

APPLICATION OVERVIEW

What: The Regional Share Call for Projects for the FY 2024-2027 TIP (Call #3)

Funding Available: \$28,089,000 for this application, split fairly evenly over all four years.

\$21,105,000 is available in the AQ/MM track; \$49,194,000 overall for call 3. All funding levels are estimated as of the open date

Eligibility: Surface Transportation Block Grant (STBG) eligible projects only.

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

Call Dates: August 22, 2022 until October 11, 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 1) this application, 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 September 23, 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](#))
- **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 September 2, 2022, with CDOT/RTD providing a response no later than September 30, 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 Calls #1 or #2 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 some work in the resubmittal process
- **Application Data:** To assist sponsors in filling out the application, DRCOG has developed a TIP Data Tool. A link to the TIP Data Tool and instructions on how to use it are available on the [TIP Data Hub](#). Additionally, sponsors may download datasets to run their own analyses from this same site. Requests for additional data or calculations from DRCOG staff should be submitted to tipapplications@drcog.org no later than September 23, 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 provide a score for each eligible application to a Project Review Panel. The panel will then review, discuss, and rank the applications and provide a 1) recommended funding list within the funding available, and 2) a ranked wait list. The panels' recommendations will then be forwarded to the DRCOG committee process for approval. Following Call #4 (FY 2024-2027 TIP Subregional Share Call for Projects), all Call #3 and Call #4 projects will be incorporated into the new FY 2024-2027 TIP in August 2023
- If you have any questions or need assistance, reach out to us at tipapplications@drcog.org

APPLICATION FORMAT

The STBG Regional 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. Regional Impact of Proposed Projects..... 30%

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

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

Score	% non-Regional Share funds
5	60% and above
4	50-59.9%
3	40-49.9%
2	30-39.9%
1	20.1-29.9%
0	20%

Section D. Project Readiness 10%

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

5	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	Planning for New Bus Facility	
2. Project Location <i>Provide a map, as appropriate (see Page 1)</i>	Start point:	
	End point:	
	OR Geographic Area: RTD boundaries; see appendix for potential site areas	
3. Project Sponsor <i>(entity that will be financially responsible for the project)</i>	RTD	
4. Project Contact Person:		
Name: Brian Welch	Title: Acting Assistant General Manager, Planning	
Phone: 303-299-2404	Email: brian.welch@rtd-denver.com	

5. Required CDOT and/or RTD Concurrence: Does this project touch CDOT Right-of-Way, involve a CDOT roadway, access RTD property, or request RTD involvement to operate service?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, provide applicable concurrence documentation</i>
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6. What planning document(s) identifies this project? <i>Provide link to document(s) and referenced page number if possible, or provide documentation in the supplement</i>	If this project is listed in the DRCOG 2050 Metro Vision Regional Transportation Plan (2050 MVRTP) , provide the staging period:	
	Local/Regional plan:	Planning Document Title: Reimagine RTD Adopting agency (local agency Council, CDOT, RTD, etc.): RTD Provide date of adoption by council/board/commission, if applicable:
	Please describe public review/engagement to date:	Reimagine RTD conducted extensive public outreach on what the future of the agency should look like, including many public meetings and online surveys. Public meetings were held in person and online throughout the District. RTD engaged more than 4,000 attendees at over 181 public meetings. RTD received more than 1,000 responses to its online survey.
	Other pertinent details:	This project is a recommendation of Reimagine RTD, and something that has been on RTD's radar for multiple years. RTD's ability to provide adequate bus service in the future will be dependent on the successful construction of a new bus maintenance facility.

7. Identify the project's key phases and the anticipated schedule of phase milestones. (phases and dates should correspond with the "Phase to be Initiated" in the Funding Breakdown table below)		
Phases to be included:	Major phase milestones:	Anticipated completion date (based on 8/16/2023 DRCOG approval date): (MM/YYYY)
<input checked="" type="checkbox"/> Preconstruction (including studies) <input type="checkbox"/> Construction <input type="checkbox"/> Both		

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)	01/2024
<input type="checkbox"/> Design	Design contract Notice to Proceed (NTP) issued (if using a consultant):	
	Design scoping meeting held with CDOT (if no consultant):	
<input type="checkbox"/> Environmental	Environmental contract Notice to Proceed (NTP) issued (if using a consultant):	
	Environmental scoping meeting held with CDOT (if no consultant):	
<input type="checkbox"/> Right-of-Way	Initial set of ROW plans submitted to CDOT:	
	ROW acquisition completed: Estimated number of parcels to acquire:	
<input type="checkbox"/> Construction	FIR (Field Inspection Review):	
	FOR (Final Office Review):	
	Required clearances:	
	Project publicly advertised:	
<input checked="" type="checkbox"/> Study	Kick-off meeting held after consultant NTP (or internal if no consultant):	04/2024
<input type="checkbox"/> Bus Service	Service begins:	
<input type="checkbox"/> Equipment Purchase (Procurement)	RFP/RFQ/RFB (bids) issued:	
<input type="checkbox"/> Other Phase not Listed:	First invoice submitted to CDOT/RTD:	

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

The DRCOG Regional Transportation Plan predicts transit ridership in the Denver Region will exceed 578,000 weekday boardings by 2050. This is more than double the number of weekday boardings RTD saw before the pandemic (2019). With its current bus facilities close to or exceeding designed capacity, RTD will not have sufficient space to service and store the number of vehicles required to satisfy this demand. RTD estimates that it will need 93% more buses by 2050 to meet service demand, and this assumes RTD is operating diesel buses. Current technology of alternate fuel vehicles, such as battery electric or compressed natural gas, does not provide the same range as diesel counterparts. Because of this, RTD's vehicle demand will be even greater as alternate fuel vehicles are introduced, and this project will allow RTD to maintain additional new vehicles to expand service in the future.

RTD's bus facility capacity issues are widely-known. RTD currently owns and operates three bus facilities – Platte, East Metro, and Boulder. Platte is the largest facility, with a designed capacity of 350 buses, while East Metro is the next largest, with a designed capacity of 250 buses. While these facilities were operating at capacity before the pandemic, they are currently operating at 80-90% of designed capacity. RTD's third bus facility is Boulder. This is RTD's smallest facility, with a designed capacity of only 110 buses. This facility is currently operating at 107% of designed capacity. Operating more buses out of a facility than it was designed for can create operational inefficiencies and cause crowded conditions in the facility, posing safety hazards. Additionally, because the size of this facility is smaller than RTD's other facilities, the agency cannot operate as many buses out of it. Many of the buses that operate within Boulder County originate from RTD's Platte Division, causing longer deadheads and introducing operational inefficiencies.

Additionally, the agency has less flexibility in how it delivers service due to these issues, and is unable to expand service in the future to meet growing demand. This lack of flexibility, particularly in the northern areas of the metro, have long frustrated RTD operations staff, as well as external stakeholders. The existing operating facility in Boulder is not large enough to handle articulated buses. RTD operations staff are unable to deploy articulated buses out of this facility, even if a route warranted additional capacity, leading to overcrowded buses and upset customers. Integrating alternate fuel vehicles, such as battery electric or compressed natural gas, is also very difficult and costly at RTD's existing facilities. This study will consider how to incorporate needed alternate fuel infrastructure, such as charging stations, into the new facility when it is built.

RTD is a critical player in addressing the regional problems of air quality, mobility, safety, and climate change. RTD is the primary public transportation provider in the region, and additional investment in RTD facilities will position the agency to manage increased demand in the future. Shifting people away from single-occupancy vehicles and onto public transportation will not only reduce emissions and improve air quality, but it will also improve safety of the transportation network. Because public transportation is a safer mode of transportation than driving, a robust public transit network is important to the region meeting its transportation safety goals. Finally, public transportation provides mobility to many people in the region; without RTD, they would not have access to jobs, school, or healthcare.

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

Roadway

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

Grade Separation

- Roadway
- Railway
- Bicycle
- Pedestrian

Regional Transit¹

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

Safety Improvements

Active Transportation Improvements

- Bicycle Facility
- Pedestrian Facility

Air Quality Improvements

Improvements Impacting Freight

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

- Complete Streets Improvements

Study

Other, briefly describe:

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.

Specific scope items include:

- Public engagement – public engagement on potential sites locations would be part of this process. RTD may utilize federal funding for the eventual construction of the facility; the NEPA process, which RTD would need to follow in order to receive federal funds for the project, requires public participation at various steps in the project development process.
- Preliminary environmental review – preliminary environmental review of potential sites would help RTD assess which sites would be the best sites for construction. This environmental review would help identify environmental issues at each potential site, as well as address Title VI concerns. RTD will be required to conduct a Title VI analysis when planning for this new maintenance facility.
- Site identification – this study will result in final site selection of one site for RTD's future maintenance facility. Depending on constraints, RTD's needs, and the public process, more than one site may be selected for additional assessment in work completed outside the scope of this project.
- Conceptual engineering – conceptual engineering designs will be drawn up to ensure the site will meet RTD's future operational needs and to aide in the project development process.
- Alternate fuels – technology surrounding alternate fuels is advancing by the year. This study will address RTD's ability to provide vehicles utilizing alternate fuels, such as compressed natural gas or battery electric, at the new bus maintenance facility, as well as high-level cost estimates for supporting infrastructure.

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.*

Recognizing the current facility constraints, construction of a new maintenance facility has been considered at RTD for years. In-depth planning for this facility has not yet begun. The specific need for this facility was reinforced with the completion of Reimagine RTD, which found that RTD will not be able to grow its services to meet future demand without a new facility. Reimagine estimated that RTD will need to grow its bus fleet by 93% by 2050 in order to meet future transit demand. Existing facilities are operating at or above designed capacity, making expansion of bus service near-impossible. The Reimagine RTD work helped identify the amount of space that would be needed for a new operations facility for various sized facilities, how the new facilities would help RTD grow service, and identify areas of the District that would be a strategic area to locate a new facility.

It is expected that this new facility would provide flexibility to RTD’s operations, especially in the northern metro, where fleet size and vehicle types are constrained due to the design and capacity of the Boulder bus facility. Two maps of potential bus facility sites are located in the Appendix. Figure 1 is a product of Reimagine RTD, which outlines possible areas that a new facility would make sense strategically. Figure 2 is based on internal work completed by RTD’s Capital Programs department, which assessed existing RTD properties for their potential to house a new maintenance facility.

Through this work, RTD identified several factors and considerations in deciding where a new maintenance facility would need to be sited. These factors are 1) locating the facility centrally, to avoid excessive “dead head” travel by buses during pull out; 2) access to multiple streets for bus entry and exit, as well as access nearby to major thoroughfares; 3) avoid siting the facility near residential areas, as it may be unwelcome; 4) locating away from existing facility so that transit hubs are widely distributed.

While this funding request is only for initial planning, RTD has also identified a rough project schedule for planning, design and construction. RTD expects initial planning (the phase included in this application) to take approximately 24 months. Once planning is complete, facility design is expected to take roughly 18 months, and facility construction to take roughly 30 months. Total time for project implementation would be six years, once planning is initiated. Note that the full project schedule is dependent on funding availability. RTD expects that the completion of this study would put it in a good position to receive federal funding for the facility construction in the future.

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 Regional Share Funding Request (in \$1,000’s) <i>(No greater than \$20 million and not to exceed 80% of the total project cost)</i>	\$2,397	79.90% of total project cost
Match Funds (in \$1,000’s) List each funding source and contribution amount.	Contribution Amount	% Contribution to Overall Project Total
RTD Sales and Use Tax	\$603	20.10%
	\$	0.00%

	\$	0.00%
	\$	0.00%
	\$	0.00%
	\$	0.00%
Total Match <i>(private, local, state, subregional, or federal)</i>	\$603	20.10%
Project Total	\$3,000	

Funding Breakdown (in \$1,000s) (by program year)¹ (Total funding should match the Project Total from above)					
	FY 2024	FY 2025	FY 2026	FY 2027	Total
DRCOG Requested Funds²	\$1,200	\$1,200	\$	\$	\$2,400
CDOT or RTD Supplied Funds³	\$	\$	\$	\$	\$ 0
Local Funds (Funding from sources other than DRCOG, CDOT, or RTD)	\$300	\$300	\$	\$	\$ 600
Total Funding	\$1,500	\$1,500	\$ 0	\$ 0	\$3,000
Phase to be Initiated	Study	Study	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 2024 is October 1, 2023 through September 30, 2024). The proposed funding plan is not guaranteed if the project is selected for funding. While DRCOG will do everything it can to accommodate the applicants' request, final funding will be assigned at DRCOG's discretion within fiscal constraint. Funding amounts must be provided in year of expenditure dollars using a recommended 3% inflation factor. 2. For the 2024-2027 Regional Share STBG Call, 23% of DRCOG funding is available in FY 2024, 25% in FY 2025, 26% in FY 2026, and 27% in FY 2027 3. Only enter funding in this line if CDOT and/or RTD specifically give permission via concurrence letters or other written source. 				
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. Regional 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 regionally important? *Relevant quantitative data in your response is required.*

This project is regionally important because it will help RTD continue delivering the public transit services that many residents of the Denver Region depend on. The current DRCOG 2050 forecast projects that there will be over 578,000 weekday transit boardings in the Denver region; this is up from roughly 350,000 per weekday in 2019 (pre-pandemic). In order to provide the region with the needed transit services, RTD needs additional bus maintenance facility capacity to help operate and maintain new buses.

Currently, all three of RTD's bus operations facilities are near or exceeding capacity. A new bus facility would help alleviate capacity issues at these facilities allowing RTD more flexibility in how it provides service and enabling more efficient use of resources. Air quality, mobility, safety, and climate change are major regional issues; ensuring RTD has the facility capacity to expand transit services in the future is important to addressing these regional issues. Additionally, as RTD continues to deploy alternate fuel vehicles, substantial upgrades will be required at the existing facilities and more space will be needed to accommodate infrastructure to support the alternate fuel vehicles, thereby further reducing capacity. The existing facilities are also each at least 30 years old; RTD spends a lot of money each year keeping each facility in a state of good repair, costing the agency even more money. A new facility would have significantly lower state of good repair costs.

For this project, RTD will conduct an initial study for siting a new bus maintenance facility. As part of Reimagine, RTD has conducted very high-level work and identified the need for a new bus maintenance facility, as well as general areas of the District that this bus facility could be located. This funding from DRCOG would give RTD the ability to take the next step in the planning process for its next bus maintenance facility.

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

This project will address four specific transportation problems identified in the Problem Statement. These four problems include air quality, mobility, safety, and climate change.

Air quality: this project will address regional air quality, as it will allow RTD to expand the number of vehicles it operates in the future. Without this additional capacity, RTD will not be able to provide the amount of transit service that the region is expected to need. Without additional capacity, residents of the Denver region will be forced to drive themselves. A report from the Federal Transit Administration estimates that public transportation emits less than half of the emissions per capita compared to a single-occupancy vehicle. By shifting modes, we will help improve air quality in the region. With the recent reclassification of Denver’s air quality to “Severe” by the Environmental Protection Agency, this is even more important. Also, as RTD continues to electrify its fleet, additional space will be required to accommodate charging infrastructure. RTD has been challenged with retrofitting existing facilities for electrification, however, a new facility would be designed specifically to allow required charging or other necessary equipment to support a non-diesel fleet.

Mobility: this project will improve regional mobility for all people living, working in, and visiting the region. This project will enable RTD to scale its services in the future to provide additional transportation options, enhancing access to work, school, recreation, and healthcare.

Safety: this project will enhance regional safety, as it will allow RTD to provide more public transit service. According to a report from the American Public Transportation Association, public transportation is significantly safer than driving a vehicle. From 2000-2014, deaths per billion passenger-miles for buses was 0.2, while it soared to 6.53 for passenger cars. Enhancing public transportation is a vital part of the region’s fight to improve safety of the transportation network.

Climate change: similar to the project’s impact on air quality, a new bus facility would also assist in the fight against climate change. Public transportation emits fewer emissions per capita than cars, and shifting trips to transit is important to fight climate change. Additionally, public transportation can also help foster smarter, denser land use, which is more climate-friendly than the urban sprawl that is so common around the region.

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.

Yes, this project will benefit every subregion and municipality within the District. This includes the Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, and Jefferson subregions, as well as all of the municipalities located within these subregions. Construction of a new maintenance facility will give RTD additional capacity and flexibility to expand transit service throughout the District. The funding provided as match for this project comes from a sales and use tax which is paid on all goods purchased within the District.

4. Disproportionately Impacted and Environmental Justice Communities

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

	DI & EJ Population Groups	Number within ½ mile	% of Total	Regional %
Use 2015-2019 American Community Survey Data <i>(In the TIP Data Tool, use a 0.5 mile buffer)</i>	a. Total population	3,094,884	-	-
	b. Total households	1,288,494	-	-
	c. Individuals of color	1,095,977	35%	33%
	d. Low-income households	107,761	8%	9%
	e. Individuals with limited English proficiency	106,810	3%	3%
	f. Adults age 65 and over	390,726	13%	13%
	g. Children age 5-17	510,336	16%	16%
	h. Individuals with a disability	140,748	5%	9%
	i. Households without a motor vehicle	67,762	5%	5%
	j. Households that are housing cost-burdened	362,221	28%	32%

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

Describe how this project will improve access and mobility for each of the applicable disproportionately impacted and environmental justice population groups identified in the table above, *including the required quantitative analysis*:

This project would impact 3.1 million people, 1.3 million households, 1.1 million people of color, 108,000 low-income households, 107,000 individuals with limited English proficiency, 391,000 seniors, 510,000 children, 141,000 people with a disability, 68,000 households without a motor vehicle, and 362,000 households that are cost-burdened.

Many of these disproportionately impacted and environmental justice populations depend on RTD services to meet their daily mobility needs. Based on on-board surveys completed in recent years, RTD knows that a larger percentage of low-income and minority populations use RTD services compared to the population at large. In 2015, when RTD’s last large on-board survey effort took place, 47% of RTD’s ridership was classified as minority while 31% of was classified as low-income. These are much higher than the numbers above, indicating a larger share of these groups use RTD’s services than are in the District.

Ensuring that these populations continue to receive adequate transit services is critical to providing the connections needed to access jobs, school, and healthcare facilities. Some of the populations identified, such as the 67,000 households who do not own a car, rely on RTD for a majority of their transportation needs. Populations such as these are the ones who will benefit greatly from this project.

Each of the agency’s three operating facilities are near or exceeding their designed operating capacity. Without a new maintenance facility, RTD’s ability to expand bus service in the region is severely hampered. Construction of a new facility will allow RTD to provide more bus service in the future, which will provide mobility options for many of the above listed groups who depend on public transportation.

5. How will this project move the region 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.)*
 - Public transportation is most successful in developed areas that have the housing and employment density to support it. Public transportation also helps support more urban land uses. Developing a comprehensive public transit network will help foster denser land use and help increase housing and employment in urban centers.
 - This project will directly enhance multimodal connections within urban centers and continue to encourage private sector investment in areas near RTD stations. Investment in public transit infrastructure is critical to this goal.
 - The public transportation network plays a key role in the region's economy by providing transportation to individuals who do not own an automobile, as well as providing a more sustainable alternative to driving on congested roads. Since 2010, more than 22,000 jobs have been created within a half mile of RTD's rapid transit stations and in 2019, more than 40% of downtown employees commuted via transit. It is clear that employers value the public transportation network, and continued investment in the region's public transit system will improve the region's economic position.
 - RTD adopted an equitable TOD policy in 2021, where the agency set a goal for developing affordable housing in joint development projects on RTD-owned land.
 - 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 improve the region's multimodal transportation system by providing additional facility capacity for an expanded RTD bus fleet. Without an additional facility, RTD will not be able to scale transit services in the manner that the region needs. Transit connects the entire region, and RTD is the backbone of the multimodal transportation.
 - A new bus maintenance facility will help RTD continue operating, managing, and maintaining a reliable transit system. RTD conducts important work in its maintenance facilities. Some examples of work that occurs at RTD bus facilities includes regular cleaning, oil changes, brake replacements, tire replacements, farebox repairs. These bus facilities also serve as RTD's main operations bases, where drivers report for work and where vehicles are stored.
 - 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 allow RTD to provide additional transit services to the Denver region. Many of RTD's bus routes connect to regional trails, greenways, and parks. These connections allow people to access active recreation opportunities without a car, encouraging a healthy lifestyle.
 - Construction of a new bus maintenance facility will also increase access to healthcare facilities and to opportunity. This facility will allow RTD to provide additional bus service throughout the region, enhancing connections to those who need it most to access critical services such as healthcare.

6. Items marked with an asterisk (*) below are available in the TIP Data Tool.

- Is there a DRCOG designated urban center within ½ mile of the project limits?*

Yes No If yes, please provide the name: Depending on the final location, there may or may not be an urban center within a half-mile of the project. However, the transit service that will be operated out of the future facility will serve numerous urban centers throughout the District. See full list in Appendix.

- Does the project connect two or more urban centers?*

Yes No If yes, please provide the names: The transit service that will be operated out of the future facility will connect numerous urban centers throughout the District. See full list in Appendix.

- Is there a transit stop or station within ½ mile of the project limits?*

Bus stop: Yes No If yes, how many? All RTD stops will benefit from the transit service operating out of this future facility.

Rail station: Yes No If yes, how many? All RTD rail stations will be impacted by the transit service operating out of this future facility.

- 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:

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

Provide households and employment data*	2020	2050
Households within ½ mile	1,288,494	1,731,059
Jobs within ½ mile	2,103,691	2,867,844
Household density (per acre) within ½ mile	3.40	4.70
Job density (per acre) within ½ mile	17.94	22.20

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 allow RTD to expand the amount of bus service it provides to the region, enhancing access to public transit. Public transportation is a critical component of the region’s overall transportation network, and the transit service that will operate out of the future facility will impact transit service in every urban center in the District. While it is impossible to determine what future routes would operate out of the new facility, the expanded capacity provided by the new facility would allow RTD to provide more service where it is needed most – in urban centers and between urban centers.

Additionally, investment in additional operations capacity will help foster better land use in the region. Many studies have shown that dense, mixed use development supports transit more than sprawl. This relationship is a positive feedback loop; as more transit-supportive land use occurs in the region, the more people will rely on transit, and the more service that will be required to meet passenger demand. In order to be able to scale the amount of service needed to meet this growing demand, RTD needs to increase its maintenance capacity.

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

RTD's rail system is the backbone of the region's public transportation network. However, many people do not realize that it is actually the bus system that carries the majority of passengers. RTD provides bus (and rail) service to the region's largest employment centers and regional destinations. Employment centers such as Downtown Denver, Downtown Boulder, the Denver Tech Center, and Denver International Airport all have direct, frequent transit service during commuting hours to provide people with an option to access their job. One of RTD's highest-ridership bus routes, the Flatiron Flyer, connects Downtown Denver and Downtown Boulder.

As each of these employment centers grows, and more employment centers develop, RTD needs the ability to scale its bus fleet to meet demand. With its current capacity, RTD will not be able to meet projected ridership demands as forecasted by DRCOG. By adding another bus maintenance facility, RTD can scale its operations to meet the region's transit needs.

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

- What modes will project improvements directly address?
 Walking Bicycling Transit SOV Freight Other:
- List the elements of this project which will address the above modes (i.e., sidewalk, shared use path, bus stop improvements, new general purpose or managed lanes, etc.): [This project is the first step in RTD constructing a new bus maintenance facility, which will allow RTD to deploy more bus service](#)
- Will the completed project be a complete street as described in the [Regional Complete Streets Toolkit](#)? [This data is available in the TIP Data Tool](#).
 Yes No If yes, describe how it implements the Toolkit's strategies in your response.
- Does this project improve travel time reliability?
 Yes No
- Does this project improve asset management of roadway infrastructure, active transportation facilities, and/or transit facilities or vehicle fleets?
 Yes No
- Does this project implement resilient infrastructure that helps the region 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](#).*

This project is the first step in the development of a new bus maintenance facility, directly addressing RTD's ability to expand transit service across the region. RTD's current bus fleet of roughly 1,000 vehicles is not large enough to meet future demand. RTD projects that it will need almost 1,000 more buses by 2050 to meet future demand. The eventual construction of a new bus facility will enable RTD to provide more mobility choices for people, goods, and services through the delivery of additional bus service throughout the region.

The new transit services that would operate out of the new bus facility would help improve travel time reliability. RTD provides an alternative to driving a single occupancy vehicle, helping to reduce congestion. This reduced congestion will provide improved travel time for everyone, including those on transit vehicles; the fewer cars on the road, the faster buses can travel. This project also improves the asset management of transit facilities and the transit fleet. As RTD grows its bus fleet, it will need more facility capacity to operate and maintain those buses. A modern maintenance facility will allow RTD to keep its buses operating in a state of good repair.

Finally, this study for a new maintenance facility will help implement resilient infrastructure in multiple ways. When winter weather strikes, many people are unable to drive. RTD provides them an alternative to driving when the roads may be too icy for their own vehicle. By its nature, having a multimodal transportation system promotes resiliency, as transit creates redundancy for people who own and drive cars. If someone's car breaks down, RTD will still be there to get them to their job. A new maintenance facility will also create redundancy in RTD's operations. If a system at one facility goes down, RTD will have one other facility to carry out work necessary for operations. Currently, RTD will use other facilities for activities such as refueling if there is a power outage. Promoting multimodal transportation options is critical to the region achieving truly resilient infrastructure.

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.

- 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 ₂ e
	25,994.00	2,070.00	951.00	227.00	66.70

*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.

While this project will not directly increase transit service, the construction of a new maintenance facility will allow RTD to expand transit service in the future. For this reason, we used the Transit Bus Service and Fleet Expansion tool from the FHWA CMAQ calculator. Our calculation assumes the construction of a large bus maintenance facility, which would support an increase in RTD’s fleet count by 500 vehicles. This would roughly be a 50% increase to RTD’s total vehicle count, which would support an overall increase in service of about 50%. We used RTD’s total revenue miles for 2019 in the calculator as well as total regional VMT as inputs into the calculator. We assumed a 5% reduction in VMT as a result of a 50% expansion in transit service. This calculation yielded the reductions shown above.

Expanded transit service is proven to reduce VMT as it provides alternatives to driving. Frequent transit service, in particular, has an even bigger effect on mode-shift. With a 50% increase in service, RTD would be able to provide more frequent service on many of its core routes. This additional service would reduce emissions by the amounts estimated above and lead to improved air quality for the region.

**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, 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.

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?
- 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? [This project will enable RTD to provide additional transit service on many regional transit planning corridors, including Colfax Ave, Broadway, Federal Blvd, State Highway 119, among others.](#)
- Does this project implement a mobility hub (as defined in the [2050 MVRTP](#))?
 Yes No
- Does this project improve connections between transit and other modes?
 Yes No If yes, please describe in your response.
- Does this project add and/or improve transit access to or within a DRCOG-defined urban center?*
 Yes No

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

This project will expand the region’s transit system, as it will provide a new facility for RTD to operate and maintain buses which will provide new service throughout the region. According to the 2050 MVRTP, more than 75% of transit trips in the region occurred on buses – almost 70 million trips in 2019. This is a significant number, and one that will grow as RTD expands service to account for the expected increases in demand.

As defined by Reimagine RTD, a “large” bus maintenance facility would be able to house 500 buses. This amount is roughly equivalent to some peer agency’s largest bus maintenance facility. A large bus maintenance facility would be approximately 200,000 square feet and require a site that is approximately 48 acres. If RTD were to only construct an “average” sized facility – one that could house 250 buses – it would require approximately 150,000 square feet and 24 acres. Facilities designed for 250 vehicles are more common today, but as transit demand continues to grow nationally, the expectation is that larger facilities will be constructed in more cities.

This project would help improve connections between transit and other modes, as it would create a larger, more frequent, transit network. More service allows more people to access the destinations they need, making transit a more popular mode choice. The project would support improved transit access to and within all DRCOG urban centers located within RTD’s boundaries.

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.

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* (using the 2015-2019 period – in the TIP Data Tool, use a 0.02 mile buffer of your project) 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	1,013	
Serious Injury crashes	6,821	
Other Injury crashes	71,739	
Property Damage Only crashes	257,103	
Estimated reduction in crashes applicable to the project scope (per the five-year period used above)		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	

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](#).*

Over the last few years, the safety of our transportation network has declined. Fatalities and serious injuries are elevated and continue to increase. One major cause of this increase is the increase in single-occupancy vehicle use and vehicle miles traveled (VMT). One method of improving safety metrics is to reduce VMT. This project will help reduce VMT through by providing additional facility capacity for RTD to operate more transit service.

While this project does not implement a physical countermeasure to improve safety, it would start project development for the construction of a new bus maintenance facility. Construction of this facility would allow RTD to deploy more transit service in the region. This increased service would encourage individuals to opt out of driving and opt in to transit, and subsequently decrease the number of crashes. According to the American Public Transportation Association, transit is ten times safer per mile than traveling by car. Expanding RTD’s capacity to operate and maintain its bus fleet will allow for expanded service as the region’s population continues to grow. Additionally, expanding service and supporting a better provision of service will encourage higher ridership. While it is impossible to estimate the change in mode-shift, and thus the reduction in crashes, RTD expects this project to have a positive impact of traffic safety.

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: bridge improvements, improved turning radii, increased roadway capacity, 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](#), [I-25 North](#), [I-76/US Route 85](#), [Denver International Airport](#), [RiNo Industrial District](#), [I-70 East Distribution Corridor](#), [Downtown Denver](#), [I-70 and US Route 6 West](#), [I-25 South](#) and [Centennial Airport](#)
- If this project is located in a [Freight Focus Area](#) does it address the relevant Needs and Issues identified in the Plan (see text located within each Focus Area)?
 Yes No If yes, please describe in your response.
- Is the project located on the [Tier 1 or Tier 2 Regional Highway Freight Vision Network](#)?*
 Yes No
- Check any items from the [Inventory of Current Needs](#) which this project will address:
 Truck Crash Location Rail Crossing Safety ([eligible locations](#))
 Truck Delay Truck Reliability Highway Bottleneck
 Low-Clearance or Weight-Restricted Bridge
Please provide the location(s) being addressed:
- 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](#).*

While this project will not make direct improvements to the freight network, it will impact nine different Freight Focus Areas, listed above. The construction of a new bus facility will lead to additional bus service being deployed throughout the region, giving people more convenient ways to travel. Public transit is a more efficient way of carrying people, and by carrying more passengers on transit, congestion on the region's roadway freight network will be reduced. Truck mobility is identified as a need and issue in many of the impacted Freight Focus Areas. This project will help improve truck mobility through reduced congestion on the region's roadways, helping improve the movement of goods.

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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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:	0	
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.	0	0
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>	0	0
4. = Initial number of new bicycle trips from project (#2 – #3)	0	0
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.). <i>(Example: {#4 X 30%} or other percent, if justified on line 10 below)</i>	0.00	0.00
6. = Number of SOV trips reduced per day (#4 - #5)	0.00	0.00
7. 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>	0.00	0.00
8. = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)	0.00	0.00
9. If values would be distinctly greater for weekends, describe the magnitude of difference:		
10. 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

1. Current Average Single Weekday Pedestrians (including users of non-pedaled devices such as scooters and wheelchairs):	0	
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	0	0
3. Enter number of the new pedestrian trips (in #2 above) that will be diverting from a different walking route <i>(Example: {#2 X 50%} or other percent, if justified on line 10 below)</i>	0	0
4. = Number of new trips from project (#2 – #3)	0	0
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.). <i>(Example: {#4 X 30%} or other percent, if justified on line 10 below)</i>	0.00	0.00
6. = Number of SOV trips reduced per day (#4 - #5)	0.00	0.00
7. 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>	0.00	0.00
8. = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)	0.00	0.00

9. If values would be distinctly greater for weekends, describe the magnitude of difference:

10. If different values other than the suggested are used, please explain here:

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

This project will expand RTD's capacity to maintain and operate its fleet of buses. RTD's bus service accounts for the majority of service hours – 71% in 2019 according to RTD's Quality of Life survey. The maintenance of the bus fleet is essential to ensuring that disruptions to service are limited, supporting any expansions of service as the region continues to grow, and improving public perception and experience of relying on RTD's bus service.

Additionally, RTD's 2015 On Board survey showed that the majority of people walk to stations and stops – 86% access bus stops as a pedestrian. By supporting a strong provision of bus service through proper maintenance, RTD can encourage more individuals to ride transit and likely act as a pedestrian during the first or last mile portion of their trip. RTD's current bus routes overlap with both pedestrian focus areas and short trip opportunity areas in the region.

C. Project Leveraging	WEIGHT	10%
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What percent of outside funding sources (non-Regional Share funding) does this project have? <i>(number will automatically calculate based on values entered in the Funding Request table)</i>	20.10%	60%+ outside funding sources 5 pts 50-59.9% 4 pts 40-49.9% 3 pts 30-39.9% 2 pts 20.1-29.9% 1 pt 20%..... 0 pts
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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:

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

- Utilities:
- Railroad:
- Right-of-Way:
- Environmental/Historic:
- 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: [Choose an item](#)

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?

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

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:

RTD has local Sales and Use Tax budgeted in its Mid-Term Financial Plan to use as local match for this project. This funding is not contingent on any additional decisions.

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

Yes No

Please describe:

This project is budgeted in RTD's Mid-Term Financial Plan.

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:

This project is a direct recommendation from Reimagine RTD. Reimagine had an extensive public outreach campaign and engaged thousands of residents within the region. These materials were translated into relevant languages, and Spanish public meetings were held as part of this outreach campaign.

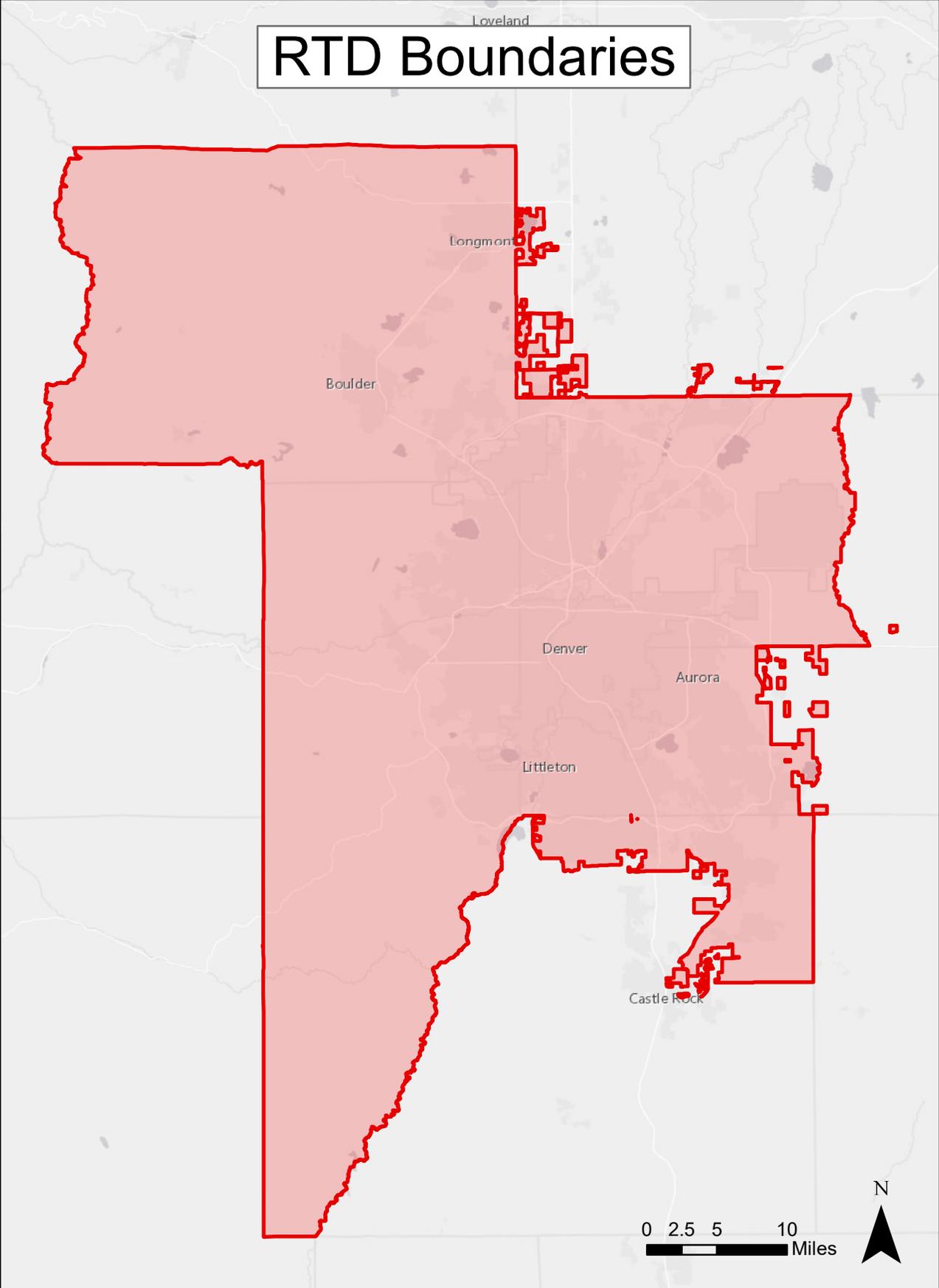
c. Have any adjacent property owners to the proposed project been contacted and provided with the initial project concept?

Yes No N/A

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

Submit completed applications through the [TIP Data Hub](#) no later than 3pm on October 11, 2022.

RTD Boundaries



Item	TIP Share	Local Share	Total Cost
Public Engagement	\$359,550	\$90,450	\$450,000
Preliminary Environmental Review	\$479,400	\$120,600	\$600,000
Site Identification	\$599,250	\$150,750	\$750,000
Conceptual Engineering	\$719,100	\$180,900	\$900,000
Alternate Fuel Assessment	\$239,700	\$60,300	\$300,000
Total	\$2,397,000	\$603,000	\$3,000,000

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.

INPUT

User Guide

Reset to Default Values

(1) What is your project evaluation year?

2020

(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	27,000,000	40,000,000	Miles

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

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

Passenger Vehicle Activity Type

Passenger Activity Type
 Passenger Vehicle Miles Traveled
 Passenger Vehicle Trips

	Before	After	
Passenger Vehicle Activity	21,000,000,000	18,900,000,000	Miles

Average One-Way Trip Distance 4.52 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	13,000,000	Miles
Passenger Vehicle Trip Reduction	464,601,770	Trips
Passenger Vehicle VMT reduction	2,100,000,000	Miles

EMISSION REDUCTIONS

Pollutant	Total kg/day
Carbon Monoxide (CO)	25,994.841
Particulate Matter <2.5 µm (PM _{2.5})	66.778
Particulate Matter <10 µm (PM ₁₀)	227.906
Nitrogen Oxide (NOx)	2,070.630
Volatile Organic Compounds (VOC)	951.463
Carbon Dioxide (CO ₂)	2,308,380.053
Carbon Dioxide Equivalents (CO ₂ e)	2,333,614.787
Total Energy Consumption (MMBTU)	30,421.455