

Part 1

Base Information

1. Project Title	BROADWAY STATION MULTIMODAL SAFETY AND ACCESS IMPROVEMENTS	
2. Project <i>Start/End</i> 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 (<i>entity that will construct/ complete and be financially responsible for the project</i>)	City and County of Denver	
4. Project Contact Person, Title, Phone Number, and Email	Justin Begley Project Manager II Public Works City and County of Denver desk 720.913.1743 cell 561.358.2881 justin.begley@denvergov.org	
5. Does this project touch CDOT Right-of-Way, involve a CDOT roadway, access RTD property, or request RTD involvement to operate service?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, provide applicable concurrence documentation with submittal</i>	
6. What planning document(s) identifies this project?	<input checked="" type="checkbox"/> DRCOG 2040 Fiscally Constrained Regional Transportation Plan (2040 FC RTP)	
	<input checked="" type="checkbox"/> Local plan:	<p>I-25 and Broadway Station Area Plan (2016), https://www.denvergov.org/content/dam/denvergov/Portals/646/documents/planning/Plans/I25-Broadway-station-area-plan.pdf</p> <p>South Broadway Environmental Assessment and Section 4(f) Evaluation (2008) http://www.denvergov.org/content/dam/denvergov/Portals/479/documents/web_south%20broadway%20final%20ea_mar08_eaonly.pdf</p> <p>FHWA/CDOT: South Broadway Finding of No Significant Impact (2008) http://www.denvergov.org/content/dam/denvergov/Portals/479/documents/South%20Broadway%20Finding%20of%20No%20Significant%20Impact.pdf</p>
	<input checked="" type="checkbox"/> Other(s):	<p>FHWA/CDOT Final I-25 Valley Highway Environmental Impact Statement (EIS) (2006) and June 2007 Record of Decision (ROD). https://www.codot.gov/library/studies/i-25-valley-highway-EIS/rod</p> <p>Phase 6 includes: I-25/ Broadway Interchange -- Reconfiguration/reconstruction of I-25/Broadway interchange</p>

Provide link to document/s and referenced page number if possible, or provide documentation with submittal

7. Identify the project's **key elements**.

- Rapid Transit Capacity (2040 FC RTP)
- Transit Other:
- Bicycle Facility
- Pedestrian Facility
- Safety Improvements
- Roadway Capacity or Managed Lanes (2040 FC RTP)
- Roadway Operational

Grade Separation

- Roadway
- Railway
- Bicycle
- Pedestrian
- Roadway Pavement Reconstruction/Rehab
- Bridge Replace/Reconstruct/Rehab
- Study
- Design
- Other:

8. **Problem Statement** What specific Metro Vision-related regional 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.

SCOPE AND SPECIFIC PROJECT ELEMENTS:

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:

- > 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 and a detached multi-use trail extending from Lincoln/Ohio directly into the RTD I-25/Broadway Station area will be constructed. Parking spaces impacted by the ramp will be relocated to a new paved parking lot adjacent to Bannock.
- > 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.
- > 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.
- > 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.

- > Broadway will be rehabilitated to extend the service life and enhance the safety of a roadway between Exposition Ave. and Ohio.

- > 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.

(See PROJECT EXHIBIT for additional information)

10. What is the status of the proposed project?

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.

11. Would a smaller federal funding amount than requested be acceptable, while maintaining the original intent of the project?

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 – \$15.36M REGIONAL 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 \$15,360,000 from the Regional Allocation share:

- > Reconstruction of Lincoln Avenue from south of I-25 to north of Ohio.
- > Reconstruction of Ohio Ave from east of Lincoln to Broadway.
- > Construction of the Exposition Avenue and Bannock Street extension into the RTD I-25/Broadway Station area along with a paved parking lot on the east side of Bannock.
- > Existing traffic signals will be modified or replaced, and new ones will be added within the subphased project area.

The total reduced scope cost for this supplemental funding request is approximately \$30.85 M (including the value of a private land contribution), which is 38% of the total project cost of \$88.648M.

SEE SUBPHASED PROJECT MAP, COST ESTIMATE, AND COMPARATIVE BENEFIT ANALYSIS IN THE Data Methodology attachment.

A. Project Financial Information and Funding Request

1. Total Project Cost	\$88,648,000	
2. Total amount of DRCOG Regional Share Funding Request <i>(no greater than \$20 million and not to exceed 50% of the total project cost)</i>	\$20,000,000	23% of total project cost
3. Outside Funding Partners <i>(other than DRCOG Regional Share funds)</i> List each funding partner and contribution amount.	\$\$ Contribution Amount	% of Contribution to Overall Total Project Cost
EXISTING FEDERAL - 2016-2021 Transportation Improvement Program (TIP ID: 2016-021) Federal (\$17M) (Existing Federal)	\$17,373,000	20%
EXISTING LOCAL - 2016-2021 Transportation Improvement Program (TIP ID: 2016-021) Local Match (\$11M) (Existing Local)	\$10,595,000	12%
NEW LOCAL - 2019 Denver Capital Improvement Program (CIP) Funds for Local Overmatch for Existing Project	\$3,500,000	4%
NEW LOCAL - 2020-2023 Denver Capital Improvement Program (CIP) Funds for Local Match	\$5,000,000	6%
NEW FEDERAL - From Denver Subregional TIP Funding (14.4M)	\$14,400,000	16%
NEW LOCAL IN-KIND - Private Developer Land Contributions	\$17,780,000	20%
Total amount of funding provided by other funding partners <i>(private, local, state, Subregion, or federal)</i>	\$68,648,000	

Funding Breakdown (year by year)*	<i>*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 2018.</i>				
	FY 2020	FY 2021	FY 2022	FY 2023	Total
Federal Funds	\$20,221,000	\$	\$31,552,000	\$	\$51,773,000
State Funds	\$	\$	\$	\$	\$0
Local Funds	\$7,479,000	\$17,780,000	\$11,616,000	\$	\$36,875,000
Total Funding	\$27,700,000	\$17,780,000	\$43,168,000	\$0	\$88,648,000
4. Phase to be Initiated <i>Choose from Design, ENV, ROW, CON, Study, Service, Equip. Purchase, Other</i>	CON	CON	CON	Choose an item	

5. By checking this box, 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.



Part 2 Evaluation Criteria, Questions, and Scoring

A. Regional significance of proposed project

WEIGHT **40%**

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

1. Why is this project regionally important?

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%

See attached data.

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%

See attached data and maps.

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 portion of its Subregional Share to leverage existing 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

WEIGHT **30%**

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).

1. Describe how the project will improve mobility infrastructure and services for vulnerable populations (including improved transportation access to health services).

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.

2. Describe how the project will **increase reliability of existing multimodal transportation network.**

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 Austs, 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.

3. Describe how the project will **improve transportation safety and security.**

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.

C. Consistency & Contributions to Transportation-focused Metro Vision Objectives

WEIGHT **20%**

Provide **qualitative and quantitative** 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.

[MV objective 2](#)

Contain urban development in locations designated for urban growth and services.

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?

Yes No

Describe, including supporting quantitative analysis

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 project will enhance the appearance of the area.

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.

MV objective 3	Increase housing and employment in urban centers.	
<p>2. Will this project help establish a network of clear and direct multimodal connections within and between urban centers, or other key destinations?</p> <p>Describe, <i>including supporting quantitative analysis</i></p> <p>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.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
MV objective 4	Improve or expand the region’s multimodal transportation system, services, and connections.	
<p>3. Will this project help increase mobility choices within and beyond the region for people, goods, or services?</p> <p>Describe, <i>including supporting quantitative analysis</i></p> <p>The existing infrastructure is in need of reconstruction with operational improvements; streetscaping tied to this project will enhance the appearance of the area.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
MV objective 6a	Improve air quality and reduce greenhouse gas emissions.	
<p>4. Will this project help reduce ground-level ozone, greenhouse gas emissions, carbon monoxide, particulate matter, or other air pollutants?</p> <p>Describe, <i>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>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
MV objective 7b	Connect people to natural resource or recreational areas.	
<p>5. 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> <p>Describe, <i>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>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

[MV objective 10](#) **Increase access to amenities that support healthy, active choices.**

6. Will this project expand opportunities for residents to lead healthy and active lifestyles? Yes No
 Describe, *including supporting quantitative analysis*

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.

[MV objective 13](#) **Improve access to opportunity.**

7. Will this project help reduce critical health, education, income, and opportunity disparities by promoting reliable transportation connections to key destinations and other amenities? Yes No
 Describe, *including supporting quantitative analysis*

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.

[MV objective 14](#) **Improve the region’s competitive position.**

8. Will this project help support and contribute to the growth of the region’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 10%**

9. What percent of outside funding sources (non-DRCOG-allocated Regional Share funding) does this project have?	77%	80%+ outside funding sourcesHigh 60-79%Medium 59% and belowLow
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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: {#3 X 50%} 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: {#5 X 30%} or other percent, if justified)	30	73
7. = Number of SOV trips reduced per day (#5 - #6)	43	171

12. Enter the value of {#7 x .4 miles} . (= the VMT reduced per day) <i>(Values other than .4 miles must be justified by sponsor)</i>	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	
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 {#3 - #4} = Reduced VHD	255
6. Enter value of {#5 X 1.4} = Reduced person hours of delay <i>(Value higher than 1.4 due to high transit ridership must be justified by sponsor)</i>	357
7. After project peak hour congested average travel time reduction 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 (*most recent 5-year period of data*)

Fatal crashes	0
Serious Injury crashes	0
Other Injury crashes	21
Property Damage Only crashes	189
2. Estimated reduction in crashes <u>applicable to the project scope</u> (<i>per the five-year period used above</i>)	
Fatal crashes reduced	0
Serious Injury crashes reduced	0
Other Injury crashes reduced	2
Property Damage Only crashes reduced	11

Sponsor must use industry accepted crash reduction factors (CRF) or accident modification factor (AMF) practices (*e.g., NCHRP Project 17-25, NCHRP Report 617, or DiExSys methodology*).

G. Facility Condition

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

Roadway Pavement

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
Bicycle/Pedestrian/Other Facility	
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	710
H. Bridge Improvements	
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
I. Other Beneficial Variables <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.
2.	
3.	
J. Disbenefits or Negative Impacts <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 checked="" type="checkbox"/> No
None anticipated.	
2. Negative impact on vulnerable populations None anticipated except disruption during construction..	
3. Other:	