

**DRCOG Transportation Improvement Program (TIP)
FY 2024-2027 TIP Subregional Share (Call #4) –
Denver City and County Subregion
Surface Transportation Block Grant (STBG) Project Application**

APPLICATION OVERVIEW

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

Funding Available: \$26,247,000 for this subregion and this STBG Track. In the STBG Track, funding is split fairly evenly over all four years.

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

Call Dates: November 28, 2022 until January 27, 2023, 3 pm

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

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

Other Notable items:

- **Eligibility:** Projects must align with the eligibility guidelines in [Appendices B and C](#) of the TIP Policy. Proposed work on roadways must primarily be located on the [DRCOG Regional Roadway System](#) to be eligible for TIP funding (the DRCOG RRS can also be viewed within the [TIP Data Tool](#)). Further details can be found in the [Policies for TIP Program Development](#) document (a [quick-guide](#) is also available for reference)
- **TIP Trainings:** To be eligible to submit an application, at least one person from your agency must have attended one of the two mandatory TIP training workshops ([February 10](#) and [February 16, 2022](#))
- **CDOT/RTD Concurrence:** If required, [CDOT and/or RTD concurrence](#) must be provided with the application submittal. The CDOT/RTD concurrence request is due to CDOT/RTD no later than December 9, 2022, with CDOT/RTD providing a response no later than January 13, 2023. Submit requests to the following: CDOT Region 1 – [JoAnn Mattson](#), CDOT Region 4 – [Josie Thomas](#), RTD – [Chris Quinn](#)
- **If a submitted application in Calls #1-3 was not funded,** and you wish to resubmit the same application for this call, please [contact DRCOG](#). In these cases, we can unlock the application, change the title, and save the applicant some work in the resubmittal process
- **Application Data:** To assist sponsors in filling out the application, DRCOG has developed a TIP Data Tool. A link to the TIP Data Tool and instructions on how to use it are available on the [TIP Data Hub](#). Additionally, sponsors may download datasets to run their own analyses from this same site. Requests for additional data or calculations from DRCOG staff should be submitted to tipapplications@drcog.org no later than December 30, 2022
- **Project Affirmation:** The application must be affirmed by either the applicant's City or County Manager, Chief Elected Official (Mayor or County Commission Chair) for local governments, or agency director or equivalent for other applicants
- **Evaluation Process:** DRCOG staff will review submittals for eligibility, develop scoring sheets, and post all applications (Jan. 30-Feb. 3, 2023). On Feb. 6, a public comment period will open until Feb. 24. Also at that time, details will be provided to each subregion to begin scoring, discussing, and recommending their projects back to DRCOG by March 15. Each forums' recommendation will then be forwarded to the DRCOG committee process for incorporation into a new 24-27 TIP anticipated to be adopted in August 2023
- If you have any questions or need assistance, reach out to us at tipapplications@drcog.org

APPLICATION FORMAT

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

Project Information

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

Evaluation Questions

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

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

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

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

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

Section B. Metro Vision Regional Transportation Plan Priorities 50%

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	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	Peña Blvd. I-70 to E-470		
2. Project Location <i>Provide a map, as appropriate (see Page 1)</i>	Start point: I-70 End point: E-470 OR Geographic Area: Click or tap here to enter text.		
3. Project Sponsor (<i>entity that will be financially responsible for the project</i>)	City and County of Denver, Denver International Airport		
4. Project Contact Person: Name: Lavynia Washington Title: Grants Manager Phone: 303-342-2417 Email: Lavynia.Washington@flydenver.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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes, provide applicable concurrence documentation</i>	
If this project is listed in the DRCOG 2050 Metro Vision Regional Transportation Plan (2050 MVRTP) , provide the staging period: 2030-2039			
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>	Local/Regional/ Subregional plan: Please describe public review/engagement to date:	Planning Document Title: Peña Boulevard Transportation and Mobility Master Plan (in-progress), DRCOG 2050 Metro Vision Regional Transportation Plan (2050 MVRTP), Far Northeast Area Plan (2019) Adopting agency (local agency Council, CDOT, RTD, etc.): Community Planning and Development, City and County of Denver Provide date of adoption by council/board/commission, if applicable: Adopted by Denver City Council June 2019 For the Peña Blvd. I-70 to E-470 Project (the Project), DEN initiated the Peña Boulevard Transportation and Mobility Master Plan Study (the Peña Master Plan) in spring 2022 and is hosting its first public open houses in Montbello, Green Valley Ranch, in addition to virtual engagement, in late February 2023. DEN is working with Councilwoman Gilmore and Denver City Council's Business, Arts, Workforce and Aviation Committee to advertise the project and ensure the community has the opportunity to influence the outcomes of the Study. In addition, all engagement materials are being developed in both English and Spanish. DEN is aware that the public and stakeholders have already been engaged on several planning studies within or adjacent to the Project area, in particular DOTI's Far Northeast Plan, and has been building on these previous engagement efforts. DEN has been engaging with the surrounding jurisdictions to inform them of the Peña Master Plan and understand their future land-use and traffic projections. A Stakeholder Working Group (SWG) is comprised of surrounding transportation and local agencies that will review and comment on project study elements including project goals; existing conditions; proposed alternatives; equity considerations, and other recommendations.	

	<p>Due to the context of Peña Boulevard crossing multiple communities, outreach and engagement strategies include engagement with multiple advocacy groups to incorporate bicycle/pedestrian, transit, and other mobility solutions that increase active, sustainable transportation and reduce single-occupancy vehicle trips.</p> <p>As part of the ongoing Mobility Study, DEN conducted surveys of passengers, employers and employees to understand their transportation needs and challenges when accessing the airport. Over 5,000 passenger and 2,700 employee survey responses were collected, in addition to over 50 tenant interviews and surveys (the 50 tenants represent over one-third of all employees at DEN). The results of the surveys are being used to develop and implement Transportation Demand Management (TDM) strategies and policies to improve mobility and access for DEN passengers and employees. These TDM strategies will not only decrease vehicle trips on Peña Boulevard, but provide more sustainable transportation options to passengers, visitors, and employees at DEN.</p> <p>A Peña Blvd Project website has been created and social media will frequently disseminate information and events and receive feedback on the proposed improvements.</p>
Other pertinent details:	<p>What is the Peña Boulevard Master Plan Study?</p> <p>The Peña Master Plan Study began in spring 2022 and will inform and recommend alternatives for improvements to Peña Boulevard between I-70 to E-470 (the Project). The Study and alternatives assessed as part of the Master Plan are pre-National Environmental Policy Act (NEPA) work that will be taken forward and used for the Design and Environmental Studies under this Project submittal. The Peña Master Plan is fully funded, and in progress with a fall 2023 completion.</p> <p>The Study is a pre-NEPA activity that represents a collaborative and integrated approach to transportation decision-making that 1) considers environmental, community, and economic goals early in the transportation planning process, and 2) uses the information, analysis, and outcomes developed during planning to inform the environmental review process. This approach reduces risk of delays, achieves significant benefits by incorporating environmental and community values into transportation alternatives early in planning and carries these considerations through project development and delivery. Benefits include but are not limited to relationship-building with project stakeholders resulting in improved project delivery timeframes.</p> <p>The Study includes traffic analysis and travel demand modeling to understand how various managed lane strategies will impact congestion on Peña Boulevard, with a heavy incentive towards high-occupancy vehicles and transit operations (such as transit, rideshares, and HOV) in a managed lane. The Peña Master Plan includes comprehensive multimodal solutions that would increase the modal share to transit (both buses and A-line) and considers all modes of travel and identify strategies to reduce single-occupancy</p>

vehicles and vehicle miles traveled. Through the Peña Master Plan, DEN will establish specific goals for mode-shift, with implementation strategies outlined in the TDM plan.

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	
<u>REQUIRED FOR ALL PHASES</u>	Intergovernmental Agreement (IGA) executed with CDOT/RTD (Assumed process is 4-9 months; any work performed before execution is NOT reimbursable)	02/2024
☒ Design	Design contract Notice to Proceed (NTP) issued (if using a consultant): Design scoping meeting held with CDOT (if no consultant): FIR (Field Inspection Review): FOR (Final Office Review):	03/2024 Enter Date Enter Date Enter Date
☒ Environmental	Environmental contract Notice to Proceed (NTP) issued (if using a consultant): Environmental scoping meeting held with CDOT (if no consultant):	03/2024 Enter Date
☐ Right-of-Way	Initial set of ROW plans submitted to CDOT: Estimated number of parcels to acquire: <input type="text"/> Enter Number ROW acquisition completed:	Enter Date Enter Date Enter Date
☐ Construction	Required clearances: Project publicly advertised:	Enter Date Enter Date
☐ Study	Kick-off meeting held after consultant NTP (or internal if no consultant):	Enter Date
☐ Equipment Purchase (Procurement)	RFP/RFQ/RFB (bids) issued:	Enter Date
☐ Other Phase not Listed Describe: Describe	First invoice submitted to CDOT/RTD:	Enter Date

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

In 2018, the Federal Aviation Administration (FAA) determined a 73% airport / 27% non-airport traffic split for all construction and maintenance of Peña Boulevard. Therefore, DEN is regulated to obtain non-airport sources of revenue to contribute to these critical subregional roadway improvements. If this TIP application is not successful, the City and County of Denver will have to identify other non-airport sources of revenue.

As northeast Denver continues to grow and Peña Boulevard becomes increasingly congested, there is an increase of traffic diverting to local arterials such as Tower Road and 56th Avenue, causing increased congestion and safety concern on roadways in Historically Disadvantaged Communities. Peña Blvd from I-70 to E-470 is a regional problem/issue for the Denver, Adams, and Arapahoe County subregions. Without upgrades to Peña Boulevard, mobility and access for people and goods to/from the Denver International Airport (DEN) and surrounding communities will continue to be increasingly difficult. Passenger growth at DEN, developments along the corridor, and increased freight have all added significant demands to the corridor and will grow worse with time. Bicycle and pedestrian facilities remain unconnected, with barriers to access transit, and limited multi-modal transportation options within the Peña Boulevard corridor and Denver Moves Gateway Area. This Project involves multi-modal solutions to the Peña Boulevard corridor through managed lanes*, transportation demand management (TDM), and incentivizing high-occupancy vehicles and public transit.

Over its history, Peña Boulevard traffic has increased from an average daily traffic (ADT) volume of 75,000 vehicles in 1995 to more than 135,000 ADT in 2019 (an increase of 80%). Safety risks are of concern; high crash rates reaching 860 collisions between 2016 through 2021, and periods of poor roadway performance on Peña have multiplied. During these periods, traffic on local streets have increased, affecting quality of life within the adjacent communities. Without the proposed improvements these issues/problems will continue to worsen on both Peña Boulevard and the surrounding local roadway network.

Peña Boulevard was originally constructed almost 30 years ago, as such required maintenance work is extensive, and the cost to maintain the aging facility is substantial. In 2019, DEN served 69 million passengers; within the next 8-10 years, DEN is expected to serve 100-million annual passengers. To manage growth, maintain the reliability of the supply-chain and continue to boost the local and regional economy, DEN must rehabilitate Peña Boulevard and address infrastructure deficiencies.

Northeast Denver is comprised of some of the largest, last undeveloped land in the Metro area. Traffic was primarily airport based and areas adjacent to the roadway were primarily open space and undeveloped. Over time, adjacent lands have developed and more recently in the past several years significant development activity has been constructed or is in progress; significantly impacting the transportation infrastructure in the area.

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

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

Regional Transit¹

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

□ Study

- Other**, briefly describe: Transportation Demand Management (TDM) Program implementation for Denver International Airport

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

10. Define the scope and specific elements of the project (including any elements checked in #9 above).

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

The Project involves preconstruction environmental studies and shovel-ready design of Peña Boulevard between I-70 to E-470. The improvements include managed lanes and adjacent multi-use trail facilities to connect cyclists to DEN/adjacent developments, existing regional trail systems, and RTD A-Line stations. The distinction between managed lanes and other traditional forms of highway lane management is the operating philosophy of “active management”. Under this philosophy, DEN proactively manages demand and available capacity by applying new strategies or modifying existing strategies.

The funding request considers preliminary/final engineering, Envision/sustainability, environmental studies for NEPA documentation/approval, and contingencies.

Additionally, the project provides a minimum of \$1.2 million toward implementation of DEN’s Transportation Demand Management (TDM) plan. The TDM plan is being developed through DEN’s Mobility Study (part of the Peña Master Plan); the suite of recommendations and strategies will reduce vehicular reliance and expand transportation options. The TDM funding includes the implementation of programs or pilot projects such as incentive programs to promote more sustainable modes of transportation, innovative parking solutions to encourage carpools and vanpools, and improved infrastructure such as bike lockers at transit stations. DEN will use any excess revenue to programs that promote RTD A-Line ridership and services.

Is DEN adding lanes to Peña Boulevard?

DEN is faced with the challenge of increased congestion on Peña Boulevard and a limited ability to expand the highway capacity due to construction costs, and environmental and societal impacts. DEN collaborated with DRCOG to change the Peña Boulevard improvements in the 2050 Metro Vision Plan from general capacity to the proposed managed lanes improvement. As such, DEN is taking advantage of the opportunity to address mobility needs and provide travel options through a combination of limited capacity expansion coupled with operational strategies that seek to manage travel demand and improve transit and other forms of ridesharing. The managed lane concept is an approach that combines these elements to make the most effective and efficient use of the Peña Boulevard facility. Under the ongoing Master Plan Study, DEN is studying lane management strategies that include – pricing, vehicle eligibility, and access control.

For more information about the Master Plan Study, including FAQs please visit the project website:
https://www.flydenver.com/about/improvements/pena_plan/faqs

- 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 Peña Master Plan is currently in progress, scheduled to be complete in Fall 2023. The Peña Master Plan is being used to identify the needs and desires between multiple communities. A traffic study and public/stakeholder engagement are being conducted that would be carried forward into the National Environmental Policy Act (NEPA) process which includes purpose and need, further alternatives analysis, environmental studies, and stakeholder and public outreach.

The Peña Master Plan is funded separately and will be completed prior to the execution of the Project IGA for environmental studies and design. This ensures timely and efficient completion of the preconstruction activities.

- 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: Peña Blvd. I-70 to Tower Road \$3.25 million Regional Share Funding Request. \$8.75 million Match Funds for overall Project Total of \$12.0 million.

Outline the differences between the scope outlined above and the reduced scope: The limits of the DRCOG funded Project would be reduced by 1.5 miles ending at Tower Road.

Project Financial Information and Funding Request		(All funding amounts in \$1,000s)	
<i>To update the formulas below, enter your information, highlight the formulas, and press F9 or right-click and select Update Field.</i>			
Total amount of Subregional Share Funding Request (in \$1,000's) <i>(Not to exceed 80% of the total project cost)</i>	\$5,000	27.03% of total project cost	
Match Funds (in \$1,000's) List each funding source and contribution amount.	% Contribution to Overall Project Total		
Click or tap here to enter text.	\$13,500	0.0%	
Click or tap here to enter text.	\$Match Amount	0.0%	
Click or tap here to enter text.	\$Match Amount	0.0%	
Click or tap here to enter text.	\$Match Amount	0.0%	
Click or tap here to enter text.	\$Match Amount	0.0%	
Click or tap here to enter text.	\$Match Amount	0.0%	
Total Match <i>(private, local, state, regional, or federal)</i>	\$ 13,500	73.0%	
Project Total	\$18,500		

Funding Breakdown (in \$1,000s) (by program year)¹ (Total funding should match the Project Total from above) <i>To update the formulas below, enter your information, highlight the formulas (or Ctrl-A), and press F9. OR close and reopen the file.</i>					
	FY 2024	FY 2025	FY 2026	FY 2027	Total
DRCOG Requested Funds ²	\$500	\$1,500	\$1,500	\$1,500	\$5,000
CDOT or RTD Supplied Funds ³	\$Enter Amount	\$Enter Amount	\$Enter Amount	\$Enter Amount	\$ 0
Local Funds (Funding from sources other than DRCOG, CDOT, or RTD)	\$1,500	\$4,000	\$4,000	\$4,000	\$13,500
Total Funding	\$2,000	\$5,500	\$5,500	\$5,500	\$18,500
Phase to be Initiated	Environmental	Environmental	Design	Design	
Notes:	1. Fiscal years are October 1 through September 30 (e.g., FY 2024 is October 1, 2023 through September 30, 2024). The proposed funding plan is not guaranteed if the project is selected for funding. While DRCOG will do everything it can to accommodate the applicants' request, final funding will be assigned at DRCOG's discretion within fiscal constraint. Funding amounts must be provided in year of expenditure dollars using a recommended 3% inflation factor. 2. For the 2024-2027 Subregional Share STBG Call, 23% of DRCOG funding is available in FY 2024, 25% in FY 2025, 26% in FY 2026, and 27% in FY 2027 3. Only enter funding in this line if CDOT and/or RTD specifically give permission via concurrence letters or other written source.				
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 subregional impact of the proposed project. Be sure to provide all required information for each question. Quantitative data from DRCOG is available [here](#).

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

As northeast Denver continues to grow and Peña Boulevard becomes increasingly congested, there is an increase of traffic diverting to local arterials such as Tower Road and 56th Avenue, causing increased congestion and safety concern on roadways in Historically Disadvantaged Communities (Montbello and Green Valley Ranch) that are not designed to handle that level of traffic. When Peña Boulevard is free flowing it takes 8 minutes to travel from Gun Club Road to I-70 (an 8-mile segment), during congested periods it can currently take up to 24 minutes. If this demand is not managed, Peña Boulevard will become increasingly congested, and vehicles and freight will continue diverting to local arterials. With the inclusion of managed lanes, DEN can prioritize High Occupancy Vehicles (HOVs) and transit on Peña Boulevard to better serve the airport and northeast Denver.

Northeast Denver, in and around Peña Boulevard, is experiencing unprecedented growth. From the 2018 opening of the Gaylord Rockies Resort and Convention Center, to the millions of square feet of industrial projects, to plans for 20,000 more residential units, the area is undergoing rapid growth. Pepsi Co is building a 1.2 million square feet manufacturing plant just south of Peña Boulevard on 72nd Avenue and Argonne Street. The facility will be Pepsi's largest plant in the US and is anticipated to add 250 new jobs for a total of approximately 500 jobs and is just one example of the many proposed developments along the corridor. Using DRCOG and local agency 2050 projections for household and employment numbers within 5 miles of Peña Boulevard, households will increase from approximately 127,000 to 250,000, and the number of jobs from 238,000 to 400,000. This represents an increase of 97% in number of households and 68% in the number of jobs when compared with 2020.

Denver International Airport (DEN) is the primary economic engine for the state of Colorado, generating more than \$33.5 billion of revenue annually. DEN is home to more than 1,000 individual companies, 25 air carriers, more than 900 contractors/tenants/vendors, and 15 federal agencies. DEN provides more than 30,000 on-airport jobs and a total of 260,000 direct and indirect jobs. DEN was the 3rd-busiest airport in the world in 2021. The facility is undergoing a multi-billion-dollar expansion, adding 39 new gates, improving the Great Hall within the Jeppesen Terminal, and planning for the seventh runway to accommodate the anticipated future growth. The Project will seek to manage this demand and ensure Peña Boulevard continues to facilitate the growth of DEN and northeast Denver in a sustainable and equitable way.

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.*

The Project will construct a managed lane in both directions of Peña Boulevard between I-70 to E-470. Roadway congestion is managed by incentivizing public transit (bus) and high-occupancy vehicles (HOV) to use the lanes for free. High-occupancy vehicles can include many forms, including carpooling, vanpooling, charter buses, hotel shuttles, mountain carriers, and shared-ride services.

Additionally, the Project will construct meaningful bicycle and pedestrian infrastructure connections to RTD transit stations. With a focus on last-mile connectivity, DEN will implement and construct an effective network of multiuse paths and bikeways within the Far Northeast neighborhood. Several of these projects have already been identified and planned in the Far Northeast Neighborhood Plan.

Finally, the Project will allow for DEN to implement its Transportation Demand Management (TDM) Program. Through the Peña Master Plan, a baseline of existing mode share will be established. Goals will be set on how to reduce SOVs and increase public transit ridership and HOVs for both employees and air passengers.

The Project will:

- **Safety:** Of the 860 vehicles crashes on Peña Boulevard from 2016 through 2021, 50% were rear end collisions which are predominately due to congestion. Hot spot locations are located at the interchange ramp locations attributable to adjacent land-use accessing the Peña Boulevard Corridor. The locations are predominately due to the numerous closely spaced interchanges with short weave distances creating weave and conflict locations. Peña Boulevard was originally constructed almost 30 years ago, safety improvements will involve bringing Peña Boulevard up to current design standards including; improved shoulder widths, acceleration/ deceleration lengths, and merge/diverge locations. The Project will also implement innovative technologies to manage demand. Opportunities include ramp metering, peak period shoulders, and real-time traffic and road condition information to reduce overall congestion by managing demand.
- **Freight:** According to DRCOG's regional multimodal freight plan, Tower Road, Peña Boulevard, 56th Avenue, I-70, and E-470 are all major freight corridors. Amazon, GE Appliances, and McLane are among the large industrial developments just north of Peña Boulevard on Tower Road, as this area continues to develop freight volumes on Peña will continue to increase. Furthermore, stresses on e-commerce and supply chains have heightened the need for a reliable freight network. By addressing infrastructure deficiencies on Peña Boulevard, the Project will enable the northeast Denver and DEN to accommodate additional freight demands and support local and regional commerce.
- **Air Quality:** One of the main causes of traffic pollution in cities worldwide is congestion. Idling vehicles increase the local concentration of harmful emissions, and the concentration of potentially hundreds of vehicles increases that concentration further. Adding managed lanes on Peña Boulevard will help to reduce congestion on the entire facility, but especially in the managed lanes, by reducing travel times and idling for HOV users and public transit. The project will also reduce the potential number of trips by providing faster travel time for HOV and transit vehicles, reducing person trips to the airport. The project will also reduce the potential number of trips by providing airport access to bicycle users via trail connections to the RTD A-Line stations. The project will moderate the GHG emissions expected along the corridor with increased traffic volume by maintaining and, in some instances, reducing planned travel times, and shifting trips from individual vehicles to HOV and transit vehicles.
- **Regional Transit:** The addition of managed lanes on Peña Boulevard will enhance the mobility and travel time reliability for public transportation (RTD buses) and HOVs (carpools, vanpools, charter buses, hotel shuttles, mountain carriers, and shared-ride services). Because public transit and HOVs can access the managed lanes for free, there is a high incentive for travelers to choose alternative modes of transportation. Preliminary findings of the ongoing Peña Master Plan's mobility surveys confirm that travel time reliability is a priority not only employees, but also departing passengers. Any improvements to transit travel time reliability will help influence shifts from SOVs to transit. In 2019, RTD's average daily ridership for the DEN airport station was 17,500, comprising of almost 14,000 daily riders on the RTD A-

Line and 3,500 daily riders on RTD bus services. These numbers are projected to double by 2040. Based on current operations, the A-Line can accommodate up to 50,000 riders per day. Through the TDM program and consultation with RTD, DEN will provide implementable strategies and plans on how the airport can increase its share of public transit ridership.

- **Active Transportation Systems:** While the shoulders on Peña Boulevard are currently a designated bike route to DEN, traffic data shows that these facilities are not often utilized by cyclists. The Project will provide meaningful connections for cyclists, with a key goal of connecting to RTD A-Line stations and regional trail systems. Utilizing the Far Northeast Plan as a blueprint, DEN will work directly with CPD and DOTI to identify and design these meaningful multiuse trails.
- **Multimodal Mobility:** Through the ongoing Peña Master Plan, a TDM program is being developed with policies and recommendations on reducing employee and air passenger SOVs and vehicle dependency. The TDM program will provide implementable strategies and plans on how DEN can increase its share of public transit ridership (including RTD A-Line and bus services), support employee vanpools/carpools, incentivize sustainable transportation, and encourage HOVs. Proposed solutions from the TDM program could include employee incentive programs to promote transit ridership, innovative parking solutions to encourage carpools and vanpools, and improved facilities to make sustainable transportation more enticing, such as bike lockers, assembly and repair stations, and bike tools. Managed lanes on Peña Boulevard will accommodate transit and other forms of high occupancy vehicles which will enhance transit travel time reliability and create opportunities for more efficient transit services on Peña.

In addition to the six priorities identified in the 2050 MVRTP, DEN is committed to the following Project elements:

- **Sustainability:** To ensure environmental and social sustainability are used for decision making, the Envision® ISI third party framework process will be followed. The categories associated with Quality of Life, Leadership and Climate and Resilience are significant opportunities that will be pursued for this Project. (i.e. the use of innovative designs and sustainable practices will reduce embodied carbons and greenhouse gas emissions).
- **Equity:** DEN is one of five leading agencies taking part in the Justice40 Equity in Infrastructure Project (EIP), which is dedicated to increasing the number, size and percentage of historically underutilized businesses (HUB) growing to prime contractors, participating in joint ventures, or as equity participants. The Project will expand prime contractor opportunities for historically disadvantaged businesses in underserved communities to create generational wealth and reduce edits with these procurements, in accordance with the Administration's Executive Order 13985 (Advancing Racial Equity) and its Justice 40 provision. Moreover, with the major construction that we are undergoing, DEN has committed to having 30% of its infrastructure contracts be secured by MWBEs. To gain any contract in procurement requires an Equity, Engagement, and Inclusion statement setting forth organizational in this area. Finally, DEN has launched the Center of Equity and Excellence in Aviation (CEEA). CEEA is one-of-a-kind in the aviation industry that uses an equity lens to provide training to small businesses, build an aviation talent pipeline and become the place for aviation research and innovation.

The Project will increase transportation choices along the Peña Boulevard Corridor to reduce barriers to opportunity and ensure citizens have ease of access to good-paying jobs. DEN is currently working with RTD to better synchronize transit schedules with employee shifts and reduce costs to employees to reduce barriers to opportunities.

- 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.

Adams County, Arapahoe County, City of Aurora, City of Commerce City and the City and County of Denver are directly benefitted by the Project.

The volumes on Peña Boulevard are the highest just north of I-70 and just east of E-470, highlighting the regional significance of the roadway and its role in connecting DEN and northeast Denver to the surrounding municipalities. As Peña Boulevard has reached its capacity, there is an increase of traffic diverting to local arterials such as Tower Road and 56th Avenue, causing increased congestion and safety concern on roadways in Historically Disadvantaged Communities that are not designed to handle that level of traffic. If this congestion and demand are not managed, vehicles will continue to divert to local arterials. Improvements to the corridor are needed to relieve congestion, improve air quality, and enhance quality of life in the communities surrounding Peña Boulevard.

DEN provides more than 30,000 on-airport jobs and a total of 260,000 direct and indirect jobs. The Peña Boulevard Corridor is critical to the movement of passengers, employees, visitors, and goods to/from the airport and surrounding communities and, thus, is of critical importance to the Denver Metro area and the state. DEN recently launched the Vision 100 plan to prepare for 100 million annual passengers within 10 years. As passenger numbers rise so will the number of jobs and the benefit to the adjacent communities by providing opportunities to good paying jobs.

- 4.** Disproportionately Impacted and Environmental Justice Communities

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

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

	DI & EJ Population Groups	Number within ½ mile	% of Total	Regional %
Use 2015-2019 American Community Survey Data <i>(In the TIP Data Tool, use a 0.5 mile buffer)</i>	a. Total population	20,465	-	-
	b. Total households	8,496	-	-
	c. Individuals of color	17,697	86%	33%
	d. Low-income households	574	7%	9%
	e. Individuals with limited English proficiency	2,142	10%	3%
	f. Adults age 65 and over	1,064	5%	13%
	g. Children age 5-17	4,441	22%	16%
	h. Individuals with a disability	588	3%	9%
	i. Households without a motor vehicle	158	2%	5%
	j. Households that are housing cost-burdened	2,617	31%	32%

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

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

The City of Denver's Neighborhood Equity Index represents the socioeconomic, built environment, health care, and barriers that residents of Denver neighborhoods face in accessing opportunities to lead healthy, productive lives. With an Equity Index of 2.7, Green Valley Ranch, at the south extent of the Project, is characterized as an underserved neighborhood below the citywide mean of 3.0. The neighborhood has a 37% Hispanic and 28% black population with 34.5% of the population below 18 years old and 96.5% below 65 years old. A total of 2.3 miles of the Project is in Historically Disadvantaged Communities. The Project will engage with communities affected by the Project, and equity considerations for disadvantaged communities will be integrated into planning. The Project will also provide multiple opportunities for Disadvantaged Business Enterprises (DBEs), and workforce development and local hire requirements for construction.

The highest concentration of DEN employees are located in areas directly south and west of the airport, which includes Montbello, Green Valley Ranch, Commerce City, and Aurora. Within many of these census tracts, between 25% and 50% of the population lives below the poverty threshold. In addition, seventy percent of DEN employees are front-line essential workers. In spite of a 95% decrease in passenger traffic at the airport at the beginning of the COVID-19 pandemic in April 2020, there were almost 6,000 daily riders on the A-Line and RTD bus services to the airport. The Project will implement TDM strategies and policies that can be applied to expand transit access to essential workers and reduce auto dependency.

The Project aims to increase transportation choices for surrounding communities and employees by building multi-use trails cyclists, expanding essential services and providing first mile/last mile strategies to reduce auto dependency in historically disadvantaged communities.

5. How will this project move the subregion toward achieving the shared [regional transportation outcomes](#) established in [Metro Vision](#) in terms of...
- Land Use, community, urban development, housing, employment? (*Improve the diversity and livability of communities. Contain urban development in locations designated for urban growth and services. Increase housing and employment in urban centers. Diversify the region's housing stock. Improve the region's competitive position.*)
 - Northeast Denver, in and around DEN, is experiencing unprecedented growth. The efficient movement of goods and people on Peña Boulevard is critical to economic growth for the subregion as well as both the airport and the surrounding communities.
 - By increasing transportation choices along the Peña Boulevard corridor, the Project will reduce barriers to opportunity and ensure citizens have ease of access to good-paying jobs.
 - Since Peña Boulevard opened almost 30 years ago, there has been significant non-airport development along the corridor, increasing the volume of non-airport traffic. The existing two lanes in each direction no longer serve the demands of Peña Boulevard and will become increasingly more congested over time.
 - The Project will increase infrastructure resiliency which is critical to supporting the real estate and commercial developments along Peña corridor.
 - 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.*)
 - The addition of managed lanes on Peña Boulevard will enhance the mobility and travel time reliability of transit and other forms of high occupancy vehicles.
 - The current shoulder widths on Peña Boulevard vary between 6 ft to 8 ft., increasing the shoulder widths to 12 ft. will reduce accidents and ensure infrastructure resiliency.
 - Increased acceleration and deceleration lane lengths on Peña Boulevard will enhance safety and improve access for vehicles/freight movements.
 - As part of the improvements to Peña Boulevard, DEN is partnering with adjacent agencies to develop safer bicycle facilities and increase multi-modal access including connections to RTD A-line.
 - Adding managed lanes on Peña Boulevard will reduce congestion on the entire facility by reducing travel times and idling for HOV users and on-road public transit vehicles. The project will also reduce the potential number of trips by providing faster travel time for HOV and transit vehicles, reducing person trips to the airport. The managed lane is anticipated to increase the existing RTD Bus Ridership to DEN from the 3,540 daily trips in 2019.
 - 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.*)
 - The Project will design solutions that improve the accessibility for passengers, employees, and visitors and further the movement of goods and freight.
 - The Master Plan will increase transportation choices along the Peña Boulevard corridor will reduce barriers to opportunity and ensure citizens have ease of access to good-paying jobs.

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

- Is there a DRCOG designated urban center within $\frac{1}{2}$ mile of the project limits?*

Yes No If yes, please provide the name: [62nd & Peña TOD, Peña & 40th, Airport Gateway](#)
- Does the project connect two or more urban centers?*

Yes No If yes, please provide the names: [62nd & Peña TOD, Peña & 40th, Airport Gateway](#)
- Is there a transit stop or station within $\frac{1}{2}$ mile of the project limits?*

Bus stop: Yes No If yes, how many: [33](#)

Rail station: Yes No If yes, how many: [2](#)
- 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:
https://www.denvergov.org/media/denvergov/cpd/Far_Northeast_Area_Plan.pdf

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

Provide households and employment data*	2020	2050
Households within $\frac{1}{2}$ mile	8,496	14,906
Jobs within $\frac{1}{2}$ mile	16,132	29,946
Household density (per acre) within $\frac{1}{2}$ mile	1.13	1.93
Job density (per acre) within $\frac{1}{2}$ mile	2.18	0.00

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:*

Peña Boulevard and the RTD A-Line connect 62nd & Peña TOD, Peña & 40th and the Airport Gateway urban centers. DEN is partnering with local agencies to develop parallel off- Peña bicycle facilities with connections to RTD transit stations. The Peña Master Plan will include strategies to improve access to transit for DEN passengers, employees, and visitors, with a goal of an overall reduction in vehicle traffic volumes on Peña Boulevard. DEN is currently working with RTD to better synchronize transit schedules with employee shifts and reduce costs to employees to reduce barriers to opportunities. These strategies will work in concert with the managed lanes to improve access to public transit and enable travel mode shifts to transit and active transportation along the Peña Boulevard corridor.

Concurrently, Denver Parks & Recreation (DPR) is applying separately for AQ/MM funding under this TIP Call #4 for design and construction of the Derby Lateral/Peña Trail. This will result in a fully built out Derby Lateral Trail system between 40th Avenue and W 56th Avenue, a built out Peña Trail between 40th Avenue and the end of the old Buckley Road on the eastern edge of the Rocky Mountain Arsenal, and a new trail connection to the 61st and Peña Station, just north of the planned Peña Station South Development-this trail segment connects to First Creek Trail that ties into the 71 mile-long High Line Canal Trail. These key connections allow access to underserved and historically disadvantaged communities in the Far Northeast Area, as well as City of Aurora's regional trail network and the Rocky Mountain Arsenal regional trail network. Critically for DEN, the proposed build-out of multi-use paths will also connect to 61st & Pena Station, which serves the RTD A-Line commuter rail. The trail will connect transit users to the airport terminal, and provide employees, passengers, and visitors with a non-vehicular alternative for traveling to and from DEN.

DEN is committed to increasing multimodal access to the airport and will provide \$280k to support the Derby Lateral/ Peña Trail development. The Derby Lateral/ Peña Trail and adjacent multi-use trail designed as part of this project will support DEN's goals to improve mobility for all ground transportation modes accessing the airport and to reduce single occupancy vehicles (SOVs) on Peña Boulevard by shifting existing travel to more sustainable modes of transportation.

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

DEN is the primary economic engine for the state of Colorado, generating more than \$33.5 billion of revenue for the region annually. DEN is home to more than 1,000 individual companies, 25 air carriers, more than 900 contractors/tenants/vendors, and 15 federal agencies. DEN provides more than 30,000 on-airport jobs and a total of 260,000 direct and indirect jobs. Northeast Denver, in and around Peña Boulevard, is experiencing unprecedented growth. From the 2018 opening of the Gaylord Rockies Resort and Convention Center, to the millions of square feet of industrial projects, to plans for 20,000 more residential units, the area is undergoing rapid growth.

Peña Boulevard and its intersecting streets provide access and connections to the key employment centers and major destinations including DRCOG defined urban centers of 62nd & Pena TOD, Pena & 40th, Airport Gateway. Peña Boulevard provides crucial access to major freight destinations such as Amazon and the future Pepsi Co plant on Tower Road. Green Valley Ranch and Montbello residents utilize Peña Boulevard to access their homes located off 40th Avenue, Green Valley Ranch Boulevard and 56th Avenue.

The existing two lanes in each direction no longer serve the demands of Peña Boulevard and will become increasingly more congested over time. The addition of managed lanes on Peña Boulevard and associated TDM strategies will facilitate continued economic growth and the efficient movement of goods and people for both the airport and the surrounding communities.

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.
<ul style="list-style-type: none">• What modes will project improvements directly address? <input type="checkbox"/> Walking <input checked="" type="checkbox"/> Bicycling <input checked="" type="checkbox"/> Transit <input checked="" type="checkbox"/> SOV <input checked="" type="checkbox"/> Freight <input type="checkbox"/> Other: Click or tap here to enter text.• List the elements of this project which will address the above modes (i.e., sidewalk, shared use path, bus stop improvements, new general purpose or managed lanes, etc.): Shared use path, managed lanes• 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. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe how it implements the Toolkit's strategies in your response.• Does this project improve travel time reliability? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No• Does this project improve asset management of roadway infrastructure, active transportation facilities, and/or transit facilities or vehicle fleets? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No• Does this project implement resilient infrastructure that helps the subregion mitigate natural and/or human-made hazards? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<p>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. <i>Note that a majority of the proposed roadway operational improvements must be on the DRCOG Regional Roadway System and/or Regional Managed Lanes System.</i></p> <p>The proposed roadway operational improvements are on both the DRCOG Regional Roadway System and the Regional Managed Lanes System. The addition of Managed Lanes on Peña Boulevard provides enhanced mobility and travel time reliability for transit, freight and other forms of high occupancy vehicles. Proposed improvements to manage the capacity along the Peña will mitigate vehicles diverting to the local road network to avoid congestion and delay on Peña Boulevard which in turn will reduce the impact to multimodal mobility on the local road network.</p> <p>New multi-use bicycle/pedestrian trail facilities will increase connections to RTD A-Line stations and regional trail systems to provide access between surrounding historically disadvantaged communities and the airport.</p> <p>As Part of the ongoing Mobility Study, DEN is benchmarking against similar large hub airports to identify and compare ground transportation best practices that facilitate multimodal access to airports. The information will be used to develop TDM program recommendations and a ground access plan for DEN.</p>	

Air Quality	<p>Improve air quality and reduce greenhouse gas emissions.</p> <p>(drawn from 2050 MVRTP priorities; state greenhouse gas rulemaking; federal congestion & emissions reduction performance measures; Metro Vision objectives 2, 3, & 6a)</p> <p>Examples of Project Elements: active transportation, transit, or TDM elements; vehicle operational improvements; electric vehicle supportive infrastructure; etc.</p>																	
<ul style="list-style-type: none"> • Does this project reduce congestion? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No • Does this project reduce vehicle miles traveled (VMT)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No • Does this project reduce single-occupant vehicle (SOV) travel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 																		
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Emissions Reduced (kg/day)</th> <th style="text-align: center;">CO</th> <th style="text-align: center;">NOx</th> <th style="text-align: center;">VOCs</th> <th style="text-align: center;">PM 10</th> <th style="text-align: center;">CO₂e</th> </tr> </thead> <tbody> <tr> <td></td> <td style="text-align: center;">-0.48</td> <td style="text-align: center;">12.65</td> <td style="text-align: center;">1.01</td> <td style="text-align: center;">9.93</td> <td style="text-align: center;">15,004.70</td> </tr> </tbody> </table>	Emissions Reduced (kg/day)	CO	NOx	VOCs	PM 10	CO ₂ e		-0.48	12.65	1.01	9.93	15,004.70	<p><i>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.</i></p> <p><i>Note: if not using the FHWA Calculators, please note your methodology in your narrative below.</i></p>					
Emissions Reduced (kg/day)	CO	NOx	VOCs	PM 10	CO ₂ e													
	-0.48	12.65	1.01	9.93	15,004.70													
<p>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.</p> <p>A 2017 traffic study on Peña Boulevard showed that the majority of segments along the corridor were operating at a Level of Service (LOS) C during the peak periods, with several segments operating at LOS D. With traffic projections of 200,000 vehicles per day in 2040, the Volume/Capacity ratio will be greater than 1.0 for most segments of Peña Boulevard. Once the demand exceeds the capacity (a v/c ratio greater than 1.0), traffic flow is unstable and excessive delay and queuing is expected. Average daily volumes during the peak month on Peña Boulevard increased by 12% from 2017 to 2019. If this congestion and demand are not managed, vehicles will continue to divert to local roadways. The managed lanes and associated improvements to the corridor are needed to relieve congestion, improve air quality, and enhance quality of life in the communities surrounding Peña Boulevard.</p> <p>When Peña Boulevard is free flowing it takes 8 minutes to travel from Gun Club Road to I-70 (an 8-mile segment), during congested periods it can currently take up to 24 minutes. Currently 50-60% of vehicles on Peña Boulevard are SOVs. Adding managed lanes on Peña Boulevard will help to reduce congestion on the entire facility by reducing travel times and idling for HOV users and on-road transit vehicles. The Project will also reduce the potential number of trips by providing faster travel time for HOV and transit vehicles, reducing person trips to the airport, and by providing airport access to bicycle users via trail connections to the RTD A-Line stations.</p> <p>The project will moderate or reduce the GHG and pollutant emissions expected along the corridor with increased traffic volume by maintaining and, in some instances, reducing planned travel times, and incentivizing a shift of trips from SOV to HOV and transit vehicles. The Project will consider ramp metering to reduce overall congestion by managing the amount of traffic entering Peña Boulevard.</p> <p>Currently 86% of passengers are using some form of automobile (private, TNC, taxi, etc.) to access the airport while just 9% of passengers are using transit. Through the Peña Master Plan, a TDM Program is being developed with policies and recommendations on reducing SOVs and vehicle dependency. The TDM program will provide implementable strategies and plans on how DEN can increase its share of public transit ridership (including RTD A-Line and bus services), support employee vanpools/carpools, incentivize sustainable transportation, and encourage HOVs. Managed lanes on Peña Boulevard will accommodate transit and other forms of high occupancy vehicles which will enhance transit travel time reliability and create opportunities for new transit services on Peña.</p>																		

Regional Transit**Expand and improve the subregion'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: Click or tap here to enter text.
- Does this project involve a regional transit planning corridor (as defined in the [2050 MVRTP](#))?*
 Yes No If yes, which specific corridor will this project focus on: Click or tap here to enter text.
- Does this project implement a mobility hub (as defined in the [2050 MVRTP](#))?
 Yes No
- Does this project improve connections between transit and other modes?
 Yes No If yes, please describe in your response.
- Does this project add and/or improve transit access to or within a DRCOG-defined urban center?*
 Yes No

Question: Describe how this project improves connections to or expands the subregion's transit system, as outlined in the [2050 MVRTP](#). Please include quantitative information, including any items referenced above, in your response.

Note that rapid transit improvements must be on the [Regional Rapid Transit System](#).

Within the Project limits, the RTD A-Line, runs alongside Peña Boulevard and has stations located at 40th Avenue and Airport Boulevard and 61st Avenue and Peña Boulevard, both of which are also park-n-ride facilities. The Peña Master Plan, being developed in advance of the Project, aims to increase transportation choices for surrounding communities and employees by expanding essential services and providing first mile/last mile strategies to reduce auto dependency. DEN is currently working with RTD to better synchronize transit schedules with employee shifts and reduce costs to employees to reduce barriers to opportunities.

The RTD AT/ATA and 169L routes, in addition to private transit and shuttles serving the airport, run on Peña Boulevard within the Project limits. Bus services have a greater degree of flexibility than fixed rail services and can more easily be expanded to serve a wider network. The addition of managed lanes on Peña Boulevard will enhance the mobility and travel time reliability of existing and future bus services and other forms of high occupancy vehicles (HOV). HOVs can include many forms, including carpooling, vanpooling, charter buses, hotel shuttles, mountain carriers, and shared-ride services. DEN will incentivize public transit (bus) ridership and high-occupancy vehicle (HOV) use on Peña Boulevard by making managed lanes free to these users.

In 2019, RTD's average daily ridership for the DEN airport station was 17,500, comprising of 13,860 daily riders on the RTD A-Line and 3,540 daily riders on RTD bus services. These numbers are projected to double by 2040. Based on current operations, the A-Line can accommodate up to 50,000 riders per day. Through the TDM program and consultation with RTD, DEN will provide implementable strategies and plans that increase the mode share of public transit ridership.

Safety	<p>Increase the safety for all users of the transportation system.</p> <p>(drawn from 2050 MVRTP priorities, Taking Action on Regional Vision Zero, CDOT Strategic Transportation Safety Plan, & federal safety performance measures)</p> <p>Examples of Project Elements: bike/pedestrian crossing improvements, vehicle crash countermeasures, traffic calming, etc.</p>									
<p>Items marked with an asterisk (*) below are available in the TIP Data Tool.</p> <ul style="list-style-type: none"> • 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?* <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No • Does this project implement a safety countermeasure listed in the countermeasure glossary? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 										
<p>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)</p> <p><i>NOTE: if constructing a new facility, report crashes along closest existing alternative route</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Fatal crashes</td> <td style="text-align: right; padding: 5px;">0</td> </tr> <tr> <td style="padding: 5px;">Serious Injury crashes</td> <td style="text-align: right; padding: 5px;">6</td> </tr> <tr> <td style="padding: 5px;">Other Injury crashes</td> <td style="text-align: right; padding: 5px;">59</td> </tr> <tr> <td style="padding: 5px;">Property Damage Only crashes</td> <td style="text-align: right; padding: 5px;">162</td> </tr> </table>		Fatal crashes	0	Serious Injury crashes	6	Other Injury crashes	59	Property Damage Only crashes	162	<p>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).</p>
Fatal crashes	0									
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<p>Estimated reduction in crashes <u>applicable to the project scope</u> (per the five-year period used above)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Fatal crashes reduced</td> <td style="text-align: right; padding: 5px;">Enter Data</td> </tr> <tr> <td style="padding: 5px;">Serious Injury crashes reduced</td> <td style="text-align: right; padding: 5px;">Enter Data</td> </tr> <tr> <td style="padding: 5px;">Other Injury crashes reduced</td> <td style="text-align: right; padding: 5px;">Enter Data</td> </tr> <tr> <td style="padding: 5px;">Property Damage Only crashes reduced</td> <td style="text-align: right; padding: 5px;">Enter Data</td> </tr> </table>		Fatal crashes reduced	Enter Data	Serious Injury crashes reduced	Enter Data	Other Injury crashes reduced	Enter Data	Property Damage Only crashes reduced	Enter Data	<p>Provide the methodology below:</p> <div style="border: 1px solid #ccc; padding: 5px; height: 80px; width: 100%;">Click or tap here to enter text.</div>
Fatal crashes reduced	Enter Data									
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Other Injury crashes reduced	Enter Data									
Property Damage Only crashes reduced	Enter Data									
<p>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. <i>Note that any improvements on roadways must be on the DRCOG Regional Roadway System.</i></p> <p>Incidents created by crashes and weather on Peña Boulevard have frequently caused significant traffic backups and delay. City & County of Denver's collision data indicates that traffic incidents were on the rise from 2016 through 2019, with more than 200 crashes per year on Peña Boulevard and its interchanges. This equates to around 4 crashes per week. The highest cluster of crashes occur within historically disadvantaged communities at the Green Valley Ranch and 56th Avenue Interchanges. The proposed improvements from the Project will reduce the number of traffic-related accidents, serious injuries, and fatalities, particularly in high-cluster locations. The Project will design improvements to make Vision Zero a reality on Peña Boulevard.</p> <p>While Peña Boulevard is not on DRCOG's High Injury Network or Critical Corridors, the following parallel and intersecting street are all on the High Injury Network: 56th Avenue; Green Valley Ranch Boulevard; Chambers Road; Tower Road; and E-470. As Peña Boulevard has reached its capacity, there is an increase of traffic diverting to these causing increased congestion and additional safety concern on roadways that are not designed to handle that level of traffic. If this congestion and demand are not managed, vehicles will continue to divert to local arterials.</p> <p>Increased congestion, high crash rates, and periods of poor roadway performance have multiplied on Peña Boulevard. With increases to freight movement using Peña Boulevard, improvements to the geometrics and reliability are critical to maintaining the supply-chain. In addition to addressing capacity, proposed safety improvements will involve bringing Peña Boulevard up to current design standards including improved shoulder widths, acceleration/deceleration lengths, and merge/diverge locations ensuring. The current shoulder widths vary between 6 ft to 8 ft., increasing the shoulder widths to 12 ft. will reduce accidents and ensure infrastructure resiliency.</p> <p>DEN completed improvements to Peña Boulevard in November 2021, which included reconstruction of the eastbound lanes between Jackson Gap Road and the Jeppesen Terminal. Collision rates for this section of corridor were between 38 and 43 accidents annually from 2016 through 2019. After completing improvements and reducing conflict points, this number dropped to 20 collisions in 2021. DEN expects to see a similar reduction of collision when the remainder of Peña Boulevard is upgraded.</p>										

Freight	<p>Maintain efficient movement of goods within and beyond the subregion.</p> <p>(drawn from 2050 MVRTP priorities; Regional Multimodal Freight Plan; Colorado Freight Plan, federal freight reliability performance measure; Metro Vision objective 14)</p> <p>Examples of Project Elements: bridge improvements, improved turning radii, increased roadway capacity, etc.</p> <p><u>Items marked with an asterisk (*) below are available in the TIP Data Tool.</u></p> <ul style="list-style-type: none"> ● Is this project located in or impact access to a Freight Focus Area?* <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, please provide the name: Denver International Airport Cargo/Aerotropolis and I-70 Distribution Corridor ● 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)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, please describe in your response. ● Is the project located on the Tier 1 or Tier 2 Regional Highway Freight Vision Network?* <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ● Check any items from the Inventory of Current Needs which this project will address: <input type="checkbox"/> Truck Crash Location <input type="checkbox"/> Rail Crossing Safety (eligible locations) <input type="checkbox"/> Truck Delay <input type="checkbox"/> Truck Reliability <input type="checkbox"/> Highway Bottleneck <input type="checkbox"/> Low-Clearance or Weight-Restricted Bridge Please provide the location(s) being addressed: Click or tap here to enter text. ● Does this project include any innovative or non-traditional freight supportive elements (i.e., curb management strategies, cargo bike supportive infrastructure, etc.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please describe in your response. <p>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. <i>Note that any improvements on roadways must be on the DRCOG Regional Roadway System.</i></p> <p>Forecasts from 2019 predicts that DEN will handle 810 million pounds of cargo in 2040, an increase of 25% compared to 2022. Additionally, freight movement is increasing from the existing and future businesses and industries along the corridor. Amazon, GE Appliances, and McLane are among the large industrial developments just north of Peña Boulevard on Tower Road, as this area continues to develop freight volumes on Peña will continue to increase. 2022 data collected as part of the Peña Master Plan indicates that trucks make up 8% of trips on Peña and 12% of the trips on Tower, highlighting the concentration of commercial developments along these corridors. With these increases to freight movements using Peña Boulevard, improvements to the geometrics and reliability are critical to maintaining the supply-chain. Proposed improvements will involve bringing Peña Boulevard up to current geometric standards including increased shoulder widths, acceleration/deceleration lengths, and merge/diverge locations. The Project is critical to ensuring that future freight demand can be facilitated on Peña Boulevard.</p> <p>The City & County of Denver's Far Northeast Plan considers freight movement and notes that Peoria Street, Chambers Road, and Tower Road should be limited-access routes that only allow freight movement during late evening and early morning hours to minimize conflicts with other modes of travel. This reinforces the importance of Peña Boulevard as a strategic freight corridor for the Denver subregion.</p>
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Active Transportation	<p>Expand and enhance active transportation travel options. (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.</p>																																				
<p><u>Items marked with an asterisk (*) below are available in the TIP Data Tool.</u></p> <ul style="list-style-type: none"> • Does this project close a gap or extend a facility on a Regional Active Transportation Corridor or locally-defined priority corridor?* <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No • Does this project improve pedestrian accessibility and connectivity in a pedestrian focus area?* <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No • Does this project improve active transportation choices in a short trip opportunity zone?* <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No • Does this project include a high-comfort bikeway (like a sidepath, shared-use path, separated bike lane, bicycle boulevard)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, please describe in your response. 																																					
<p>Bicycle Use</p> <p><i>NOTE: if constructing a new facility, report bike usage along closest existing alternative route</i></p> <p>To update the formulas below, enter your information, highlight the formulas (or Ctrl-A), and press F9. OR close and reopen the file.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;">1. Current Average Single Weekday Bicyclists:</th> <th style="text-align: right;">Enter Data</th> </tr> <tr> <th colspan="2" style="background-color: #ffffcc;"></th> </tr> <tr> <th style="width: 60%;">Bicycle Use Calculations</th> <th style="text-align: right;">Year of Opening</th> <th style="text-align: right;">2050 Weekday Estimate</th> </tr> </thead> <tbody> <tr> <td>2. Enter estimated additional average weekday one-way bicycle trips on the facility after project is completed.</td> <td style="text-align: right;">Enter Data</td> <td style="text-align: right;">Enter Data</td> </tr> <tr> <td>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></td> <td style="text-align: right;">Enter Data</td> <td style="text-align: right;">Enter Data</td> </tr> <tr> <td>4. = Initial number of new bicycle trips from project (#2 – #3)</td> <td style="text-align: right;">0</td> <td style="text-align: right;">0</td> </tr> <tr> <td>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></td> <td style="text-align: right;">Enter Data</td> <td style="text-align: right;">Enter Data</td> </tr> <tr> <td>6. = Number of SOV trips reduced per day (#4 - #5)</td> <td style="text-align: right;">0.00</td> <td style="text-align: right;">0.00</td> </tr> <tr> <td>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></td> <td style="text-align: right;">Enter Data</td> <td style="text-align: right;">Enter Data</td> </tr> <tr> <td>8. = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)</td> <td style="text-align: right;">0.00</td> <td style="text-align: right;">0.00</td> </tr> <tr> <td>9. If values would be distinctly greater for weekends, describe the magnitude of difference: <i>Click or tap here to enter text.</i></td> <td colspan="2"></td> </tr> <tr> <td>10. If different values other than the suggested are used, please explain here: <i>Click or tap here to enter text.</i></td> <td colspan="2"></td> </tr> </tbody> </table>				1. Current Average Single Weekday Bicyclists:	Enter Data			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.	Enter Data	Enter Data	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>	Enter Data	Enter Data	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>	Enter Data	Enter Data	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>	Enter Data	Enter Data	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: <i>Click or tap here to enter text.</i>			10. If different values other than the suggested are used, please explain here: <i>Click or tap here to enter text.</i>		
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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.

Presently, the Peña Boulevard shoulders are a designated bike route to DEN. With a focus on last-mile connectivity, the Project will identify and construct meaningful bicycle and pedestrian infrastructure to RTD transit stations. Concurrently, Denver Parks & Recreation (DPR) is applying separately for AQ/MM funding under this TIP Call #4 for design and construction of the Derby Lateral/Peña Trail. DEN has committed to providing \$280k to support the trail development. This will result in a fully built out Derby Lateral Trail system between 40th Ave and W 56th Avenue, a built out Peña Trail between 40th Ave and the end of the old Buckley Road on the eastern edge of the Rocky Mountain Arsenal, and a new trail connection to the 61st and Peña Station, just north of the planned Peña Station South Development-this trail segment connects to First Creek Trail that ties into the 71 mile-long High Line Canal Trail.

Additionally, the Project will construct new multiuse paths and bikeways adjacent to the Peña Blvd corridor. Several of these projects have already been identified and planned in the Far Northeast Neighborhood Plan.

C. Project Leveraging		WEIGHT	10%
What percent of outside funding sources (non-Subregional Share funding) does this project have? <i>(number will automatically calculate based on values entered in the Funding Request table. If this has not updated, select the box to the right and click F9)</i>	73.0%	60%+ outside funding sources 5 pts 50-59.9% 4 pts 40-49.9% 3 pts 20-39.9% 2 pts 10.1-19.9% 1 pt 10% 0 pts	
D. Project Readiness		WEIGHT	10%
Provide responses to the following items to demonstrate the readiness of the project. DRCOG is prioritizing those projects that have a higher likelihood to move forward in a timely manner and are less likely to experience a delay.			
Section 1. Avoiding Pitfalls and Roadblocks			
<p>a. Has a licensed engineer (CDOT, consultant, local agency, etc.) reviewed the impact the proposed project will have on utilities, railroads, ROW, historic and environmental resources, etc. and have those impacts and pitfalls been mitigated as much as possible to date before this submittal?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A (for projects which do not require engineering services)</p> <p>If yes, please type in the engineer's name below which certifies their review and that impacts have been evaluated and mitigated as much as possible before your application is submitted:</p> <p>Click or tap here to enter text.</p> <p>Please describe the status to date on each, including 1) anticipated/known pitfalls/roadblocks, and 2) mitigation activities taken to date:</p> <ul style="list-style-type: none"> • Utilities: DEN maintains a GIS asset management system that includes utilities within their property limits. The Project is for preconstruction and utility impacts will be determined during design development. • Railroad: There are no impacts to railroads. The RTD A-Line runs on the east side of Peña Boulevard and is at least 500 feet away from the edge of Peña Boulevard. It has been verified with RTD that concurrence for this project is not necessary. • Right-of-Way: City of Denver and DEN own all the right-of-way and properties required to complete this project, therefore no risk and delay anticipated in this regard. • Environmental/Historic: The project is for preconstruction environmental and the environmental/historic will be studied to determine proposed mitigation. • Other: To deliver the Project on time and within budget, DEN will conduct risk assessment and mitigation planning. <p>b. Is this application for a single project phase only (i.e., design, environmental, ROW acquisition, construction only, study, equipment purchase, etc.)?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If yes, are the other prerequisite phases complete? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p> <p>If this project is for construction, please note the NEPA status: Choose an item.</p> <p>c. Has all required ROW been identified? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p> <p>Has all required ROW already been acquired and cleared by CDOT? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p> <p>d. Based on the current status provided in Project Information, question 11, do you foresee being able to execute your IGA by October 1 of your first year of funding (or if requesting first year funding, beginning discussions on your IGA as soon as possible), so you can begin your project on time?</p>			

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?

[City of Denver, City of Aurora, Commerce City, Brighton, Adams County, Arapahoe County](#)

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

A Project Director and Project Manager are assigned to the Peña Boulevard Program. DEN has a dedicated consultant for the Peña Boulevard Project Management Team (PMT) with experience in the delivery of DRCOG TIP funded projects.

This Project is included in the current approved DEN 2023-2027 Capital Improvement Program (CIP), and DEN commits to completion of the design and environmental activities that are described in this Application. As previously described, DEN must obtain grants to fund the non-airport portion of the Project. Should there be cost overruns, DEN will provide the funding to fully complete the Project. DEN will begin the Project in Spring of 2024 with the intent of having shovel-ready design plans and engineer's construction cost estimate for the 2028-2033 CIP cycle.

The Peña Master Plan, currently in progress, is a pre-NEPA activity that represents a collaborative and integrated approach to transportation decision-making that 1) considers environmental, community, and economic goals early in the transportation planning process, and 2) uses the information, analysis, and outcomes developed during planning to inform the environmental review process. This approach reduces risk of delays, achieve significant benefits by incorporating environmental and community values into transportation alternatives early in planning and carrying these considerations through project development and delivery. Benefits include but are not limited to relationship-building with project stakeholders resulting in improved project delivery timeframes.

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:

[This project will be funded through DEN funds and will not utilize other federal funds.](#)

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

Yes No

Please describe:

[This Project has been identified in DEN's adopted 2023-2027 CIP.](#)

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 Peña Boulevard Transportation and Mobility Master Plan Study \(Peña Master Plan\), described in Project Information, has developed project materials in both English and Spanish. All public engagement materials developed as part of the design and environmental studies for the managed lanes will be available in both English and Spanish.](#)

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

Yes No N/A

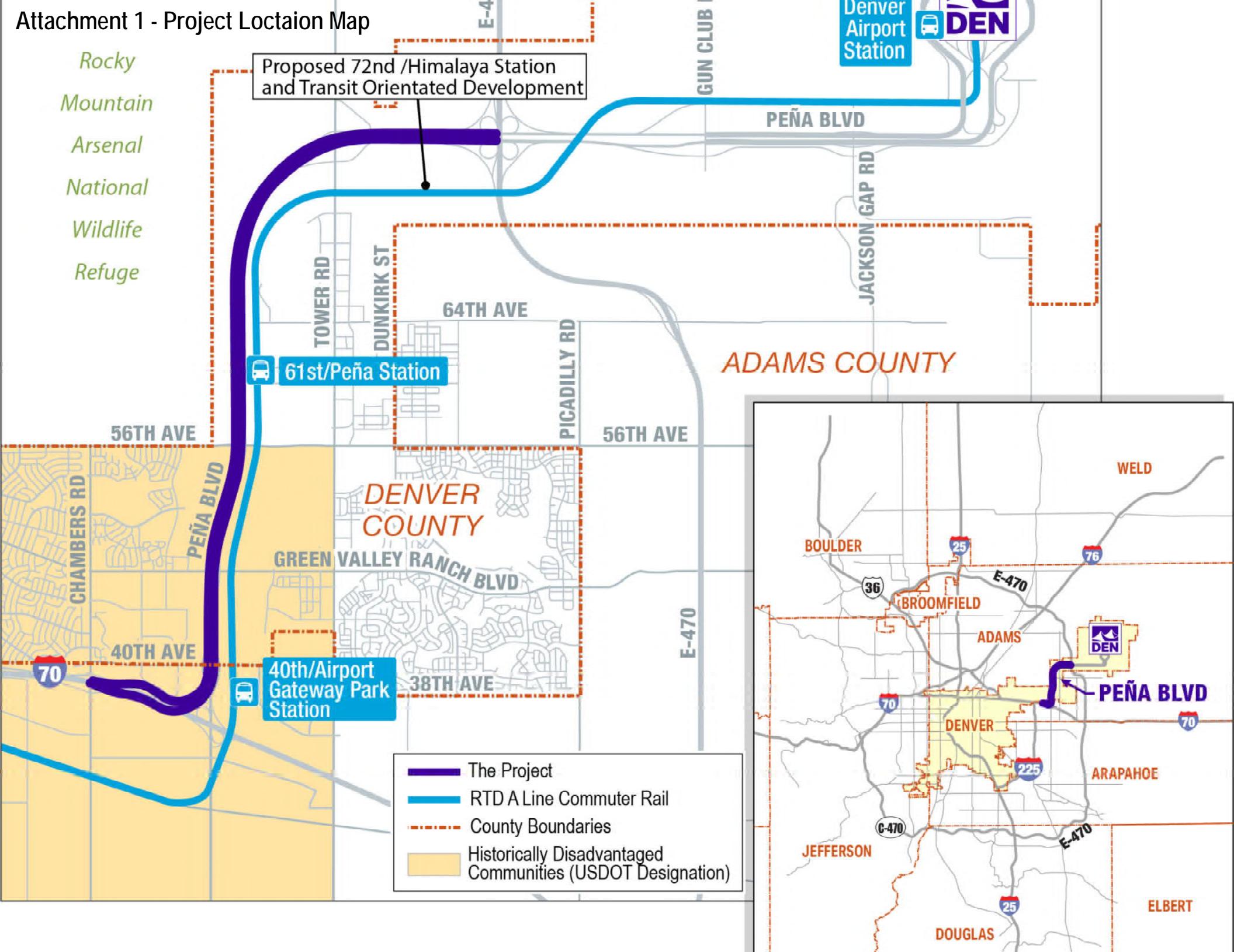
Please provide any additional details on the items in Section 3, if applicable.

As part of the Peña Master Plan, DEN has been engaging with the surrounding agencies to keep them informed of the Peña Master Plan and this Project. The Peña Master Plan has also established a Stakeholder Working Group, made up of both surrounding transportation and local agencies and advocacy groups, and will engage with them at key stages of the Peña Master Plan. Public meetings will be held in both Montbello and Green Valley Ranch to engage the public and seek their input to the Peña Master Plan.

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

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

Attachment 1 - Project Location Map



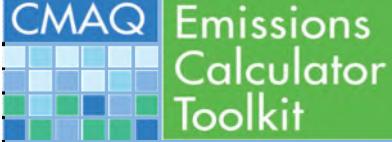
Attachment 2 - Project Cost Estimate



Budgetary Estimate Summary Sheet

PROJECT NAME:	PENA BLVD. I-70 to E-470
LOCATION:	8500 Peña Blvd. Denver, Colorado 80249-6340
PMIS No.:	17-0031
ESTIMATE BY:	Chris Kriegel
DATE PREPARED:	August 19, 2021

			PHASE 2, I-70 TO 64TH	PHASE 4, 64TH TO E-470	TOTAL
Construction Budget			\$101,123,236	\$72,517,693	\$173,640,929
Construction			\$99,140,427	\$71,095,777	\$170,236,205
Permits/Mitigation		2.00%	\$1,982,809	\$1,421,916	\$3,404,724
Professional Services			\$20,910,539	\$15,026,531	\$35,937,070
Design and Environmental Services (TIP Grant Ask)		10.0%	\$10,066,818	\$7,237,266	\$17,304,084
Travel Demand Management (TIP Grant Ask)			\$692,694	\$507,624	\$1,200,318
TOTAL TIP Grant Ask					\$18,504,402
Project Management		3.3%	\$3,692,131	\$2,648,665	\$6,340,796
Inspections		4.0%	\$4,475,310	\$3,210,503	\$7,685,813
Sustainability		2.0%	\$1,983,586	\$1,422,473	\$3,406,059
DEN Costs			\$39,369,248	\$28,241,983	\$67,611,231
ROCIP		2.0%	\$1,982,809	\$1,421,916	\$3,404,724
Art		1.0%	\$1,371,383	\$983,542	\$2,354,925
Contingency		30.0%	\$36,015,057	\$25,836,525	\$61,851,582
ESTIMATE TOTAL:			\$161,403,023	\$115,786,207	\$277,189,230



CMAQ
Emissions
Calculator
Toolkit

New Managed Lane Facilities

This calculator will estimate the reduction in emissions from implementing new managed lane (ML) facilities, such as high-occupancy vehicles (HOV) and high-occupancy toll (HOT) lanes. Users can select continuous access, buffer zones, and physical barriers between the managed and general purpose (GP) lanes.

Navigator

- [New Facilities](#)
- [Lane Conversions](#)

INPUT

(1) What is your project evaluation year?	<input type="text" value="2030"/>												
(2) Choose your type of managed lane (ML) facility:	<input type="text" value="Buffer"/>												
Note: Separation between managed and general purpose (GP) lanes will help determine project effectiveness													
(3a) How many general purpose (GP) lanes does the facility have?	<input type="text" value="2"/>												
(3b) How many managed lanes will the facility have?	<input type="text" value="1"/>												
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2,720	1,240	2,100											
70	70	70											
(4) Please enter the typical peak hour traffic flow (total vehicles per hour per lane) and free flow speed (miles per hour) for the GP lanes before completion and both the ML(s) and GP lanes after completion:													
Note: Please consult the tool's user guide and its appendix for methodology on developing appropriate traffic flow and free flow speed estimates.													
(5) What percentage of traffic in the GP lanes is from heavy-duty vehicles?	<input type="text" value="6%"/>												
(6a) Indicate peak or non-peak hour analysis for the ML facility:	<input type="text" value="Peak"/>												
(6b) How many peak/non-peak hours each day is the facility operated?	<input type="text" value="10"/>												
(7) What is the length of the facility (in miles)?	<input type="text" value="7"/>												
(8) Is the facility on an urban or rural highway?	<input type="text" value="Urban"/>												

OUTPUT

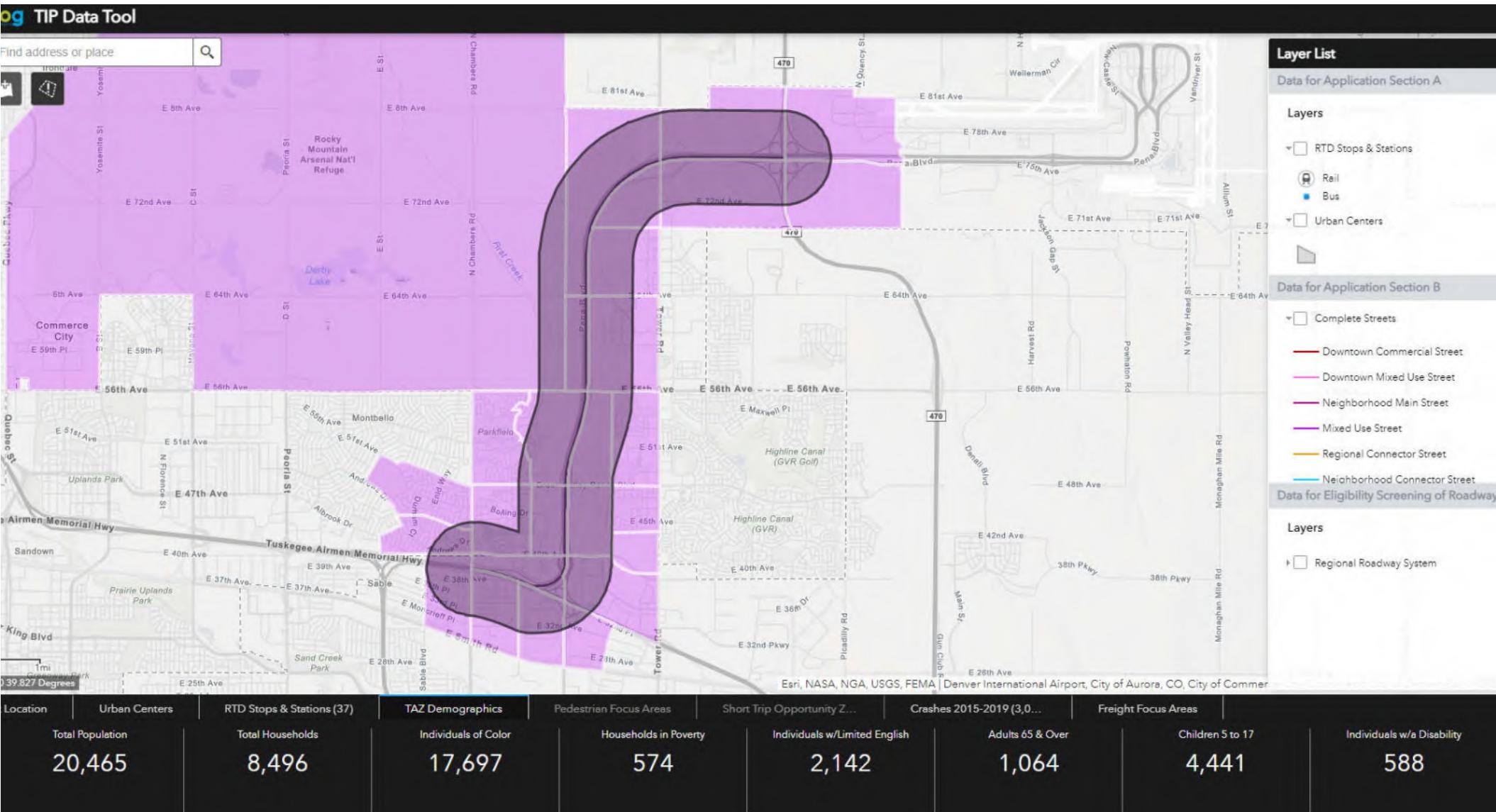
NETWORK PERFORMANCE

Derived Average Speed and Travel Time Estimates for the ML and GP Lanes Before and After Project Completion	BEFORE GP Lanes 43.20 10.56	AFTER ML(s) 61.47 7.42	GP Lanes 60.60 7.52
		Average Speed (mph) Average Travel Time (minutes)	

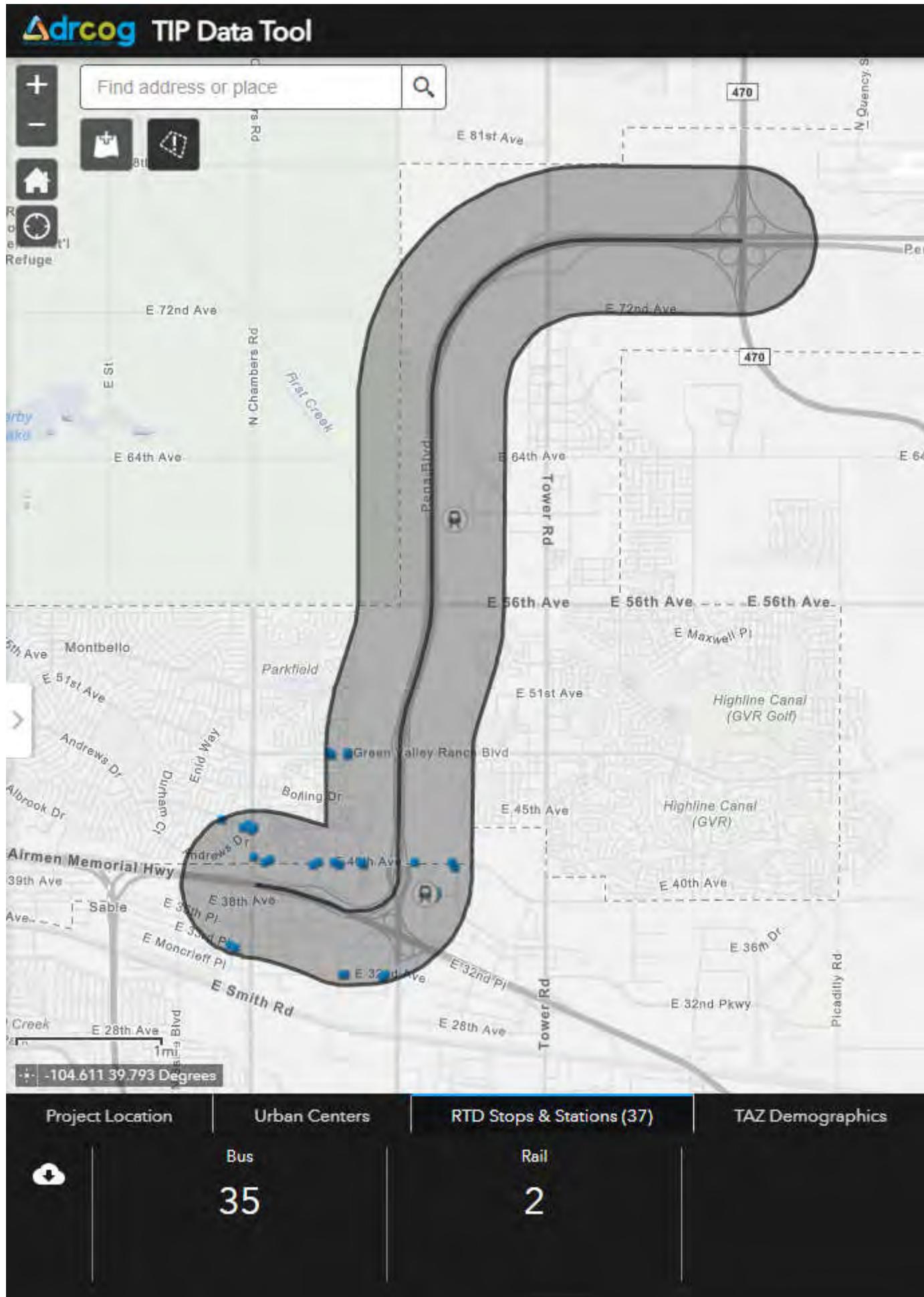
EMISSION REDUCTIONS

	Pollutant	Total (kg/day) <small>unless otherwise noted</small>	
	Carbon Monoxide (CO)	-0.4816	
	Particulate Matter <2.5 µm (PM _{2.5})	2.2644	
	Particulate Matter <10 µm (PM ₁₀)	9.9300	
	Nitrogen Oxide (NOx)	12.6542	
	Volatile Organic Compounds (VOC)	1.0089	
	Carbon Dioxide Equivalent (CO₂e)	15,004.7394	
	Total Energy Consumption (MMBTU/day)	193.9421	

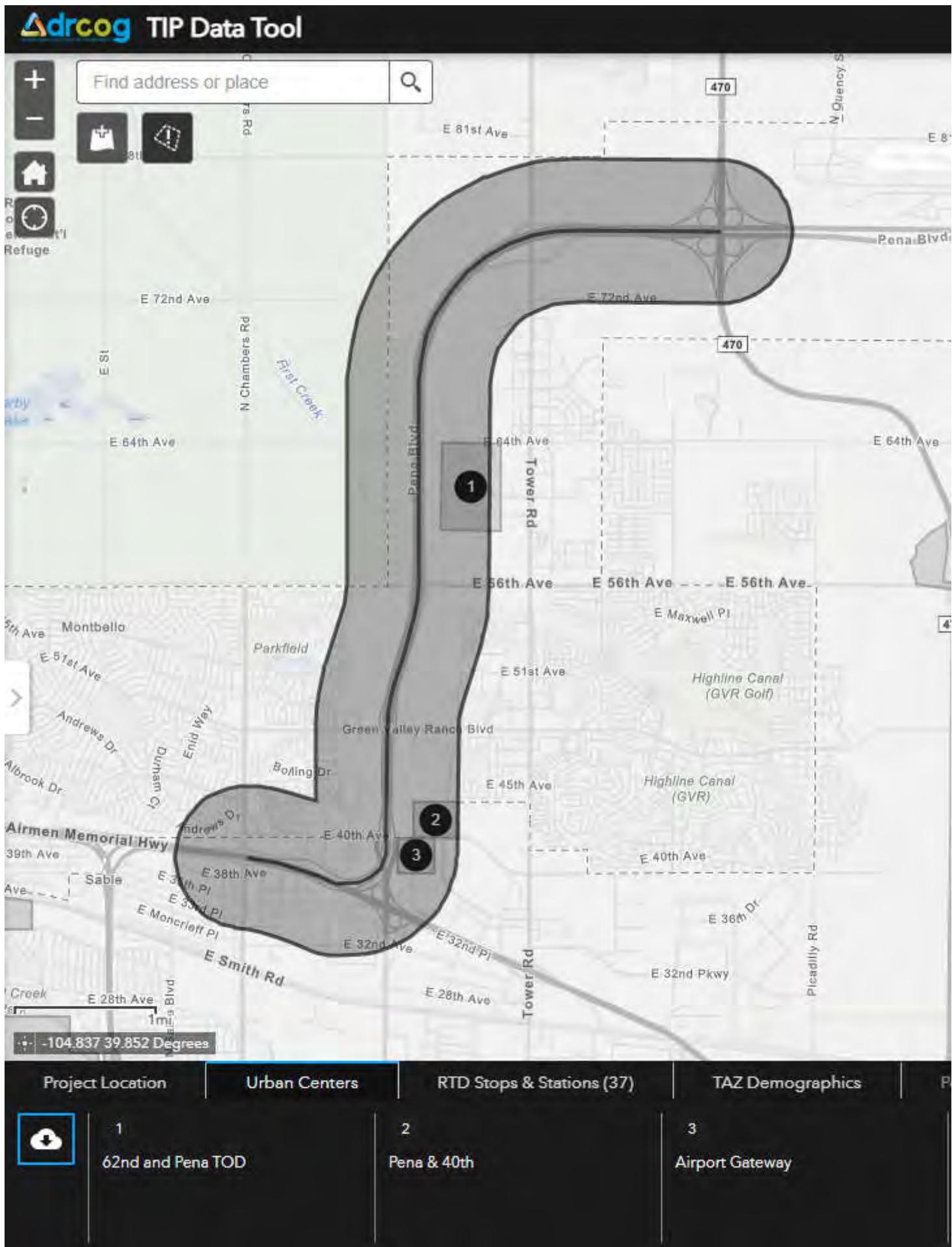
Attachment 4 - 0.5 mile TAZ Buffer



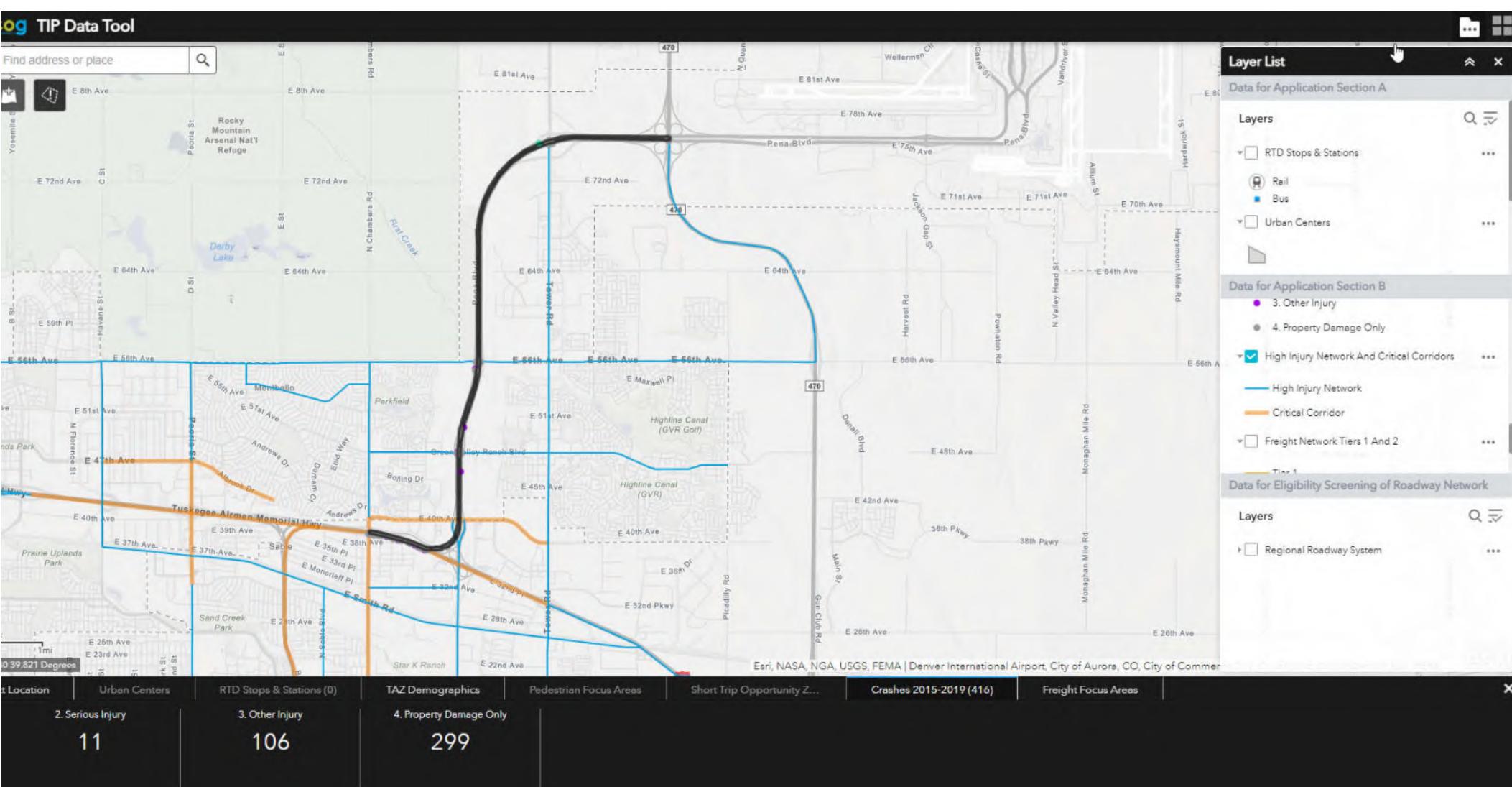
Attachment 5 - Transit Stops



Attachment 6 - Urban Centers



Attachment 7 - Crashes and High Injury Network



Attachment 8 - Freight Focus Areas

adrcog TIP Data Tool

