



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

APPLICATION OVERVIEW

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

Funding Available: \$161,292,000 overall. Target of \$26,613,000 for Jefferson County (estimated as of the open date)

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

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

Call Opens: May 2, 2022

Call Closes: June 24, 2022, 3 pm

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

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

Other Notable items:

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

APPLICATION FORMAT

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

Project Information

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

Evaluation Questions

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

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

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

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

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

Section B. Metro Vision Regional Transportation Plan Priorities50%

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

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

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

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

Section D. Project Readiness 10%

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

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

Project Information

1. Project Title		Downtown Golden Traffic Signal Upgrade	
2. Project Location <i>Provide a map, as appropriate (see Page 1)</i>		Start point: End point: OR Geographic Area: Project includes 10 signalized intersections in downtown Golden (see vicinity map)	
3. Project Sponsor <i>(entity that will be financially responsible for the project)</i>		City of Golden	
4. Project Contact Person:			
Name	Steve Glueck	Title	Assistant to the City Manager
Phone	303-384-8095	Email	sglueck@cityofgolden.net
5. Required CDOT and/or RTD Concurrence: Does this project touch CDOT Right-of-Way, involve a CDOT roadway, access RTD property, or request RTD involvement to operate service?			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes, provide applicable concurrence documentation</i>
6. What planning document(s) identifies this project? <i>Provide link to document(s) and referenced page number if possible, or provide documentation in the supplement</i>	<input type="checkbox"/> DRCOG 2050 Metro Vision Regional Transportation Plan (2050 MVRTP) Provide MVRTP staging period, if applicable capital project:		
	<input checked="" type="checkbox"/> Local/Regional plan:	Planning Document Title: Golden Transportation Master Plan Adopting agency (local agency Council, CDOT, RTD, etc.): City of Golden Provide date of adoption by council/board/commission, if applicable: January 23, 2020	
	Please describe public review/engagement to date:	The need to upgrade our downtown traffic signals for efficiency, safety, bike and ped detection, and to be able to communicate with other signals and new autonomous transit opportunities is a regular public input, for our Downtown Development Authority, Mobility and Transportation Advisory Board, and to City Council. This specific project is a direct response to these public comments.	
	Other pertinent details:	The project is also recommended by a recent traffic and transportation analysis of downtown Golden performed by Muller Engineering	
7. Identify the project's key phases and the anticipated schedule of phase milestones. (phases and dates should correspond with the Funding Breakdown table below)			
Phases to be included:	Major phase milestones:		Anticipated completion date (based on 9/21/2022 DRCOG approval date): (MM/YYYY)
<u>FOR ALL PHASES</u>	Intergovernmental Agreement (IGA) executed (with CDOT/RTD; assumed process is 4-9 months)		02/2023
<input checked="" type="checkbox"/> Design	Design contract Notice to Proceed (NTP) issued (if using a consultant):		
	Design scoping meeting held with CDOT (if no consultant):		11/2022

<input checked="" type="checkbox"/> Environmental	Environmental contract Notice to Proceed (NTP) issued (if using a consultant):	
	Environmental scoping meeting held with CDOT (if no consultant):	11/2022
<input type="checkbox"/> Right-of-Way	Initial set of ROW plans submitted to CDOT:	NA
	ROW acquisition completed: Estimated number of parcels to acquire:	
<input checked="" type="checkbox"/> Construction	FIR (Field Inspection Review):	02/2023
	FOR (Final Office Review):	
	Required clearances:	05/2023
	Project publicly advertised:	06/2023
<input type="checkbox"/> Study	Kick-off meeting held after consultant NTP (or internal if no consultant):	
<input type="checkbox"/> Bus Service	Service begins:	
<input checked="" type="checkbox"/> Equipment Purchase (Procurement)	RFP/RFQ/RFB (bids) issued:	06/2023
<input type="checkbox"/> Other:	First invoice submitted to CDOT/RTD:	11/2023

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

The subregional problem Golden faces relates to the inability of our outdated traffic signal controllers to address changes in volumes throughout the day, to efficiently accommodate periodic significant pedestrian volumes that can conflict with turning movements, the lack of any detection of pedestrians and cyclists, and the associated congestion that results from the inability to react in real time to needs to adjust signal timing and coordination. This condition results in very inefficient traffic management and potential safety problems for pedestrians and cyclists in this vital urban center and pedestrian environment.

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

Roadway

Operational Improvements

Grade Separation

- Roadway
- Railway
- Bicycle
- Pedestrian

Regional Transit¹

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

Active Transportation Improvements

- Bicycle Facility
- Pedestrian Facility

Air Quality Improvements

Improvements Impacting Freight

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

Complete Streets Improvements

Study

Safety Improvements

Other, briefly describe: Installation of appropriate traffic controller technology to accommodate all modes in a dense urban center area.

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

10. Define the **scope and **specific elements** of the project (including any elements checked in #9 above). *DO NOT include scope elements that will not be part of the DRCOG funded project or your IGA scope of work (i.e., adjacent locally funded improvements or the project merits and benefits). Please keep the response to this question tailored to details of the scope only and no more than five sentences.***

At each intersection, improvements will include: new traffic signal cabinet, battery back-up, uninterrupted power source, camera video detection, FLIR video bike detection, fiber and radio communication, and other hardware and software upgrades.

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

The proposed traffic controller equipment has been scoped by our Traffic Consultant, Muller Engineering. Release of an RFP/bid package could be scheduled shortly after the CDOT IGA

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

Yes No

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

Smaller DRCOG funding request:

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

Project Financial Information and Funding Request

(All funding amounts in \$1,000s)

Total amount of Subregional Share Funding Request (in \$1,000's)
(No less than \$100,000 and not to exceed 90% of the total project cost)

\$900

89.64%
of total project cost

Check box if requesting **only state MMOF funds** (requires minimum 50% local funds)¹

Match Funds (in \$1,000's) List each funding source and contribution amount.		Contribution Amount	% Contribution to Overall Project Total
City of Golden		\$104	10%
		\$	0%
		\$	0%
		\$	0%
		\$	0%
		\$	0%
Total Match <i>(private, local, state, another subregion, or federal)</i>		\$104	10.36%
Project Total		\$1,004	
Notes:	<p>1. Per CDOT action, the following jurisdictions are only required to provide 25% match on the MMOF funds: Englewood, Jamestown, and Wheat Ridge. The following jurisdictions are not required to provide a match on the MMOF funds: Federal Heights, Lakeside, Larkspur, Sheridan, and Ward. All sponsors will still be required to have 20% match on any added federal funds.</p>		

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

	FY 2023	FY 2024	FY 2025	Total
DRCOG Requested Funds	\$900	\$	\$	\$900
CDOT or RTD Supplied Funds²	\$	\$	\$	\$0
Local Funds (Funding from sources other than DRCOG, CDOT, or RTD)	\$104	\$	\$	\$104
Total Funding	\$1,004	\$0	\$0	\$1,004
Phase to be Initiated	Construction	Choose an item	Choose an item	
Notes:	<ol style="list-style-type: none"> 1. Fiscal years are October 1 through September 30 (e.g., FY 2023 is October 1, 2022 through September 30, 2023). The proposed funding plan is not guaranteed if the project is selected for funding. While DRCOG will do everything it can to accommodate the applicants' request, final funding will be assigned at DRCOG's discretion within fiscal constraint. Funding amounts must be provided in year of expenditure dollars using a recommended 3% inflation factor. 2. Only enter funding in this line if CDOT and/or RTD specifically give permission via concurrence letters or other written source. 			
Affirmation:	By checking this box, the applicant's Chief Elected Official (Mayor or County Commission Chair/City or County Manager/Agency Director) has certified it allows this application to be submitted for potential DRCOG-allocated funding and will follow all local, DRCOG, state, and federal policies and regulations if funding is awarded. <input checked="" type="checkbox"/>			

Evaluation Questions

A. Subregional Impact of Proposed Project

WEIGHT

30%

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

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

Downtown Golden is one of the busiest and most active urban centers in Jefferson County. The improvement of the pedestrian environment in downtown Golden as well as cyclist safety and convenience and the reduction of peak hour and day congestion in our downtown core is a benefit for the community and hundreds of thousands of regional and out of state visitors a year.

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

By addressing the obsolete technology utilized by our current traffic signals, we will better accommodate all users and improve efficiency and safety for such users and modes.

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

No direct benefit to multiple regions or municipalities. As noted above, there is direct benefit to the thousands of regional, statewide, and out of state visitors to downtown Golden daily for most of the year.

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

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

	DI and EJ Population Groups	Number within ½ mile	% of Total	Regional %
Use 2015-2019 American Community Survey Data (In the TIP Data Tool, use a 0.5 mile buffer)	a. Total population	13,837	-	-
	b. Total households	5,479	-	-
	c. Individuals of color	1771	13%	33%
	d. Low-Income households	785	14%	9%
	e. Individuals with limited English proficiency	63	0%	3%
	f. Adults age 65 and over	1537	11%	13%
	g. Children age 5-17	1,578	11%	16%
	h. Individuals with a disability	284	2%	9%
	i. Households without a motor vehicle	425	8%	5%
	j. Households that are housing cost-burdened	1790	33%	32%

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

Describe how this project will improve access and mobility for each of the applicable groups, including the required quantitative analysis: Access and mobility is improved equally for most of the above groups by the project which addressed pedestrian safety, bike access and convenience and safety and reduced congestion for motorists. It is notable that the demographics from the TIP data tool reflect a higher percentage of low income households and households without a motor vehicle than the regional percentages. This project specifically benefits both non-vehicular and vehicular modes.

5. How will this project move the region toward achieving the shared [regional transportation outcomes](#) established in [Metro Vision](#)?
- Improve the diversity and livability of communities. The livability of the community is enhanced by increased safety and convenience for all modes.
 - Contain urban development in locations designated for urban growth and services. By improving transportation options for all modes and users in this Urban Center, we continue to promote compact urban growth.
 - Increase housing and employment in urban centers. Little direct impact from specific project, but accomodates such increases.
 - Improve and expand the region’s multimodal transportation system, services, and connections. Connections within the Urban Center and to nearby neighborhoods is improved through greater efficiency.
 - Operate, manage, and maintain a safe and reliable transportation system. The upgrade in signal equipment and technology will improve management and reliability of the local system
 - Improve air quality and reduce greenhouse gas emissions. Some potential benefit from reduced delay.
 - Connect people to natural resource and recreational areas. Improved connections for residents and visitors to access Clear Creek corridor.
 - Reduce the risk of hazards and their impact. NA
 - Increase access to amenities that support healthy, active choices. Downtown amenities with improved access include parks, open space, and Clear Creek. Safer and more convenient walking and biking are definitely healthy choices.
 - Improve transportation connections to health care facilities and service providers. NA
 - Diversify the region’s housing stock. Little direct impact
 - Improve access to opportunity. Little direct impact
 - Improve the region’s competitive position. Little direct impact

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

- Is there a DRCOG designated urban center within ½ mile of the project limits?*
- Yes No If yes, please provide the name: [Golden Downtown](#)
- Does the project connect two or more urban centers?*
- Yes No If yes, please provide the names:
- Is there a transit stop or station within ½ mile of the project limits?*
- Bus stop: Yes No If yes, how many? [18](#)
- Rail station: Yes No If yes, how many?
- Is the project in a locally-defined priority growth and development area?
- Yes No
- If yes, provide a link to the relevant planning document:
<https://www.cityofgolden.net/media/DDAPlanDraft.pdf>
- If yes, provide how the area is defined in the relevant planning document: [Downtown Golden](#)
- Is the project in an area with zoning that supports compact, mixed-use development patterns and a variety of housing options?
- Yes No If yes, please provide the zoning district designation(s): [C-2, PUD](#)

Provide households and employment data*	2020	2050
Households within ½ mile	5,479	7,029
Jobs within ½ mile	15,384	22,525
Household density (per acre) within ½ mile	1.79	2.41
Job density (per acre) within ½ mile	8.42	11.01

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

[Improved connectivity is within the Urban Center](#)

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

[The major employment centers are downtown Golden itself, CoorsTek and the Coors Brewery. Improved intersection operations and safety will measurably improve access to these facilities. The Coors Brewery is also a major visitor attraction, hosting approximately 200,000 visitors annually prior to the pandemic, with lower numbers now, but growth anticipated.](#)

B. MVRTP Priorities

WEIGHT

50%

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

Multimodal Mobility

Provide improved travel options for all modes.

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

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

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

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

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

[By improving safety and convenience for alternate modes, and reducing congestion for motorists, the travel time for all users, including transit vehicles will be reduced in peak hours, and the maintenance and operation of the City's transportation infrastructure will be improved](#)

Air Quality

Improve air quality and reduce greenhouse gas emissions.

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

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

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

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

Emissions Reduced (kg/day)	CO	NO _x	VOCs	PM 10
	0.00	0.00	0.00	0.00

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

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

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

Quantification of reduction of pollutants is difficult with the moderate level reduction in peak hour congestion. It has not been estimated herein.

**Regional
Transit**

Expand and improve the region’s transit network.

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

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

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

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

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

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

The signal upgrade project will improve vehicular flow in the Urban Center thereby reducing delay for RTD busses.

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

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

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

Provide the current number of crashes involving motor vehicles, bicyclists, and pedestrians* <i>(using the 2015-2019 period – in the TIP Data Tool, use a 0.02 mile buffer of your project)</i> <i>NOTE: if constructing a new facility, report crashes along closest existing alternative route</i>		Sponsor must use industry accepted crash reduction factors (CRF) or accident modification factor (AMF) practices (e.g., NCHRP Project 17-25, NCHRP Report 617, or DiExSys methodology).
Fatal crashes	0	
Serious Injury crashes	8	
Other Injury crashes	74	
Property Damage Only crashes	456	
Estimated reduction in crashes <u>applicable to the project scope</u> <i>(per the five-year period used above)</i>		Provide the methodology below:
Fatal crashes reduced	0.00	
Serious Injury crashes reduced	0.00	
Other Injury crashes reduced	0.00	
Property Damage Only crashes reduced	0.00	

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

The project may well result in reduced injury and property damage only crashes related to low speed intersection conflicts. Due to the uncertainty in measurement, no specific reduction has been calculated.

Freight

Maintain efficient movement of goods within and beyond the region.

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

Examples of Project Elements: roadway operational improvements, etc.

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

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

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

As a downtown core with a noticeable amount of truck traffic, any peak hour congestion reduction will benefit the movement of goods to local businesses and major employers. Because freight is not the major focus, it has not been calculated.

Active Transportation	Expand and enhance active transportation travel options. <small>(drawn from 2050 MVRTP priorities; Denver Regional Active Transportation Plan; & Metro Vision objectives 10 & 13) Examples of Project Elements: shared use paths, sidewalks, regional trails, grade separations, etc. </small>
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How does this project help expand the active transportation network, close gaps, improve comfort, and/or improve connections to key destinations, particularly improvements in line with the recommendations in the [Denver Regional Active Transportation Plan](#)? Items marked with an asterisk (*) below are available in the TIP Data Tool.

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

Bicycle Use

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

1. Current Average Single Weekday Bicyclists:	500	
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.	100	300
3. Enter number of the bicycle trips (in #2 above) that will be diverting from a different bicycling route. <i>(Example: {#2 X 50%} or other percent, if justified on line 10 below)</i>	50	150
4. = Initial number of new bicycle trips from project (#2 – #3)	50	150
1. Enter number of the new trips produced (from #4 above) that are replacing a trip made by another non-SOV mode (bus, carpool, vanpool, bike, etc.). <i>(Example: {#4 X 30%} or other percent, if justified on line 10 below)</i>	15.00	50.00
5. = Number of SOV trips reduced per day (#4 - #5)	35.00	100.00
6. Enter the value of {#6 x 2 miles} . (= the VMT reduced per day) <i>(Values other than 2 miles must be justified by sponsor on line 10 below)</i>	70.00	200.00
7. = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)	66.50	190.00
8. If values would be distinctly greater for weekends, describe the magnitude of difference:		
9. If different values other than the suggested are used, please explain here:		

Pedestrian Use

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

2. Current Average Single Weekday Pedestrians (including users of non-pedaled devices such as scooters and wheelchairs):	5,500	
Pedestrian Use Calculations	Year of Opening	2050 Weekday Estimate
3. Enter estimated additional average weekday pedestrian one-way trips on the facility after project is completed	1,000	2,000
4. Enter number of the new pedestrian trips (in #2 above) that will be diverting from a different walking route <i>(Example: {#2 X 50%} or other percent, if justified on line 10 below)</i>	500	1,000
5. = Number of new trips from project (#2 – #3)	500	1,000
6. Enter number of the new trips produced (from #4 above) that are replacing a trip made by another non-SOV mode (bus, carpool, vanpool, bike, etc.). <i>(Example: {#4 X 30%} or other percent, if justified on line 10 below)</i>	150.00	400.00
7. = Number of SOV trips reduced per day (#4 - #5)	350.00	600.00

8. Enter the value of {#6 x .4 miles}. (= the VMT reduced per day) <i>(Values other than .4 miles must be justified by sponsor on line 10 below)</i>	140.00	240.00
9. = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)	133.00	228.00
10. If values would be distinctly greater for weekends, describe the magnitude of difference: Current pedestrian activity on weekends is more than double our recent counts for weekdays. We anticipate that the above benefits would also be double.		
11. If different values other than the suggested are used, please explain here:		

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

Based on recent engineering counts weekday pedestrian traffic at our highest use intersection total over 5,500 pedestrians, with Saturday pedestrian traffic totaled over 12,600 pedestrian trips at this one location (12th and Washington Avenue). Total pedestrian activity at the 10 affected intersections would obviously be greater. The comfort of these resident and visitor pedestrians will certainly be enhanced, along with their safety and likelihood to walk and cycle more than before.

C. Project Leveraging	WEIGHT	10%
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<p>What percent of outside funding sources (non-Subregional Share funding) does this project have? <i>(number will automatically calculate based on values entered in the Funding Request table)</i></p>	10.36%	<table style="width: 100%; border-collapse: collapse;"> <tr><td>60%+ outside funding sources</td><td>5 pts</td></tr> <tr><td>50-59.9%</td><td>4 pts</td></tr> <tr><td>40-49.9%</td><td>3 pts</td></tr> <tr><td>20-39.9%</td><td>2 pts</td></tr> <tr><td>10.1-19.9%</td><td>1 pt</td></tr> <tr><td>10%.....</td><td>0 pts</td></tr> </table>	60%+ outside funding sources	5 pts	50-59.9%	4 pts	40-49.9%	3 pts	20-39.9%	2 pts	10.1-19.9%	1 pt	10%.....	0 pts
60%+ outside funding sources	5 pts													
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40-49.9%	3 pts													
20-39.9%	2 pts													
10.1-19.9%	1 pt													
10%.....	0 pts													

D. Project Readiness	WEIGHT	10%
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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:
[Muller Engineering](#)
- Please describe the status to date on each, including 1) anticipated/known pitfalls/roadblocks, and 2) mitigation activities taken to date:
- Utilities: [No Impact to Utilities](#)
 - Railroad: [NA](#)
 - Right-of-Way: [No right of way impacts for signal controller upgrades](#)
 - Environmental/Historic: [NA](#)
 - Other:
- 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: [Other](#)
- c. Has all required ROW been identified? Yes No N/A
 Has all required ROW already been acquired and cleared by CDOT? Yes No N/A
- d. Based on the current status provided in Project Information, question 11, do you foresee being able to execute your IGA by October 1 of your first year of funding (or if requesting first year funding, beginning discussions on your IGA as soon as possible), so you can begin your project on time?
 Yes No
- Does your agency have the appropriate staff available to work on this project? Yes No
- If yes, are they knowledgeable with the federal-aid process? Yes No
- e. Have other stakeholders in your project been identified and involved in project development?
 Yes No N/A
- If yes, who are the stakeholders? [Coty of Golden Downtown Development Authority](#)

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

Section 2. Local Match

- a. Is all the local match identified in your application currently available, and if a partnering agency is also committing match, do you have a commitment letter?
 Yes No

Please describe:

Funds for the local match are identified in the City's 2022 Budget

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

Please describe:

Funds for the local match are shown as a 2022 expenditure in the City's 10 year CIP. They will be carried over to 2023 for this project.

Section 3. Public Support

- a. Has the proposed project previously been through a public review process (public comment period, public hearing, etc.)?
 Yes No
- b. Has the public had access to translated project materials in relevant languages for the local community?
 Yes No

Please describe:

The City of Golden has not historically needed to provide translated materials

- 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.

The project is strongly supported by the Downtown Development Authority Mobility and Transportation Advisory board, and general public comment. We would not typically have an indepth public process for a traffic signal upgrade.

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



Intersection

Cabinet Upgrade

332 Cabinet
 Upgrade Cost to ATC
 Cabinet Battery Backup
 Uninterruptual Power Supply
 Traffic Signal Controller

Cabinet Subtotal

Detection Upgrades

Camera Video Detection (ex. Iteris) (4 Cameras)
 FLIR Video/Bike Detection (4 Cameras)

Communication/Monitoring Upgrades

PTZ Camera
 BlueToad Travel Time Readers
 Radio Communication
 Fiber Communication (Distance)
 Fiber Communication (Cost/Foot)

Communication/Monitoring Subtotal

Intersection Total

Central System (ex. TransSuite)

Total Upgrade Sub-Total

Total Upgrade Cost (Rounded)

Contingency (15%)

Total Upgrade Total

Unit Costs	10th & Washington		11th & Washington		12th & Washington		13th & Washington		10th & Ford		12th & Ford		13th & Ford		19th & Ford		19th & Jackson		19th & Illinois	
	Incl. Imp	Cost	Incl. Imp	Cost	Incl. Imp	Cost	Incl. Imp	Cost	Incl. Imp	Cost	Incl. Imp	Cost	Incl. Imp	Cost	Incl. Imp	Cost	Incl. Imp	Cost	Incl. Imp	Cost
16500	x	16500	x	16500	x	16500	x	16500	x	16500	x	16500	x	16500	x	16500	x	16500	x	16500
5500	x	5500	x	5500	x	5500	x	5500	x	5500	x	5500	x	5500	x	5500	x	5500	x	5500
1100	x	1100	x	1100	x	1100	x	1100	x	1100	x	1100	x	1100	x	1100	x	1100	x	1100
5500	x	5500	x	5500	x	5500	x	5500	x	5500	x	5500	x	5500	x	5500	x	5500	x	5500
3300	x	3300	x	3300	x	3300	x	3300	x	3300	x	3300	x	3300	x	3300	x	3300	x	3300
Cabinet Subtotal		31900		31900		31900		31900		31900		31900		31900		31900		31900		31900
Detection Upgrades																				
11000		0		0		0		0		0		0		0	x	11000	x	11000	x	11000
17600	x	17600	x	17600	x	17600	x	17600	x	17600	x	17600	x	17600		0		0		0
Communication/Monitoring Upgrades																				
1100	x	1100	x	1100	x	1100	x	1100	x	1100	x	1100	x	1100		0		0		0
1100	x	1100	x	1100	x	1100	x	1100	x	1100	x	1100	x	1100		0		0		0
5500		0		0		0		0		0		0		0	x	5500	x	5500	x	5500
		750		560		400		400		750		975		350				375		1500
82.5	x	61875	x	46200	x	33000	x	33000	x	61875	x	80437.5	x	28875		0		0		0
Communication/Monitoring Subtotal		64075		48400		35200		35200		64075		82637.5		31075		5500		5500		5500
Intersection Total		113575		97900		84700		84700		113575		132137.5		80575		48400		48400		48400
Central System (ex. TransSuite)		20000																		
Total Upgrade Sub-Total		872362.5																		
Total Upgrade Cost (Rounded)		873000																		
Contingency (15%)		130950																		
Total Upgrade Total		\$ 1,003,950.00																		

Fiber Communication Cost/Foot Includes:

- Potholing
- Erosion Control
- 1-2" Lateral Conduit (To Cabinet)
- 2-2" Conduit (Backbone)
- Type 4 & 5 Pull Boxes
- Fiber Optic Cable (Single Mode)
- Fiber Optic Termination Panel
- Ethernet Switch
- Mobilization
- Traffic Control
- 25% Contingency

(Based on Aurora Fiber Master Plan Estimate)



DOWNTOWN
Development Authority
GOLDEN • COLORADO

1445 10TH ST GOLDEN, CO 80401
TEL: 303-384-8080
EMAIL: DDA@CITYOFGOLDEN.NET
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June 14, 2022

Denver Regional Council of Governments
1001 17th St., Suite 700
Denver, CO 80202

Re: FY 2022-2025 TIP Call for Projects: Subregional Share Call for Projects (CALL 2)

Dear TIP Committee:

The Golden Downtown Development Authority is pleased to support the City of Golden's application to the TIP Subregional Share Call 2 for the Downtown Golden Traffic Signal Upgrade Project. The goals of the TIP align closely with those of the DDA – supporting land use and transportation in Golden's historic downtown neighborhood commercial center by reducing congestion and/or improving air quality.

Improvements to ten signals would increase traffic flow efficiency as well as bike, traffic, and pedestrian activity and safety in the downtown core. Such improvements are anticipated in the DDA's [Plan of Development](#), specifically, strategies to improve public spaces and infrastructure and encourage transportation policies that support community goals.

I appreciate your consideration of this application and look forward to your support.

Sincerely,

Robin Fleischmann
Economic Development Manager