

## APPLICATION OVERVIEW

---

The **Subregional Share Call for Projects** will **open on January 2, 2019**, with applications **due no later than 3 p.m. on February 27, 2018** to your subregional forum.

- To be eligible to submit, at least one person from your agency must have attended one of the mandatory TIP training workshops (held August 8 and August 16) or a supplemental training held on September 14.
- Projects requiring CDOT and/or RTD concurrence must provide their official response with the application submittal. The CDOT/RTD concurrence request is due to CDOT/RTD no later than January 7, with CDOT/RTD providing a response no later than February 8. The form can be found [here](#). Concurrence to the City and County of Denver is also requested and due February 8.
- Any applications submitted by regional or similar agencies (TMA's), or municipalities crossing multiple subregions, must be submitted through the subregional forum based on where the majority of the project is located.
- Regional data to help the sponsor fill out the application, *especially Part 3*, can be found [here](#).
- If any sponsor wishes to request additional data or calculations from DRCOG staff, please submit your request to [scook@drcog.org](mailto:scook@drcog.org) no later than February 6, 2019.
- The application must be affirmed by either the applicant's City or County Manager or Chief Elected Official (Mayor or County Commission Chair) for local governments, or agency director or equivalent for other applicants.
- Further details on project eligibility, evaluation criteria, and the selection process are defined in the Policy on Transportation Improvement Program (TIP) Preparation: Procedures for Preparing the 2020-2023 TIP, which can be found online [here](#).
- The Denver Subregional Forum has established minimum and maximum DRCOG-allocated subregional request amounts as follows:
  - Infrastructure Projects – Minimum \$5,000,000
  - Plans, Studies, and Design – Minimum \$150,000 and Maximum \$5,000,000
  - Programs – Minimum \$150,000
- Required submission documents are listed below:
  - Completed Denver Subregional Application form
  - "Considerations for Project Federalization" form (see Denver staff)
  - 2019 Conceptual Project Cost Worksheet (see Denver staff)
  - Financial commitment documentation for the local match and other non-federal project funding contributions
  - Denver, CDOT, and RTD Concurrence letters, where applicable
- Additional documents may be attached such as support letters, photos and project diagrams, and data methodology and sources.

# APPLICATION FORM OUTLINE

The 2020-2023 TIP Subregional Share application contains three parts: *base project information* (Part 1), *evaluation questions* (Part 2), and *data calculation estimates* (Part 3). DRCOG staff will review each forum's submitted applications for eligibility. Each forum will be responsible for making a comprehensive evaluation of all eligible applications and rank ordering their submittals to determine their recommended projects and waiting lists. Forum recommendations will be forwarded to DRCOG staff for a final recommendation to the TAC, RTC, and DRCOG Board.

## Part 1 | Base Information

Applicants will enter **foundational** information for their *project/program/study* (hereafter referred to as *project*) in Part 1, including a Problem Statement, project description, and concurrence documentation from CDOT and/or RTD, if applicable. Part 1 will not be scored.

## Part 2 | Evaluation Criteria, Questions, and Scoring

This part includes four sections (A-D) for the **applicant to provide qualitative and quantitative responses** to use for scoring projects. The outcomes from Part 3 should guide the applicant's responses in Part 2.

**Scoring Methodology:** Each section will be scored using a scale of *High-Medium-Low*, relative to other applications received. The four sections in Part 2 are weighted and scored as follows:

### Section A. Subregional Significance of Proposed Projects ..... 30%

<b>High</b>	The project will significantly address a clearly demonstrated major subregional problem and benefit people and businesses from multiple subregions.
<b>Medium</b>	The project will either moderately address a major problem or significantly address a moderate-level subregional problem.
<b>Low</b>	The project will address a minor subregional problem.

### Section B. Metro Vision TIP Focus Areas and Specific Denver Goals ..... 30%

<b>High</b>	The project will <b>significantly improve</b> the safety and/or security, <b>significantly increase</b> the reliability of the transportation network, and benefit a <b>large number and variety</b> of users (including vulnerable populations*).
<b>Medium</b>	The project will <b>moderately improve</b> the safety and/or security, <b>moderately increase</b> the reliability of the transportation network, and benefit a <b>moderate number and variety</b> of users (including vulnerable populations*).
<b>Low</b>	The project will <b>minimally improve</b> the safety and/or security, <b>minimally increase</b> the reliability of the transportation network, and benefit a <b>limited number and variety</b> of users (including vulnerable populations*).

*\*Vulnerable populations include: Individuals with disabilities, persons over age 65, and low-income, minority, or linguistically-challenged persons.*

**Section C. Consistency & Contributions to Transportation-focused Regional Metro Vision and Denver Plans, Goals, and Objectives ..... 30%**

Metro Vision guides DRCOG’s work and establishes shared expectations with our region’s many and various planning partners. The plan outlines broad outcomes, objectives, and initiatives established by the DRCOG Board to make life better for the region’s residents. The degree to which the outcomes, objectives, and initiatives identified in Metro Vision apply in individual communities will vary. Metro Vision has historically informed other DRCOG planning processes, such as the TIP. In addition, at the Denver Subregional level, consistency with the goals, objectives, priorities, and recommendations of Denver local plans is also an important consideration.

<b>High</b>	The project will <b>significantly</b> address Metro Vision and Denver transportation-related objectives and is determined to be in the <b>top third</b> of applications based on the magnitude of benefits.
<b>Medium</b>	The project will <b>moderately</b> address Metro Vision and Denver transportation-related objectives and is determined to be in the <b>middle third</b> of applications based on the magnitude of benefits.
<b>Low</b>	The project will <b>slightly or not at all</b> address Metro Vision and Denver transportation-related objectives and is determined to be in the <b>bottom third</b> of applications based on the magnitude of benefits.

**Section D. Leveraging of non-Subregional Share funds (“overmatch”) ..... 10%**

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

% of Outside Funding (non-Subregional Share)	<b>High</b>	60% and above
	<b>Medium</b>	30-59%
	<b>Low</b>	29% and below

**Part 3 | Project Data – Calculations and Estimates**

Based on the applicant’s project elements, sponsors will complete the appropriate sections to estimate usage or benefit values. Part 3 is not scored, and the quantitative responses should be used to back-up the applicant’s qualitative narrative

## Part 1 Base Information

1. Project Title	<b>BROADWAY STATION / I-25 SAFETY AND ACCESS IMPROVEMENTS</b>	
2. Project Start/End points or Geographic Area <i>Provide a map with submittal, as appropriate</i>	Kentucky Ave to Exposition Ave.; Bannock to Lincoln SEE "TOTAL PROJECT EXHIBIT: Attached	
3. Project Sponsor (entity that will construct/ complete and be financially responsible for the project)	<b>City and County of Denver</b>	
4. Project Contact Person, Title, Phone Number, and Email	<b>Justin Begley</b> , Project Manager II, Denver Public Works, Transportation Planning, 720-913-1743, <a href="mailto:justin.begley@denvergov.org">justin.begley@denvergov.org</a>	
5. Does this project touch CDOT Right-of-Way, involve a CDOT roadway, access RTD property, or request RTD involvement to operate service?		<b>XX</b> Yes <input type="checkbox"/> No <i>If yes, provide applicable concurrence documentation with submittal</i> SEE ATTACHED CDOT AND RTD CONCURRENCE
6. What planning document(s) identifies this project?	<b>XX</b> <a href="#">DRCOG 2040 Fiscally Constrained Regional Transportation Plan (2040 FC RTP)</a>	
	<b>XX</b> Local plan:	<i>I-25 and Broadway Station Area Plan (2016),</i> <a href="https://www.denvergov.org/content/dam/denvergov/Portals/646/documents/planning/Plans/I25-Broadway-station-area-plan.pdf">https://www.denvergov.org/content/dam/denvergov/Portals/646/documents/planning/Plans/I25-Broadway-station-area-plan.pdf</a> <i>South Broadway Environmental Assessment and Section 4(f) Evaluation (2008)</i> <a href="http://www.denvergov.org/content/dam/denvergov/Portals/479/documents/web_south%20broadway%20final%20ea_mar08_eaonly.pdf">http://www.denvergov.org/content/dam/denvergov/Portals/479/documents/web_south%20broadway%20final%20ea_mar08_eaonly.pdf</a> <i>FHWA/CDOT: South Broadway Finding of No Significant Impact (2008)</i> <a href="http://www.denvergov.org/content/dam/denvergov/Portals/479/documents/South%20Broadway%20Finding%20of%20No%20Significant%20Impact.pdf">http://www.denvergov.org/content/dam/denvergov/Portals/479/documents/South%20Broadway%20Finding%20of%20No%20Significant%20Impact.pdf</a>

	<b>XX</b> Other(s):	FHWA/CDOT <i>Final I-25 Valley Highway Environmental Impact Statement (EIS) (2006) and June 2007 Record of Decision (ROD).</i> <a href="https://www.codot.gov/library/studies/i-25-valley-highway-EIS/rod">https://www.codot.gov/library/studies/i-25-valley-highway-EIS/rod</a> Phase 6 includes: I-25/ Broadway Interchange -- Reconfiguration/reconstruction of I-25/Broadway interchange
<i>Provide link to document/s and referenced page number if possible, or provide documentation with submittal</i>		
<p><b>7. Identify the project's key elements.</b></p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><input type="checkbox"/> Rapid Transit Capacity (2040 FC RTP)</p> <p><input type="checkbox"/> Transit Other:</p> <p><b>XX</b> Bicycle Facility</p> <p><b>XX</b> Pedestrian Facility</p> <p><b>XX</b> Safety Improvements</p> <p><input type="checkbox"/> Roadway Capacity or Managed Lanes (2040 FC RTP)</p> <p><b>XX</b> Roadway Operational</p> </div> <div style="width: 45%;"> <p>Grade Separation</p> <p><input type="checkbox"/> Roadway</p> <p><input type="checkbox"/> Railway</p> <p><input type="checkbox"/> Bicycle</p> <p><input type="checkbox"/> Pedestrian</p> <p><b>XX</b> Roadway Pavement Reconstruction/Rehab</p> <p><input type="checkbox"/> Bridge Replace/Reconstruct/Rehab</p> <p><input type="checkbox"/> Study</p> <p><b>XX</b> Design</p> <p><b>XX</b> Transportation Technology Components</p> <p><input type="checkbox"/> Other:</p> </div> </div>		

8. **Problem Statement** What specific Metro Vision-related subregional problem/issue will the transportation project address?

#### **METRO VISION REGIONAL TRANSPORTATION PLAN CHALLENGES ADDRESSED**

This project addresses the following challenges identified in the 2040 Metro Vision Regional Transportation Plan (MVRTP) at the Broadway Station, an identified urban center on Figure 2.5 of the MVRTP:

##### Transportation Challenges

- > Automobile dominance
- > Mobility options for persons without a car
- > Traffic congestion
- > Traffic crashes
- > Water quality

##### Land Development Challenges

- > Location of growth
- > Less efficient development patterns
- > Lower development densities

#### **CHALLENGES AT I-25 RAMPS, BROADWAY/LINCOLN, AND FOR BROADWAY STATION ACCESS**

As a result of extensive project coordination with the project stakeholders, traffic and engineering analyses, Consensus Committee input, public involvement activities, and agency scoping in the development of the South Broadway Environmental Assessment, the following major needs have been identified for the project:

- > South Broadway and South Lincoln are currently experiencing peak-hour congestion and a high level of crashes that is expected to worsen, impacting the I-25 on- and off-ramps and increasing travel time and delay.
- > Projected regional growth, as well as local growth in traffic due to desirable high-density, transit-oriented redevelopment of the rezoned Gates property, will result in increased congestion and increase the likelihood of traffic cutting through adjacent neighborhoods.
- > A current lack of connectivity and inadequate width of bicycle and pedestrian facilities that are focused on the South Broadway corridor, bus stops, and the I-25 RTD Broadway Station bus and light rail hub hampers access by alternative modes to the station resulting in additional use of single-occupant vehicles.
- > The pavement on many of the roadways is in poor condition due to the age of the infrastructure

On page 6 and 7 of Denver's Vision Zero Action Plan, Broadway and Lincoln are identified as corridors on the High Injury Network. See Excerpts of Denver Vision Zero Action Plan attached.

**9. Define the *scope* and *specific elements* of the project.**

The primary purpose of this project is to create a transportation network near the Broadway Station hub at I-25 and Broadway that results in safe and efficient mobility for all modes of transportation including pedestrian, bicycle, transit, and automobile. Increased travel demands are the result of background population and employment growth in the region in combination with the on-going transit-oriented redevelopment of the former Gates Rubber Company site.

This regionally significant project provides improvements for both Broadway Station safety and access, as well as congestion relief for travelers on and off I-25 at Broadway and Lincoln/Ohio, includes the following scope and project elements:

**EXISTING SCOPE AND PROJECT ELEMENTS:**

- > E. Exposition Ave. will be reconstructed between Lincoln and Broadway to allow for improved vehicular movements between these roadways. New traffic signals will be installed at the intersections of E. Exposition with Broadway and Lincoln.
- > Broadway will be rehabilitated or restored where concrete pavement exists to extend the service life and enhance the safety of a roadway. The asphalt portion of the roadway will be reconstructed on concrete. The limits extend from E. Exposition Ave. to South of Ohio.
- > Realignment and reconstruction of the I-25 interchange southbound on-ramp to improve traffic operations. The existing on-ramp will be replaced by a new ramp beginning at the intersection of Broadway Boulevard and Ohio Avenue with an alignment that crosses under I-25 west of Broadway, continues parallel to I-25 and crosses over Broadway with a new bridge structure before connecting to I-25. This new SB I-25 on-ramp will alleviate substantial congestion that currently exists on southbound Broadway, particularly in the PM peak hours.
- > Parking located within the new ramp will be reconfigured to maximize the number of spaces. The parking area will be paved and a detached multi-use trail extending from Lincoln/Ohio directly into the RTD I-25/Broadway Station area will be constructed.

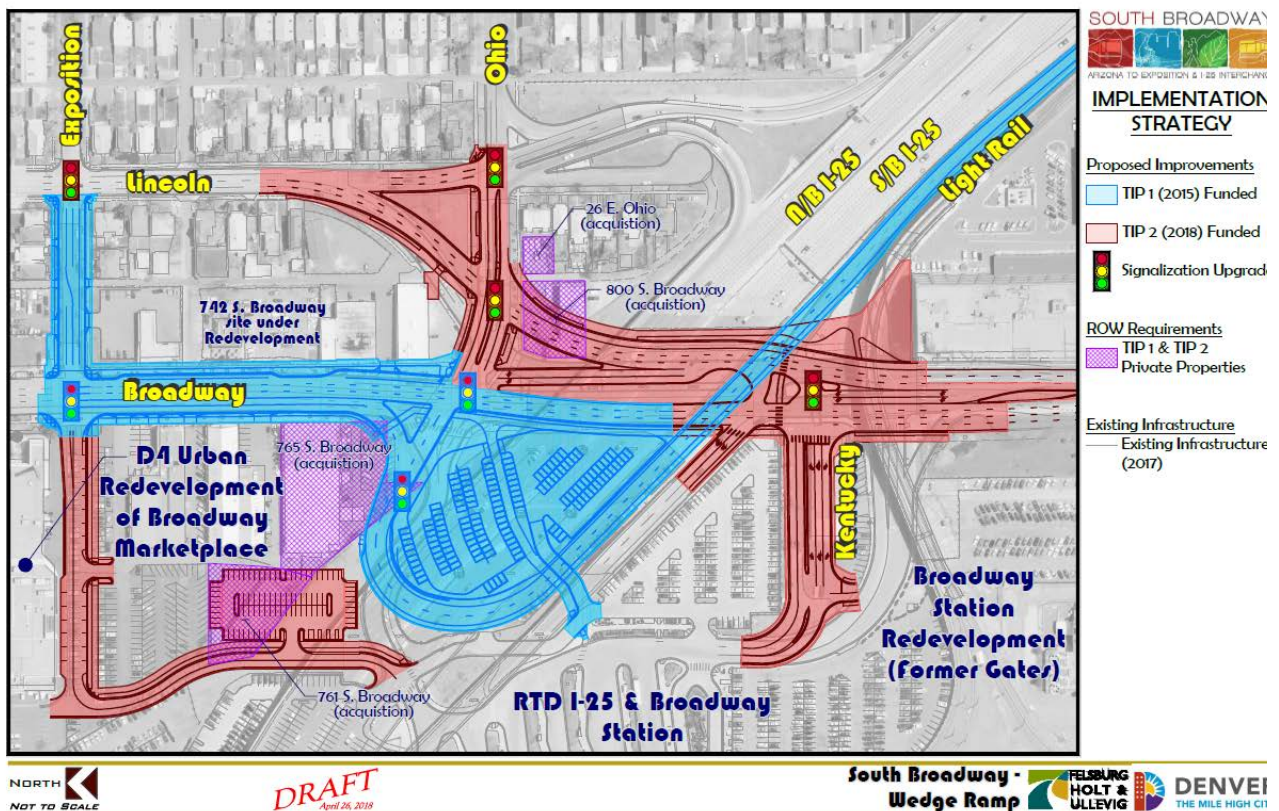
**NEW SCOPE AND PROJECT ELEMENTS**

- > West of Broadway, an extension of Exposition Avenue and Bannock Street will be constructed to provide the northern connection to the RTD I-25/Broadway Station area. This connection will include a 10' multi-use trail to connect the future bike lane on Broadway to the Station and development on the former Gates Rubber Plant site.
- > A new parking lot will be constructed adjacent to Bannock, in close proximity to the Station, to mitigate parking spaces impacted by the new on-ramp.
- > Kentucky Ave. will be realigned and reconstructed to consolidate it with the southbound I-25 off-ramp intersection to further reduce congestion and the number of accidents at this location.> Ohio Avenue will also be reconstructed to provide the needed laneage, raised medians and to align with the new southbound I-25 on-ramp. A new signal will be added to the intersection of Ohio and Lincoln to improve the pedestrian/ bicycle access from West Wash Park.
- > Broadway and Lincoln Streets will be reconstructed in concrete pavement from south of Kentucky Avenue, to north of Ohio. At Kentucky Avenue, the new concrete pavement will tie to the concrete pavement completed as a part of the prior phase of the project in 2017 (Kentucky to Arizona). The reconstruction will provide additional width to accommodate turn lanes, medians, sidewalks and the preferred streetscape.

### Scope and project elements that apply to the whole project:

- > The project also includes new or modified traffic signals and pedestrian and bike crossings; new sidewalks; and street lighting to current standards. Streetscaping will be provided to enhance the visual character of the roadway.
- > Permanent Water Quality facilities will be installed at multiple/ strategic locations throughout the project.

(Refer to the following illustration for additional information. TIP 1 represents the existing scope, TIP 2 represents the new scope)



### STATUS OF THE PROPOSED PROJECT

With additional funding, this project can be implemented consistent with the Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) completed in 2008. The System Level Study and Interchange Access Request for the entire project was approved by the Transportation Commission in 2008. The 30% design of the entire project was completed in July 2011. This project is the second phase of the overall project. The construction of the first phase of the project was completed in the fall of 2017.

The design of the improvements for this phase of the project is approximately 60 percent complete. The ROW phase for the current phase of the project was initiated in 2017.

10. Would a smaller DRCOG-allocated funding amount than requested be acceptable, while maintaining the original intent of the project?

**XX** Yes ☐ No

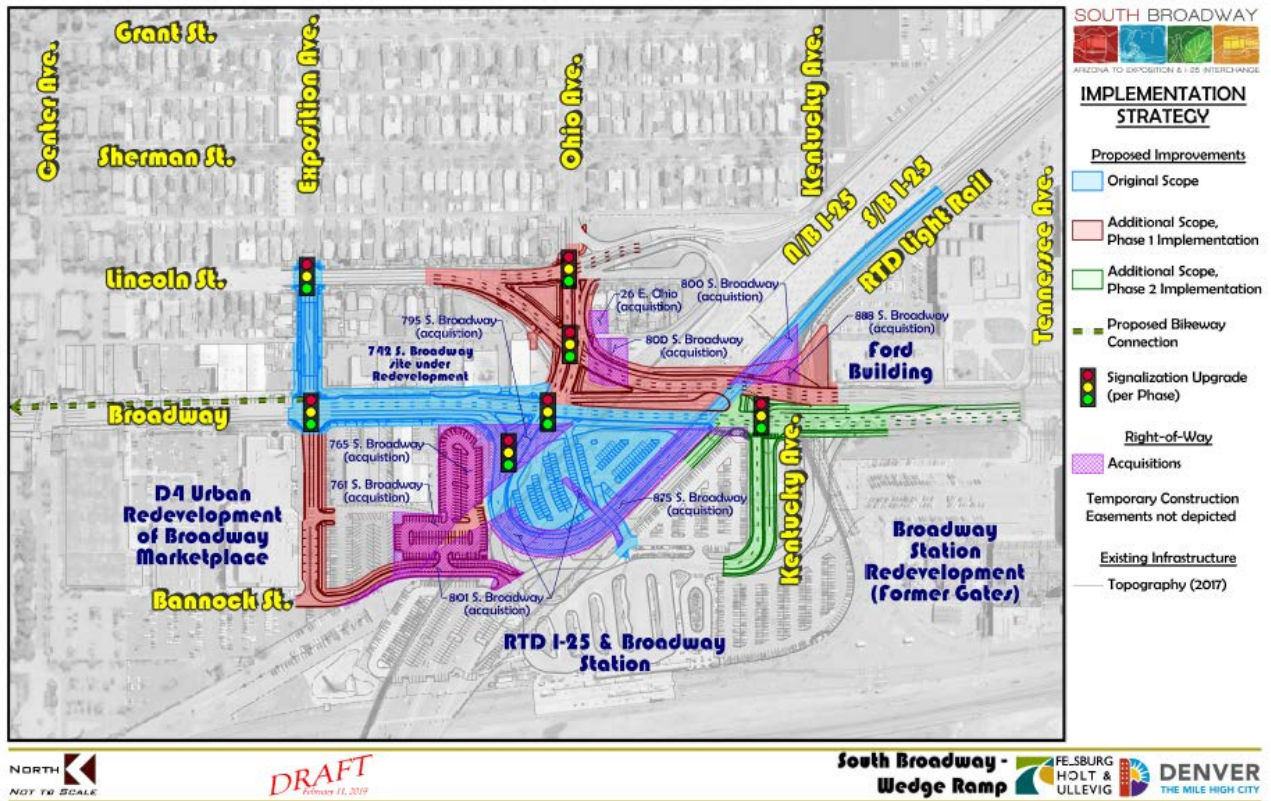
*If yes, define smaller meaningful limits, size, service level, phases, or scopes, along with the cost for each.*

**Option 2 - SUBPHASED PROJECT - REDUCED SCOPE AND COST – \$17.91M SUBREGIONAL REQUEST**

A smaller subphase of the overall project could be implemented, but as documented in the Data Methodology, in general, Option 2 is not an improvement over doing nothing – delay increases due to the introduction of new traffic signals. . The phased scope could include the following elements and would seek a total of \$17,910,000 from the Subregional Allocation share:

- > West of Broadway, an extension of Exposition Avenue and Bannock Street will be constructed to provide the northern connection to the RTD I-25/Broadway Station area. This connection will include a 10' multi-use trail to connect the future bike lane on Broadway to the Station and development on the former Gates Rubber Plant site. A paved parking will be added to the East of the new roadway to mitigate impacts to existing parking in the area.
- > Northbound Broadway/ Lincoln will be realigned and reconstructed in concrete pavement from south of Kentucky Avenue, to a point between Ohio and Exposition. At Kentucky Avenue, the new concrete pavement will tie to the concrete pavement completed as a part of the prior phase of the project in 2017 (Kentucky to Arizona). The reconstruction will provide additional width to accommodate turn lanes, medians, sidewalks and the preferred streetscape.
- > Ohio Avenue will also be reconstructed to provide the needed laneage, raised medians, pedestrian connections, and to align with the new Southbound I-25 on-ramp. A new signal will be added to the intersections of Ohio and Lincoln and the signal at Ohio and E Walsh Pl will be replaced to improve the pedestrian/ bicycle access from West Wash Park.
- > A protected bikeway on Broadway will be implemented through repurposing a travel lane for parking and applying signage and striping improvements, as well as vertical elements, to facilitate a parking protected, two-way cycle track. This will close the gap between the City's bikeway at Center and the multiuse trail being installed at Exposition.
- > Additional features include new sidewalks, new street lighting, and storm sewer upgrades. Streetscaping will be provided to enhance the visual character of the roadway.
- > Permanent Water Quality facilities will be installed at multiple/ strategic locations throughout the project.

(Refer to the “Additional Scope Phase 1 Implementation” on the illustration as follows for additional information)



The total reduced scope cost for this supplemental funding request is approximately \$37.5375 M (including the value of a private land contribution), which is 44% of the total project cost of \$85.476M.

## A. Project Financial Information and Funding Request

<b>1. Total Project Cost</b>		<b>\$48,324,000</b>
<b>2. Total amount of DRCOG Subregional Share Funding Request</b>	<b>\$21,200,000</b>	<b>44%</b> of total project cost
<b>3. Outside Funding Partners (other than DRCOG Subregional Share funds)</b> List each funding partner and contribution amount.	<b>\$\$</b> <b>Contribution Amount</b>	<b>% of</b> <b>Contribution</b> <b>to Overall Total</b> <b>Project Cost</b>
	\$	
EXISTING LOCAL – 2019 CIP Local Overmatch (Existing Local)	\$3,500,000	7%
NEW LOCAL – 2020 - 2022 Denver Capital Improvement Program (CIP) Funds for Local Overmatch for Existing Project	\$5,844,000	12%
NEW LOCAL IN-KIND - Private Developer Land Contributions	\$17,780,000	37%
	\$	
	\$	
<b>Total amount of funding provided by other funding partners</b> (private, local, state, Regional, or federal)	<b>\$27,124,000</b>	

<b>Funding Breakdown (year by year)*</b>					
*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 an inflation factor of 3% per year from 2019.					
	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>Total</b>
<b>Federal Funds</b>	\$9,392,000	\$	\$11,808,000	\$	<b>\$21,200,000</b>
<b>State Funds</b>	\$	\$	\$	\$	<b>\$0</b>
<b>Local Funds</b>	\$3,500,000	\$17,780,000	\$5,844,000	\$	<b>\$27,124,000</b>
<b>Total Funding</b>	\$12,892,000	\$17,780,000	\$17,652,000	\$0	<b>\$48,324,000</b>
<b>4. Phase to be Initiated</b> Choose from Design, ENV, ROW, CON, Study, Service, Equip. Purchase, Other	DESIGN/ ROW	ROW	CON		
<b>5. By checking this box</b> , the applicant's Chief Elected Official (Mayor or County Commission Chair) or City/County Manager for local governments or Agency Director or equivalent for others, has certified it allows this project request to be submitted for DRCOG-allocated funding and will follow all DRCOG policies and state and federal regulations when completing this project, if funded.					<b>XX</b>

RTD has indicated that land at the Broadway Station, required for the new on-ramp to southbound I-25, will have to be purchased. Additional funding is needed for the transaction and is not included in this request.

## Part 2 | Evaluation Criteria, Questions, and Scoring

### A. Subregional significance of proposed project

WEIGHT

3

Provide **qualitative and quantitative** (derived from Part 3 of the application) responses to the following questions on the subregional significance of the proposed project.

1. Why is this project important to the Denver subregion?

This project located at I-25 Broadway will provide improvements for travelers on two regional facilities: I-25 and three regional RTD rail lines – Central, Southwest, and Southeast. It will provide congestion relief for I-25 on- and off-ramps, as well as multimodal safety and access, and first- and last-mile connections to the regional bus/rail hub at Broadway Station. As detailed below, the freeway access ramps and the Broadway Station are used by multiple counties.

2. Does the proposed project cross and/or benefit multiple **municipalities**? If yes, which ones and how?

YES. SEE #3 BELOW.

3. Does the proposed project cross and/or benefit another **subregion(s)**? If yes, which ones and how?

For metro area residents traveling on I-25, Broadway, Lincoln, and Santa Fe to the Broadway Station area for regional transit connections, as well as to and from Downtown Denver for employment, sports and recreation, and access to other regional destinations, the operational improvements to these key regional and statewide arteries will reduce travel time and traffic incidents/crashes.

FREEWAY USERS AT BROADWAY/LINCOLN - DRCOG RTP 2017 Forecasts

DRCOG's Regional Transportation Plan 2017 forecasts that 65% of the travelers using the I-25 NB off-ramp to Lincoln Street at Ohio Avenue are originating outside of Denver, with the following highest percentages by metro area counties:

- > Arapahoe 43%
- > Denver 35%
- > Douglas 17%

TRANSIT USERS AT BROADWAY STATION – RTD License Plate Data by County

RTD's 2017 license plate survey at the Broadway Station park-n-Ride demonstrates that non-Denver travelers accounted for 60% of the vehicles parked at the station with a breakdown as follows for metro area counties:

- > Denver 40%
- > Arapahoe 35%
- > Douglas 12%
- > Jefferson 10%

4. How will the proposed project address the specific transportation problem described in the **Problem Statement** (as submitted in Part 1, #8)?

Overall, this project will reduce congestion and delay, improve safety, and provide faster access to the jobs located in Downtown and in the southern metro area suburbs.

The following elements of the Broadway Station MM project are especially critical to address the problems identified:

- (1) A new Exposition/Bannock multimodal connection to the Broadway Station, with a connection to the Denver planned bikeway on Broadway to the north of the study area.
- (2) Multimodal safety and congestion mitigation improvements on Lincoln and Broadway, and on Ohio and Exposition Avenues east of Broadway;
- (3) A more direct access ramp onto SB I-25 from SB Broadway; and
- (4) Consolidation of the Kentucky Ave. Station Access and the SB I-25 off-ramp into one safer intersection
- (5) Improved multi-use path access on reconstructed corridors, with new or replaced signals and crosswalk improvements at intersections.

Project addresses the following MVRTP Challenges as indicated:

Transportation Challenges

- > Automobile dominance - multimodal access to a large TOD development
- > Mobility options for persons without a car - safer, more convenient transit, bike, and ped connections
- > Traffic congestion - I-25 ramp improvements, additional turn lanes
- > Traffic crashes - increased signalization and
- > Water quality - Provision of water quality facilities to serve the project as well as CDOT freeway flows

Land Development Challenges

- > Location of growth, Less efficient development patterns, and Lower development densities and - Facilitating growth in an urban center that is redeveloping to denser multi-use TOD development served by a bus/rail transit hub

5. One foundation of a sustainable and resilient economy is physical infrastructure and transportation. How will the **completed** project allow people and businesses to thrive and prosper?

Completion of these improvements will provide safe, direct, and convenient multimodal access to the Broadway Station area, which is the largest Transit-Oriented Development infill site available in the Denver metro area. This 50+ acre, mixed-use redevelopment site lies in a prime location at the intersection of I-25, Santa Fe Drive, and South Broadway at the Broadway Station light rail and bus transfer station. For vehicles, the site is accessed by the I-25 / Broadway interchange which serves as a gateway to Downtown Denver, the Central Business District (CBD) as well as the Denver Tech Center (DTC).

**6. How will connectivity to different travel modes be improved by the proposed project?**

The primary purpose of this project is to create a multimodal, first/last mile transportation network near the Broadway Station hub at I-25 and Broadway that results in safe and efficient mobility for all modes of transportation including pedestrian, bicycle, transit, and automobile. Reductions in travel delay will benefit buses as well as motor vehicles parking at the Broadway Station.

Each of the reconstructed roadways will provide multi-use paths to access the station. The new access to the station -- the Exposition/Bannock Extension -- will provide the connection into the station from the bikeway Denver is implementing on Broadway north of the project area.

In Part 3, the expected transit, bicycle, and pedestrian trips increases are estimated. The City and County of Denver recognizes that the growth in transit, walking and bicycling trips between now and 2040 will increase due to projects beyond the scope of the I-25 and Broadway station improvements (i.e. the separated bikeway that will be implemented on South Broadway will facilitate access to the station, and likely will increase bike trips). Knowing this, the grant application uses a conservative growth figure of 2 percent to model the growth in trips specifically caused by the I-25 and Broadway station improvement. The total growth in trips will likely be higher (3.5 to 7.5 percent), but CCD attributes any additional growth to other improvements, such as South Broadway bikeway, that will occur within the first/last mile radius of the station.

**7. Describe funding and/or project partnerships (*other subregions, regional agencies, municipalities, private, etc.*) established in association with this project.**

The two major property owners/developers in the I-25/Broadway and Broadway Station area vicinity -- Broadway Station Partners and D4 Urban -- were key partners in the development of the ***I-25 AND BROADWAY STATION AREA PLAN*** adopted by the Denver City Council in 2016. This Plan highlighted the amazing transit-oriented development (TOD) opportunities at the Broadway Station, but it also identified the existing regional transportation challenges in the area including congestion, safety, and first-last mile access and connectivity gaps.

Through the planning process, the City, RTD, CDOT, developers and property owners, and the public recognized that significant public and private investment is needed. Millions of dollars of on-site infrastructure will be provided by the private property owners and special districts formed in the area.

The partners determined that additional Federal transportation funding and City investment is needed to close the funding gap to realize the TOD vision, and to provide safe, direct, and convenient access for buses, pedestrians, bicyclists, and private vehicles into and out of the Station area. As detailed in Section A. PROJECT FINANCIAL INFORMATION AND FUNDING REQUEST above and the attached support letters, the following partners are contributing to the overall funding package for the public improvements:

- > RTD and CDOT own property and facilities in the project areal

- See have attached CDOT and RTD Concurrence letters.

- >> Denver is providing match and overmatch from City capital improvement funding, and is dedicating a substantial poerion of its Subregional Share to leverage exsiting TIP funding and the new Regional Share funding requested in this application. Broadway Station Partners is providing a key parcel to the City valued at \$6.1 M for the new Broadway/Kentucky Avenue / SB off-ramp consolidated intersection and station access.

- See attached Denver Financial Commitment letter.

- > D4 Urban is providing land for the new Exposition/Bannock extension into the station north of I-25 valued at \$11.65 M.

- See attached D4 Urban Support Letter.

## B. DRCOG Board-approved Metro Vision TIP Focus Areas and Specific Denver Goals

WEIGHT

3  
0

Provide **qualitative and quantitative** (derived from Part 3 of the application) responses to the following questions on how the proposed project addresses the three DRCOG Board-approved Focus Areas (in bold).

### VULNERABLE POPULATIONS AND EQUITY

1.A. Describe how the project will **improve mobility infrastructure and services for vulnerable populations (including improved transportation access to health services)** as defined in the [Adopted 2020-2023 TIP Policy](#):

A key goal of DRCOG's 2040 Metro Vision Regional Transportation Plan (MVRTP) is as follows:

> MAKE CONNECTIONS THAT INCREASE ACCESS AND TRAVEL CHOICE.

. . . [C]ompleted portions of the FasTracks program have expanded regional mobility, such improvements cannot be fully realized without easier connections for those walking, biking, driving, sharing a ride, or riding a bus to first- or final-mile connections to transit. . . Providing all of these travel choices can help reduce

vehicle miles traveled, ground-level ozone and other air pollutants, which can lead to improved individual and environmental health. A transportation system that serves users of all modes of travel also helps ensure that people of all ages, income levels and abilities remain connected to their communities and have the means to access services, amenities and employment opportunities.

The Broadway Station project is providing more direct and convenient transit access in the area who are transit-dependent or are physically unable to walk or bike; as well as bicycle and pedestrian facilities, which will benefit active and healthy vulnerable populations in the area. The greater transit access will allow vulnerable populations to reduce travel costs and time to travel to jobs, health facilities, and other destinations.

In addition, over 5,000 minority persons reside in the vicinity of the project, as well as 1,500 seniors and 1,500 students. These numbers are over and above the vulnerable populations that access the station via bus.

1.B. Describe how your project is consistent with **Denver's commitments to Equity principles** as defined below, and discussed in more detail in Chapter 4, Access to Opportunity, in the [Blueprint Denver \(Public Review Draft August 6, 2018\)](#).

***Equity is providing everyone with access to opportunity regardless of income level, race, ethnicity, gender, ability, or age.***

The Broadway Station project is providing more direct and convenient transit access in the area who are transit-dependent or are physically unable to walk or bike; as well as bicycle and pedestrian facilities, which will benefit active and healthy vulnerable populations in the area. The greater transit access will allow vulnerable populations to reduce travel costs and time to travel to jobs, health facilities, and other destinations.

## RELIABILITY OF THE MULTIMODAL TRANSPORTATION NETWORK

2.A. Describe how the project will **increase reliability of existing multimodal transportation network** as defined in the ***Adopted 2020-2023 TIP Policy***:

The improvements will provide congestion relief and reduce travel delay for vehicles, including buses.

In its draft 2018 annual congestion report presented to the Transportation Advisory Committee in August, the facilities in this area are rated as follows:

- I-25 in this vicinity is identified as a key freeway bottleneck point (see map in August TAC version);
- I-25 in this vicinity has regional congestion mobility scores of 18-20 (max possible (worse) is 20);
- Broadway and Lincoln have scores of 14.

Bicycle and pedestrian connectivity will be more continuous with less circuitous paths. The addition of signals at some intersections will provide a safer crossing for bicyclists and pedestrians that is more reliable than the current condition of attempting to cross multiple lanes of traffic with unpredictable traffic gaps.

2.B. Describe how the project will meet the goals of the [Denver Mobility Action Plan](#).

The congestion relief, first-and- last mile bicycle and pedestrian connections, and intersection and signalization safety improvements as part of this project will directly address the following two Strategic Goals of Denver Mobility Action Plan (MAP):



### **Accelerate Safety Improvements and Robustly Pursue Vision Zero**

Reduce traffic fatalities and serious injuries through the Mayor's Vision Zero program, achieving zero deaths by 2030. In 2016, 61 people died on Denver roadways, including 22 people walking and four people riding bicycles.



### **Deliver a Multi-Modal Network that Encourages Mode Shift**

Reduce single-occupant vehicle (SOV) commuters to 50 percent and increase the percentage of bike and pedestrian commuters to 15 percent and transit commuters to 15 percent. Today, 73 percent of Denver commuters drive alone.

With regard to Safety especially, this project will meet the following Tactical Action advocated in the “Tactical Actions” in MAP:

- Upgrade, replace and install new traffic signals,
- Accelerate the city’s infrastructure safety program by more swiftly innovating and implementing design modifications at high-risk intersections, and along high-injury roadways, to reduce vehicle speeds and minimize conflicts between vehicles and everyone who uses our streets.

The Bicycle improvements, including the extension of the protected bikeway on Broadway that will be installed between Center Ave and Exposition and into the Broadway Station, will help implement the following Tactical Action item in the MAP:

- Accelerate implementation of bike lanes, protected bike lanes and neighborhood bikeways to increase the number of households within a five-minute bicycle ride of high ease-of-use facilities.

Finally, the sidewalk and pedestrian crossing improvements are consistent with the following MAP Tactical Action:

- Improve safe pedestrian access and connectivity to schools, transit hubs, parks and other amenities by addressing challenges with the city’s sidewalk network.

2.C. If applicable, describe how the project will **increase multimodal person-trip capacity and access** as described in the [Denver Strategic Transportation Plan \(2008\)](#).

Increasing person-trip capacity and access are the essence of this project. It provides safer and more convenient first- and last-mile connections for the bus and transit riders, which will result in increased attractiveness of the alternative modes at the station.

## TRANSPORTATION SAFETY AND SECURITY

3A. Describe how the project will **improve transportation safety and security as defined in the *Adopted 2020-2023 TIP Policy***:

Additional lighting and the increased pedestrian and bicycle activity on-site and in the surrounding area will provide security for the travelers by walking and biking.

In addition, as shown in part 3, the overall project will result in crash reduction.

3B. Describe how the project will meet the goals of [Denver's Vision Zero Action Plan](#).

Broadway and Lincoln across and through the Broadway Station and I-25 interchange area are identified as corridors in [Denver's Vision Zero Action Plan](#) on the High Injury Network (HIN) as shown on the map below:



This project provides safety for all modes accessing the station and traveling through the area consistent with the following key action theme for Vision Zero includes:

- Implement safety treatments along the High Injury Network (HIN)
- Reconfigure streets and intersections to improve safety and operations
  - Install or upgrade pedestrian crossing treatments consistent with the Denver Moves: Trails and Pedestrians plan.
  - Enhance street lighting to improve visibility, consistent with the Street Lighting Design Guidelines.
  - Implement signal and/or operational modifications that are proven to reduce serious crashes.

C. Consistency & Contributions to Transportation-focused Metro Vision and Denver Plans, Goals, and Objectives		WEIGHT	30%
Provide <b>qualitative and quantitative</b> responses (derived from Part 3 of the application) to the following items on how the proposed project contributes to Transportation-focused Objectives (in bold) in the adopted Metro Vision plan. Refer to the expanded Metro Vision Objective by clicking on links. In addition, provide information related to the consistency with Denver goals, objectives, plans, and priorities.			
<a href="#">MV objective 2</a>	<b>Contain urban development in locations designated for urban growth and services.</b>		
1. Will this project help focus and facilitate future growth in locations where urban-level infrastructure already exists or areas where plans for infrastructure and service expansion are in place? Describe, including supporting quantitative analysis		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>Much of the multimodal infrastructure in the Broadway Station urban center is in place but this project will provide connectivity in the areas where gaps in the network existing. The existing infrastructure is in need of reconstruction with operational improvements; streetscaping tied to this prorject will enhance the appearance of the area.</p> <p>This infrastructure improvements will support and accelerate the redevelopment of the Gates site. Private developers are providing on-site infrastructure, but these public improvements will provide the access for both transit riders and other travelers to the retail, office, housing, and civic activities generated by the new development.</p> <p>A recent article in Denverite highlighted the planned development of the form Gates site, which is currently under construction.</p>			

**Broadway Station? Midtown? Whatever it will be called, the Gates rubber factory site will finally get developed** Denverite January 23, 2019



A rendering depicting the vision for the "midtown" district on South Broadway. (Broadway Station Partners)

The owners of the dirt-and-asphalt crater next to the I-25 and Broadway light rail station have finally found a buyer to build homes, businesses, offices and parks on the site.

Austin-based Endeavor Real Estate Group closed on the land, part of the former Gates rubber factory site, Tuesday afternoon. . . .

Endeavor's parcels, on the east side of the tracks, [7.5 acres] will sport either four apartment buildings and two office buildings with ground-floor shops and restaurants, or up to six apartment buildings with ground-floor amenities, according to Broadway Station Partners. . . .



The developer bought the land east of the train tracks at Broadway and Mississippi. (Broadw

More than 13 acres are still available on the west side. Combined, those sites will see an estimated 2,500 apartment homes, 1 million square feet of office space and 200,000 square feet of retail, according to the master plan.

### [MV objective 3](#)

### **Increase housing and employment in urban centers.**

**2.A.** Will this project help establish a network of clear and direct multimodal connections within and between urban centers, or other key destinations?

☐ Yes ☐ No

Describe, *including supporting quantitative analysis*

As shown in the Data Sources attachment, three rail lines and 4 bus routes serve this transit hub and the transit ridership is expected to increase. The roadway, bicycle, and pedestrian transit travel is conservatively estimated to increase by 2% per year with the addition of the project.

**2.B.** How does this project focus or serve desired growth in areas identified on the Places map (Chapter 5, p. 126) in the [Blueprint Denver](#) (Public Review Draft August 6, 2018)?

The two major property owner/developers in the Broadway Station TOD area are actively participating in the planning and financing of infrastructure at the station, including transferring significant value of land needed to implement the project. The development plans for both ownership sites will result in increased density, cultural opportunities, and commercial development.

MV objective 4

**Improve or expand the region's multimodal transportation system, services, and connections.**

**3.A.** Will this project help increase mobility choices within and beyond your subregion for people, goods, or services?

☐ Yes ☐ No

Describe, *including supporting quantitative analysis*

The existing infrastructure is in need of reconstruction with operational improvements; streetscaping tied to this project will enhance the appearance of the area.

**3.B.** If applicable, describe how this project is consistent with Denver's specific alternative mode and/or project priorities contained in one or more of **Denver's modal plans linked below or small area plans** (Neighborhood Planning Initiative, corridor plans, station area plans, Next Steps Studies, etc.). See Denvergov website: denvergov.org search bar and specific plan links below:

**NOTE: The application does not need to address numerous plans. Provide documentation for the most applicable or relevant document(s) or plan(s).**

Examples are listed below:

- Denver Moves: Transit  
<https://www.denvergov.org/content/denvergov/en/denveright/transit.html>
- Denver Moves: Pedestrian and Trails  
<https://www.denvergov.org/content/denvergov/en/denveright/pedestrians-trails.html>
- Denver Moves: Bicycles  
[https://www.denvergov.org/content/dam/denvergov/Portals/708/documents/FINAL\\_Denver\\_Moves.pdf](https://www.denvergov.org/content/dam/denvergov/Portals/708/documents/FINAL_Denver_Moves.pdf)
- Transit Oriented Development (TOD) Strategic Plan  
[https://www.denvergov.org/content/dam/denvergov/Portals/193/documents/TOD\\_Plan/TOD\\_Strategic\\_Plan\\_FINAL.pdf](https://www.denvergov.org/content/dam/denvergov/Portals/193/documents/TOD_Plan/TOD_Strategic_Plan_FINAL.pdf)
- Small area plans (Neighborhood Planning Initiative, corridor plans, station area plans, Next Steps studies, etc.)

The following plans support the safety and access improvements in this project including:

- *Transit Oriented Development (TOD) Strategic Plan (2014)*
- *I-25 and Broadway Station Area Plan (2016)*



TRANSIT ORIENTED DEVELOPMENT STRATEGIC PLAN • 2014

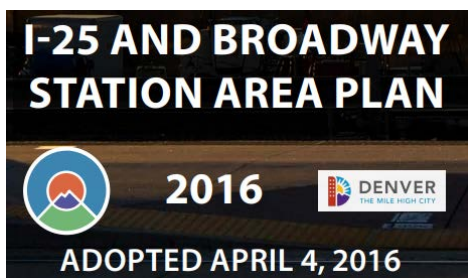
In Denver’s 2014 Transit Oriented Development (TOD) Strategic Plan, the Broadway Station is recognized as a key rail-transit hub and designated in the TOD Station Typologies as an “Urban Center.”

The I-25 Broadway Station is classified in the TOD Plan as a “Catalyze” Station described as follows:

### CATALYZE

Station areas with above average market conditions for TOD, but with a **need for specific infrastructure or amenity improvements to achieve the desired type of development.** [emphasis added] Catalytic infrastructure and amenity investments are needed, and should yield the sought-after TOD results.

\*\*\*\*\*



A Transformative **MULTI-MODAL HUB** integrates all modes of transportation safely and efficiently.

Provide Convenient & Accessible Transit

Promote Alternative Transportation

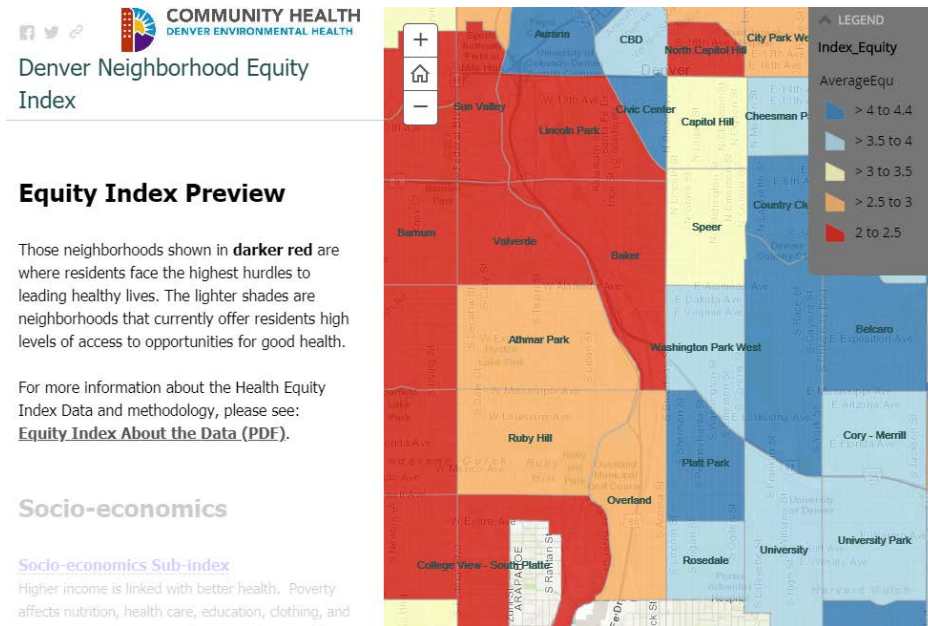
Enhance Regional Connectivity

This project will implement multimodal station access improvements that were prioritized in the ***I-25 and Broadway Station Area Plan***, which was adopted by the Denver City Council in April 2016. This Broadway Station area is one of Denver’s greatest transit-oriented development opportunities outside of Denver Union Station. The Plan provides a framework plan, vision elements, strategies, transformative projects, and implementation strategies for the future evolution of the station area. It also identifies needs and makes recommendations for infrastructure, mobility, parking, land use, open space, economic development, housing, partnerships, and other cultural and community investments.

<a href="#">MV objective 6a</a>	<b>Improve air quality and reduce greenhouse gas emissions.</b>	
<p><b>4.A.</b> Will this project help reduce ground-level ozone, greenhouse gas emissions, carbon monoxide, particulate matter, or other air pollutants?</p>		<input type="checkbox"/> Yes <input type="checkbox"/> No
<p><i>Describe, including supporting quantitative analysis</i></p> <p>As shown in Part 3A, 3B, and 3C, the increases in transit ridership, bicycling, and pedestrian travel result in substantial VMT reduction and greenhouse gas (GHG) reduction, and the mode shifts from autos to alternative modes will reduce vehicular emissions and energy usage. As documented, the combined GHG reduction totals over 850 pounds per day on opening day and over 3000 pounds per day by 2040.</p>		
<p><b>4.B.</b> If applicable, describe how this project is consistent with, or helps implement, Denver's <a href="#">80x50 Climate Action Plan</a>, which set the City's target to <b>reduce greenhouse gas emissions to 80% below 2005 levels by 2050</b>, and/or Denver's <a href="#">2020 Sustainability Goals</a>.</p> <p>Facilitating use of alternative modes will result in improvements in air quality and a reduction in energy consumption.</p>		
<p><b>4.C.</b> If applicable, describe if this project contains <b>water quality and green infrastructure</b> consistent with project types and focus areas identified in Denver's <a href="#">Green Infrastructure Implementation Strategy</a>:</p> <p>Permanent Water Quality facilities will be installed at multiple strategic locations throughout the project, including green infrastructure elements where feasible..</p>		
<a href="#">MV objective 7b</a>	<b>Connect people to natural resource or recreational areas.</b>	
<p><b>5.A.</b> Will this project help complete missing links in the regional trail and greenways network or improve other multimodal connections that increase accessibility to our region's open space assets?</p>		<input type="checkbox"/> Yes <input type="checkbox"/> No
<p><i>Describe, including supporting quantitative analysis</i></p> <p>The enhanced access to the Broadway station will be the first in a series of private and public bike-ped investments (including bridges over the rail and Santa Fe/So Platte River Drive, and improved trail ramps) that will ultimately connect to the South Platte Greenway Trail to the west. Bike improvements and connections will also improve tie to a bikeway to Washington Park to the east of the Broadway Station area.</p>		
<p><b>5.B.</b> If applicable, describe how your project meets the goals, objectives and priorities of the Denver Department of Parks and Recreation's <a href="#">Game Plan for a Healthy City (Public review draft 2018)</a>.</p> <p>As stated, these improvements will lead to more use of bicycle facilities, including completing the network to access the South Platte River Greenway Trail via proposed bridges over the rail to be completed by the adjacent developers.</p>		

<a href="#">MV objective 10</a>	<b>Increase access to amenities that support healthy, active choices.</b>	
<p>6. Will this project expand opportunities for residents to lead healthy and active lifestyles? Describe, <i>including supporting quantitative analysis</i></p> <p>Opportunities to safely bike and walk to the Station, and to the TOD development in the area, will improve the health of those who normally drive.</p>		<input type="checkbox"/> Yes <input type="checkbox"/> No
<a href="#">MV objective 13</a>	<b>Improve access to opportunity.</b>	
<p>7.A. Will this project help reduce critical health, education, income, and opportunity disparities by promoting reliable transportation connections to key destinations and other amenities? Describe, <i>including supporting quantitative analysis</i></p> <p>The bus and private vehicle access improvements will help support the new housing and jobs that will be developed adjacent to the Station, and enhance the convenience and travel times for those traveling to Downtown, Auraria campus, University of Denver, and the Denver Tech Center and adjacent job activities.</p>		<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>7.B. Describe how your project addresses the neighborhood inequities related to transportation as depicted and mapped in the <b>Denver Neighborhood Equity Index</b> which was produced by the Denver Department of Public Health and Environment, which helps to inform decision makers about where city investment and resources are needed most for those living in Denver’s underserved neighborhoods?</p> <p>General information on the Neighborhood Equity Index is on the Denvergov website:  <a href="https://www.denvergov.org/content/denvergov/en/environmental-health/community-health/health-in-all-policies.html">https://www.denvergov.org/content/denvergov/en/environmental-health/community-health/health-in-all-policies.html</a></p> <p>See the interactive map, by opening this <a href="#">link</a> in a new window. The source of each indicator is described in the map. Click on each individual link and see specific map layers; for example, in Built Environment, there is information on “Access to Parks” separately.</p>		

As shown on the diagram below, neighborhoods to the west and north of Broadway and I-25 such as Overland and Baker are shown as neighborhoods that have higher hurdles to leading healthy lives. This project's transit, bike, and pedestrian improvements for station are part of the larger network to connect these neighborhoods to this critical transit hub:



#### MV objective 14

#### Improve the Denver Subregion's competitive position.

8. Will this project help support and contribute to the growth of the subregion's economic health and vitality?

☐ Yes ☐ No

Describe, *including supporting quantitative analysis*

Improving the convenience, safety, and visual environment, and more efficient travel provided by these multimodal improvements will contribute to the quality of life for those who will live, work, and play in the new TOD development. Job access, especially for vulnerable populations, is key to the metro region's economy.

### D. Project Leveraging

WEIGHT **1**

9. What percent of outside funding sources (non-DRCOG-allocated Subregional Share funding) does this project have?

**56%**

60%+ outside funding sources ..... High  
30-59% ..... Medium  
29% and below ..... Low

# Part 3

## Project Data Worksheet – Calculations and Estimates (Complete all subsections applicable to the project)

### A. Transit Use

1. Current ridership weekday boardings	8,450
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	9,186	17,151	26,337
2040	24,451	19,604	44,055

Transit Use Calculations	Year of Opening	2040 Weekday Estimate
3. Enter estimated additional daily transit boardings after project is completed. <i>(Using 50% growth above year of opening for 2040 value, unless justified)</i> <i>Provide supporting documentation as part of application submittal</i>	192	652
4. Enter number of the additional transit boardings (from #3 above) that were previously using a different transit route. <i>(Example: {#3 X 25%} or other percent, if justified)</i>	48	163
5. Enter number of the new transit boardings (from #3 above) that were previously using other non-SOV modes (walk, bicycle, HOV, etc.) <i>(Example: {#3 X 25%} or other percent, if justified)</i>	48	163
6. = Number of SOV one-way trips reduced per day (#3 – #4 – #5)	96	326
7. Enter the value of {#6 x 9 miles}. (= the VMT reduced per day) <i>(Values other than the default 9 miles must be justified by sponsor; e.g., 15 miles for regional service or 6 miles for local service)</i>	864	2,934
8. = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)	820	2,787
9. If values would be distinctly greater for weekends, describe the magnitude of difference:		
10. If different values other than the suggested are used, please explain here:		

## B. Bicycle Use

1. Current weekday bicyclists	170
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	19,186	17,151	36,337
2040	24,451	19,604	44,055

Bicycle Use Calculations	Year of Opening	2040 Weekday Estimate
3. Enter estimated additional weekday one-way bicycle trips on the facility after project is completed.	27	98
4. Enter number of the bicycle trips (in #3 above) that will be diverting from a different bicycling route. (Example: {#3 X 50%} or other percent, if justified)	13	49
5. = Initial number of new bicycle trips from project (#3 – #4)	14	49
6. Enter number of the new trips produced (from #5 above) that are replacing an SOV trip. (Example: {#5 X 30%} or other percent, if justified)	4	14
7. = Number of SOV trips reduced per day (#5 - #6)	10	35
8. Enter the value of {#7 x 2 miles}. (= the VMT reduced per day) (Values other than 2 miles must be justified by sponsor)	20	60
9. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	19	57
10. If values would be distinctly greater for weekends, describe the magnitude of difference:		
11. If different values other than the suggested are used, please explain here:		

## C. Pedestrian Use

1. Current weekday pedestrians (include users of all non-pedaled devices)	540
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	19,186	17,151	36,337
2040	24,451	19,604	44,055

Pedestrian Use Calculations	Year of Opening	2040 Weekday Estimate
3. Enter estimated additional weekday pedestrian one-way trips on the facility after project is completed	146	488
4. Enter number of the new pedestrian trips (in #3 above) that will be diverting from a different walking route (Example: <b>{#3 X 50%}</b> or other percent, if justified)	73	244
5. = Number of new trips from project (#3 – #4)	73	244
6. Enter number of the new trips produced (from #5 above) that are replacing an SOV trip. (Example: <b>{#5 X 30%}</b> or other percent, if justified)	30	73
7. = Number of SOV trips reduced per day (#5 - #6)	43	171
12. Enter the value of <b>{#7 x .4 miles}</b> . (= the VMT reduced per day) (Values other than .4 miles must be justified by sponsor)	17	68
8. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	16	64
9. If values would be distinctly greater for weekends, describe the magnitude of difference:		
10. If different values other than the suggested are used, please explain here:		

D. Vulnerable Populations		
Use Current Census Data	Vulnerable Populations	Population within 1 mile
	1. Persons over age 65	1,440
	2. Minority persons	5,322
	3. Low-Income households	996
	4. Linguistically-challenged persons	514
	5. Individuals with disabilities	758
	6. Households without a motor vehicle	644
	7. Children ages 6-17	1,496
	8. Health service facilities served by project	6

## E. Travel Delay *(Operational and Congestion Reduction)*

Sponsor must use industry standard Highway Capacity Manual (HCM) based software programs and procedures as a basis to calculate estimated weekday travel delay benefits. *DRCOG staff may be able to use the Regional Travel Model to develop estimates for certain types of large-scale projects.*

1. Current ADT (average daily traffic volume) on applicable segments	55,000
2. 2040 ADT estimate	71,100
3. Current weekday vehicle hours of delay (VHD) (before project)	1,085

Travel Delay Calculations	Year of Opening
4. Enter calculated future weekday VHD (after project)	830
5. Enter value of <b>{#3 - #4} = Reduced VHD</b>	255
6. Enter value of <b>{#5 X 1.4} = Reduced person hours of delay</b> <i>(Value higher than 1.4 due to high transit ridership must be justified by sponsor)</i>	357
7. <b>After project peak hour congested average travel time reduction</b> per vehicle (includes persons, transit passengers, freight, and service equipment carried by vehicles). <i>If applicable, denote unique travel time reduction for certain types of vehicles</i>	58
8. If values would be distinctly different for weekend days or special events, describe the magnitude of difference.	
9. If different values other than the suggested are used, please explain here:	

## F. Traffic Crash Reduction

1. Provide the current number of crashes involving motor vehicles, bicyclists, and pedestrians <i>(most recent 5-year period of data)</i>		Sponsor must use industry accepted crash reduction factors (CRF) or accident modification factor (AMF) practices <i>(e.g., NCHRP Project 17-</i>
<b>Fatal</b> crashes	0	
<b>Serious Injury</b> crashes	0	
<b>Other Injury</b> crashes	21	
<b>Property Damage Only</b> crashes	189	

2. Estimated reduction in crashes <u>applicable to the project scope</u> (per the five-year period used above)		25, NCHRP Report 617, or DiExSys methodology).	
Fatal crashes reduced	0		
Serious Injury crashes reduced	0		
Other Injury crashes reduced	2		
Property Damage Only crashes reduced	11		
<b>G. Facility Condition</b>			
Sponsor must use a current industry-accepted pavement condition method or system and calculate the average condition across all sections of pavement being replaced or modified. Applicants will rate as: Excellent, Good, Fair, or Poor			
<b>Roadway Pavement</b>			
1. Current roadway pavement condition		POOR	
2. Describe current pavement issues and how the project will address them.  The average pavement condition index (PCI) for Lincoln and Broadway, within the project limits, is 52.43. On arterial roadways, if the PCI is less than 55, the pavement is in need of rehabilitation or reconstruction now. To resolve this, the project reconstructs the roadway pavement throughout the project. In areas where the concrete pavement is still in overall good condition or will be upgraded in the future, damaged panels will be repaired or replaced. For more information, refer to the PCI for each segment shown below:			
Street	From	To	2017 PCI
S BROADWAY	E EXPOSITION AVE	E OHIO AVE	50.98
S BROADWAY	E OHIO AVE	INTERSTATE 25	54.09
S BROADWAY	INTERSTATE 25	INTERSTATE 25	52.83
S BROADWAY	INTERSTATE 25	RAMP	54.73
S BROADWAY	RAMP	BRIDGE	48.5
S BROADWAY	BRIDGE	W KENTUCKY AVE	53.46
S LINCOLN ST	E EXPOSITION AVE	E WALSH PL	47.25
S LINCOLN ST	E WALSH PL	E OHIO AVE	57.6
3. Average Daily User Volume		0	

<b>Bicycle/Pedestrian/Other Facility</b>	
4. Current bicycle/pedestrian/other facility condition	Choose an item
5. Describe current condition issues and how the project will address them. The current infrastructure has inadequate width and a missing link of a paved trail into the station. In new sections of the project, concrete multi-use paths will be provided..	
6. Average Daily User Volume	0
<b>H. Bridge Improvements</b>	
1. Current bridge structural condition from CDOT N/A	
2. Describe current condition issues and how the project will address them. N/A	
3. Other functional obsolescence issues to be addressed by project N/A	
4. Average Daily User Volume over bridge	0
<b>I. Other Beneficial Variables</b> <i>(identified and calculated by the sponsor)</i>	
1.	Water quality improvements to treat stormwater run-off volume increases from the project, and also to treat CDOT freeway flows.
<b>J. Disbenefits or Negative Impacts</b> <i>(identified and calculated by the sponsor)</i>	
1. Increase in VMT? <i>If yes, describe scale of expected increase</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No
None anticipated	
2. Negative impact on vulnerable populations  None anticipated except disruption during construction.	
3. Other:	