

Part 1

Base Information

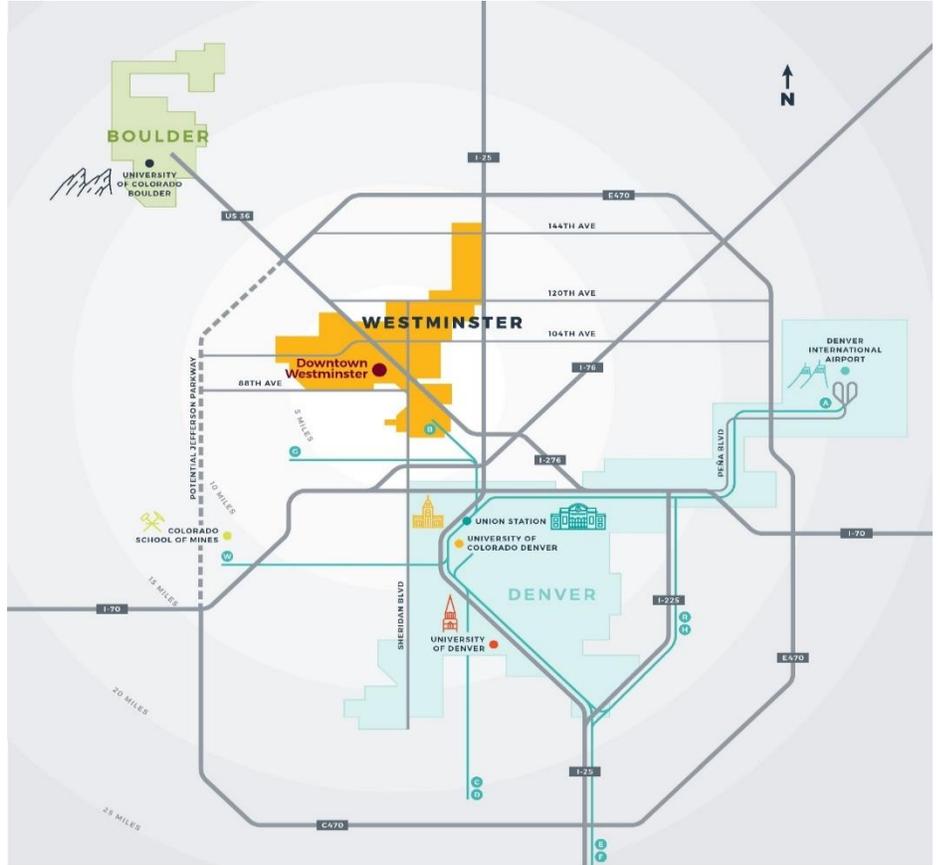
1. Project Title

Sheridan Boulevard Multimodal Improvements

SH 95 (Sheridan Boulevard) from US 36 to Turnpike Drive in Westminster.

2. Project Start/End points or Geographic Area

Provide a map with submittal, as appropriate



Context Map



Site Location at US 36 and Sheridan Boulevard

3. Project Sponsor <i>(entity that will construct/ complete and be financially responsible for the project)</i>	City of Westminster	
4. Project Contact Person, Title, Phone Number, and Email	Debra Baskett, Senior Transportation Planner 303 658 2129, DBaskett@cityofwestminster.us	
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>Attached at end of application</i>	
6. What planning document(s) identifies this project?	<input type="checkbox"/> DRCOG 2040 Fiscally Constrained Regional Transportation Plan (2040 FC RTP)	
	<input checked="" type="checkbox"/> Local plan:	<p>Westminster’s Strategic Plan set by the City Council identifies Objective X.24 to “Relentlessly pursue the development of Downtown Westminster” and Objective XV.33 to “Promote connectivity of regional transportation and the last mile to connect commuters with places of employment and residences”.</p> <p>Westminster Strategic Plan, pages 3 and 4: https://www.cityofwestminster.us/Portals/1/Documents/Government%20-%20Documents/City%20Council/2017AdoptedStrategicPlan.pdf</p> <p>The City of Westminster Comprehensive Plan identifies the Downtown as a Focus Area, which is further delineated in the Downtown Westminster Specific Plan. The Downtown Specific Plan establishes the zoning for the site, allowing for the density and range of land uses that will support a transit oriented environment. The Specific Plan also delineates the street network, transit and mobility policies, and standards and guidelines for development.</p> <p>Westminster’s Comprehensive Plan, Pages 3.4 – 3.7: https://www.cityofwestminster.us/Portals/1/Documents/Government%20-%20Documents/Departments/Community%20Development/Planning/COMPLETE%20Comp%20Plan_2015%20Update_WEB.pdf</p> <p>Downtown Specific Plan, Pages 30-32: https://www.cityofwestminster.us/Portals/1/Documents/Government%20-%20Documents/Departments/Community%20Development/Planning/Downtown%20Specific%20Plan_150dpi_1.pdf</p>
	<input checked="" type="checkbox"/> Other(s):	<p>DRCOG, Metro Vision, April 2018 , Appendix B: Designated Urban Centers page 78 https://metrovision.drcog.org/</p>

DRCOG, Active Transportation Plan, January 2019, page 98. The proposed Sheridan Multimodal Underpass is located in a Pedestrian Focus Area, the underpass area is located east of a Short Trip Opportunity Zone, adjacent to/along an existing Regional Active Transportation Corridor and part of a Local Active Transportation Network.

https://drcog.org/sites/default/files/resources/DRCOG_ATP.pdf

CDOT, Together We Go, Sheridan: US 36 to 88th Avenue. The Sheridan Multimodal Underpass is one of CDOT’s priority projects across the state that can be implemented as funding becomes available. This project was also included in the 2018 “Let’s Go Colorado” voter initiative.

<https://www.codot.gov/programs/colorado-transportation-matters/together-we-go/interactive-project-map>

North Area Transit Alliance (NATA), 2017 Project Priority List

US 36 Mayors and Commissioner Coalition, 2018 List of Priority Projects

US 36 Final Environmental Impact Statement, Chapter 2, Section 2.6 – Package Descriptions, Bikeway

https://www.codot.gov/projects/archived-project-sites/us36eis/documents/us-36-final-eis-volume-i/chapter-2_alternatives-considered.pdf/view

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: Grade Separated Multimodal Connection to RTD Park n Ride at US 36/Sheridan
- 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
- Transportation Technology Components
- Other: Operational/lane balancing, less than one mile roadway construction

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

The proposed project supports many of Metro Vision’s Theme’s and Outcomes as follows:

- An Efficient and Predictable Development Pattern – Downtown Westminster is an Emerging Urban Center. The Downtown Specific Plan (linked above) is the regulatory document that is shaping development. It sets forth our vision of a high density, urban scale, mixed use development that will be a regional and community-wide destination.

- A Connected Multimodal Region – The project site is equidistant between Denver and Boulder. The FasTracks US 36 BRT Station at US 36/Sheridan currently has bi-directional service every 15 minutes. It will provide a direct, grade-separated connection to the 18 mile long US 36 Bikeway. The roadway component improves SH 95 (Sheridan) with connections to US 36, SH 76 and I-70. Adding one-south bound lane will create a safer roadway section.
- Healthy, Inclusive, and Livable Communities – Downtown Westminister’s 105 acre site dedicates 18 acres of parks and public spaces supporting healthy and active choices. The US 36 Bikeway links to 110 miles of trails in Westminister, and connects to Front Range trails. Diverse housing options include multifamily market rate and affordable housing. The Eaton Street Affordable Housing provides our first 118 units and Ascent Westminister offers with 255 units of market rate housing with move in beginning this summer.
- A Vibrant Regional Economy – The project will enhance residents access to mobility, employment, commerce, housing, educational and recreational opportunities. Downtown Westminister is poised to create two to three million square feet of office space in the next 10-15 years. The full build-out of Downtown Westminister will comprise over \$1.5 billion in private investment in the site, with approximately \$2 billion of additional development anticipated in adjacent areas.

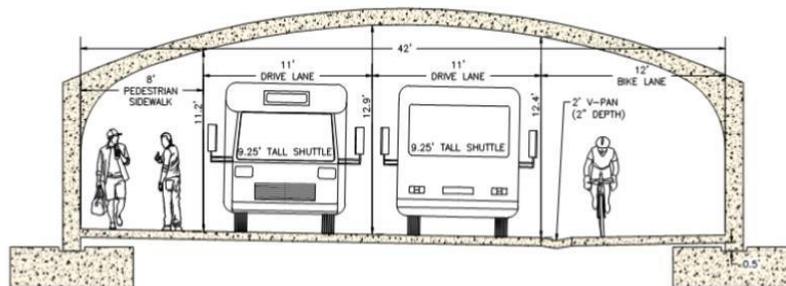




Conceptual Rendering of Sheridan Multimodal Underpass

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

Constructs the Sheridan Multimodal Underpass to provide a first and final mile connection between RTD’s US 36/Sheridan Park-n-Ride/Bus Rapid Transit (BRT) station, the US 36 Bikeway and Downtown Westminster. Adds one south-bound travel lane on Sheridan Boulevard from the US 36 Bridge to Turnpike Drive to improve vehicular travel flow and improve safety. New roadway lane mileage is approximately .72 miles. Provides the infrastructure for safe travel of pedestrians, cyclists and future microtransit service.



Proposed Sheridan Multimodal Underpass Cross Section

10. What is the status of the proposed project?

The City of Westminster has contracted with Drexel Barrell & Company to prepare a structural selection report (for the underpass), 30% Design Plans, geotechnical report, right-of-way exhibit and ownership list, environmental clearance and a detailed cost estimate. CDOT R 1 has assigned a project manager and project

number (22946) and held the Scoping Meeting on January 30, 2019. Anticipated Final Office Review (FOR) is planned 3rd quarter 2019.

11. Would a smaller DRCOG-allocated 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.

A. Project Financial Information and Funding Request

1. Total Project Cost		\$8,500,000
2. Total amount of DRCOG Subregional Share Funding Request	1,500,000	18% of total project cost
3. Outside Funding Partners (other than DRCOG Subregional Share funds) List each funding partner and contribution amount.	\$\$ Contribution Amount	% of Contribution to Overall Total Project Cost
City of Westminster	\$2,000,000	24%
CDOT	\$1,000,000	12%
Jefferson County Forum	\$4,000,000	47%
	\$	
	\$	
	\$	
Total amount of funding provided by other funding partners <i>(private, local, state, Regional, or federal)</i>	\$7,000,000	

Funding Breakdown (year by year)*

**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.*

	FY 2020	FY 2021	FY 2022	FY 2023	Total
Federal Funds	\$1,500,000	\$2,000,000	\$1,500,000	\$500,000	\$5,500,000
State Funds	\$ 0	\$500,000	\$500,000	\$0	\$1,000,000
Local Funds	\$500,000	\$1,000,000	\$500,000	\$0	\$2,000,000
Total Funding	\$2,000,000	\$3,500,000	\$2,500,000	\$500,000	\$8,500,000
4. Phase to be Initiated <i>Choose from Design, ENV, ROW, CON, Study, Service, Equip. Purchase, Other</i>	Design	CON	CON	CON	

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. Subregional significance of proposed project

WEIGHT **40%**

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 your subregion?

This project is important for the Adams County Subregion because it will:

- Enhance Adams County's connectivity to regional, state and national networks of transportation.
- Improve flow of regional traffic for jurisdictions located along Sheridan Boulevard, connecting to 120th Avenue (SH 287), I-76, US 36 and I-70.
- Increase safety for this segment. Between 2014 and 2018 there was one fatal crash, 18 injury crashes and 417 combined rear-end and sideswipe crashes.
- Support use of alternative travel by improving bus travel time and reliability between communities. RTD's Route 51 operates on Sheridan Boulevard connecting Westminster, Wheat Ridge and Lakewood, and will provide connections to the Arvada Gold Strike G Line Station at 60th and Sheridan.
- Construct a First and Final Mile Connection to encourage use of all alternative modes of travel.
- Improve reliability of movement of people and goods through the subregion and to state highways, increase Adams County connectivity to
- Connect people to four regional trails; the US 36 Bikeway, Little Dry Creek Trail connecting to Denver, the Rocky Mountain Greenway Trail, the Big Dry Creek Trail providing access to Standley Lake Regional Park, and the Farmers' High Line Canal.

Downtown Westminster is identified as the primary node of high intensity growth in the City of Westminster. The Downtown will serve as the economic, civic, and cultural core of the city as well as a regional destination for parks, events, employment, and unique amenities. The build out of the Downtown will encompass approximately 6,500,000 square feet of building space including up to 3,000,000 square feet of office space, 750,000 square feet of retail, over 300 hotel rooms, and 2,500 residential units. This development will bring 12,000 to 15,000 jobs to the site as well as house over 5,000 residents. Additionally, Downtown Westminster will bring a minimum of 450 residential units that will serve households with incomes of 80% or less of the Area Median Income (AMI). The first phase of development, currently under construction includes 167 units, 118 of which serve households of 30-60% of the AMI.

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

The project site is directly adjacent to US 36 and is easily accessible to key job centers and populations in Adams County, Denver and Boulder. Sheridan Boulevard is the county border line at Adams County and Arvada is less than 500 feet from the project site. The project will provide improved mobility options, access to jobs, and active recreation for residents of our neighboring municipality. The development and improvements in the area will also serve residents regionally who utilize the 18 mile US 36 Bikeway with connections to Broomfield, Superior, Louisville, Boulder and Boulder County.

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

Sheridan Boulevard is the Adams County/Jefferson County county line. The project is geographically located in Jefferson County. It directly benefits Adams County Subregion residents and workers by providing safer and quicker access to bus, pedestrian and biking options. It improves connectivity to the Broomfield Subregion by creating a grade separated crossing for US 36 Bikeway. Lane balancing will facilitate enhanced flow of travel for cars, buses and freight vehicles and will improve safety between Adams County and Jefferson County jurisdictions. Sheridan Boulevard provides a connection to Denver.

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

- An Efficient and Predictable Development Pattern – Downtown Westminster is owned by the City of Westminster and is being developed block by block rather than by a master developer allowing us to realize our vision of a high density, urban scale, mixed use development. Westminster demolished the former Westminster Mall, and constructed new streets and undergrounded utilities. The street network provides an interconnected system of vehicular, bicycle and pedestrian circulation. Wide sidewalks, slow traffic speeds, and off-street paths will establish a multi-layered network of connectivity throughout the site.



Downtown Westminster

- Emerging Urban Center. With leasing available this summer, housing includes Ascent Westminster, with 10% of its 255 housing units set-aside for workforce housing along with ground floor retail and the Eaton Street Apartments which wrap the City owned 885 space parking structure with 118 units of income restricted housing. A nine-screen Alamo Theater and a 125 room Origin Hotel with a restaurant and meeting space have expected completion this year. The Grid Collaborative work space includes 80,000 square feet of office and 30,000 square feet of retail planned for opening in 2020.

Development Activity

1. JC Penney
2. City Parking Structure
3. Eaton Street Apartments
4. The Ascent
5. Origin Hotel
6. Alamo Draft House
7. The Aspire
8. Grand Peaks



- A Connected Multimodal Region – The project site is equidistant between Denver and Boulder. The FasTracks US 36 BRT Station at US 36/Sheridan currently has bi-directional service every 15 minutes. It will provide a direct, grade-separated connection to the 18 mile long US 36 Bikeway. The roadway component improves SH 95 (Sheridan) with connections to US 36, SH 76 and I-70. Adding one-south bound lane will create a safer roadway section.
- Healthy, Inclusive, and Livable Communities – Downtown Westminister’s 105 acre site dedicates 18 acres of parks and public spaces supporting healthy and active choices. Westminister opened our first park the “central square’ in October. The 1.2 acre park is north of JCPenney and can be used as an outdoor meeting space. The parks pavilion features restrooms and picnic tables and is in the process of being approved for silver LEED certification. A picture of the park is below.



- A Vibrant Regional Economy – The project will enhance residents access to mobility, employment, commerce, housing, educational and recreational opportunities. Downtown Westminster is poised to create two to three million square feet of office space in the next 10-15 years. The full build-out of Downtown Westminster will comprise over \$1.5 billion in private investment in the site, with approximately \$2 billion of additional development anticipated in adjacent areas.

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?

Currently, pedestrians and cyclists cross 17 travel lanes to connect to destinations including the US 36/Sheridan Park n Ride and must wait an average of four minutes to fully cross the intersection. The estimated delay for motorists at this location is 40.3 seconds. The completed project will reduce travel time for all modes, including buses and freight vehicles traveling the corridor and significantly improve safety.

The Sheridan Multimodal Underpass will provide direct access to nearly 500 buses per day and enable connections to regional destination including Denver, Boulder, Broomfield, Boulder and Denver International Airport. The underpass connection will further improve transit accessibility for workers, a key concern for prospective employers and their location choices throughout the Denver region. The City anticipates transit ridership to increase based on this improved accessibility.

Downtown Westminster will provide more than 12,000 jobs and house 5,000 new residents. These workers and residents will benefit significantly by the project, with a reduction of pedestrian travel time from 10-15 minutes to 3-5 minutes and significantly improved safety for both pedestrians and bicyclists.

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

The project provides grade separated connections for walking, biking and future microtransit. It provides a First and Final Mile Connection between the RTD park n ride and Downtown Westminster.

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

CDOT is a supporting partner, pledging \$1 M if the project is funded. RTD concurs with the project. Subregional funding is requested from both the Jefferson County TIP Forum and the Adams County TIP Forum.

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)**.

One of the first developments to open in Downtown Westminster will be the Eaton Street apartments, which is a mixed-use affordable housing development. The 118 rental residential units are income-restricted between 30% and 60% of the Area Median Income. The City of Westminster and Jefferson County Housing Authority contributed to this project. Access to health and human services is a key element that enabled this development to obtain Low Income Housing Tax Credits through the Colorado Housing and Finance Authority. In fact, eight of the units in the Eaton Street development will be serving disabled households that will rely on access to transit. The Sheridan underpass was anticipated to occur to better provide access to the Sheridan Station.

Downtown’s infrastructure is being completed to assure safe accommodations for all people, regardless of age or ability.

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

The project will increase the reliability of the existing multimodal transportation network by providing lane balancing on Sheridan Boulevard to assure smooth flow of motorized traffic.

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

Vehicular and pedestrian/bike crashes will be reduced.

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*

Downtown Westminster is located in the heart of urban development in both Westminster and Arvada. The area has been developed for approximately 50 years and is home to many well-established residential neighborhoods, developments, and businesses. Redevelopment of the former Westminster Mall into a Downtown is dependent on smart growth principles of locating density in transit-oriented districts and access to key transportation corridors. In addition to the existing infrastructure surrounding the site, the City of Westminster has invested over \$40 million dollars to create “infrastructure ready” parcels to sell to private development partners.

Downtown Westminster has already installed roads/traffic lights/street lights/900 stall parking structure/water/sanitary sewer/storm sewer pipes, and regional water quality and stormwater detention facilities to serve the full buildout of the 100-acre site.

[MV objective 3](#)

Increase housing and employment in urban centers.

2. 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

With over 12,000 jobs and 5,000 projected residents, the Sheridan underpass provides direct connectivity for those who live in other areas of the metro area and work in Downtown Westminster to those who live in Downtown Westminster and work in other parts of the metro area. Likewise, the underpass will provide a higher quality connection along the US 36 Bikeway to expand alternative mobility options to communities along the US 36 corridor.

[MV objective 4](#)

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

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

Yes No

Describe, including supporting quantitative analysis

This project will provide safer connections to more than 500 buses per day.

Adams and Broomfield residents are served by RTD Route 51 <http://www3.rtd-denver.com/schedules/getSchedule.action?runboardId=2653&routeType=0&routeId=L51&serviceType=3> Sheridan Boulevard (with termini for the route are Broomfield City Hall and Englewood Station) service to Front Range Community College and connections to G Line Stations soon.

[MV objective 6a](#)

Improve air quality and reduce greenhouse gas emissions.

4. Will this project help reduce ground-level ozone, greenhouse gas emissions, carbon monoxide, particulate matter, or other air pollutants?

Yes No

Describe, including supporting quantitative analysis

See Part 3 Data please.

[MV objective 7b](#)

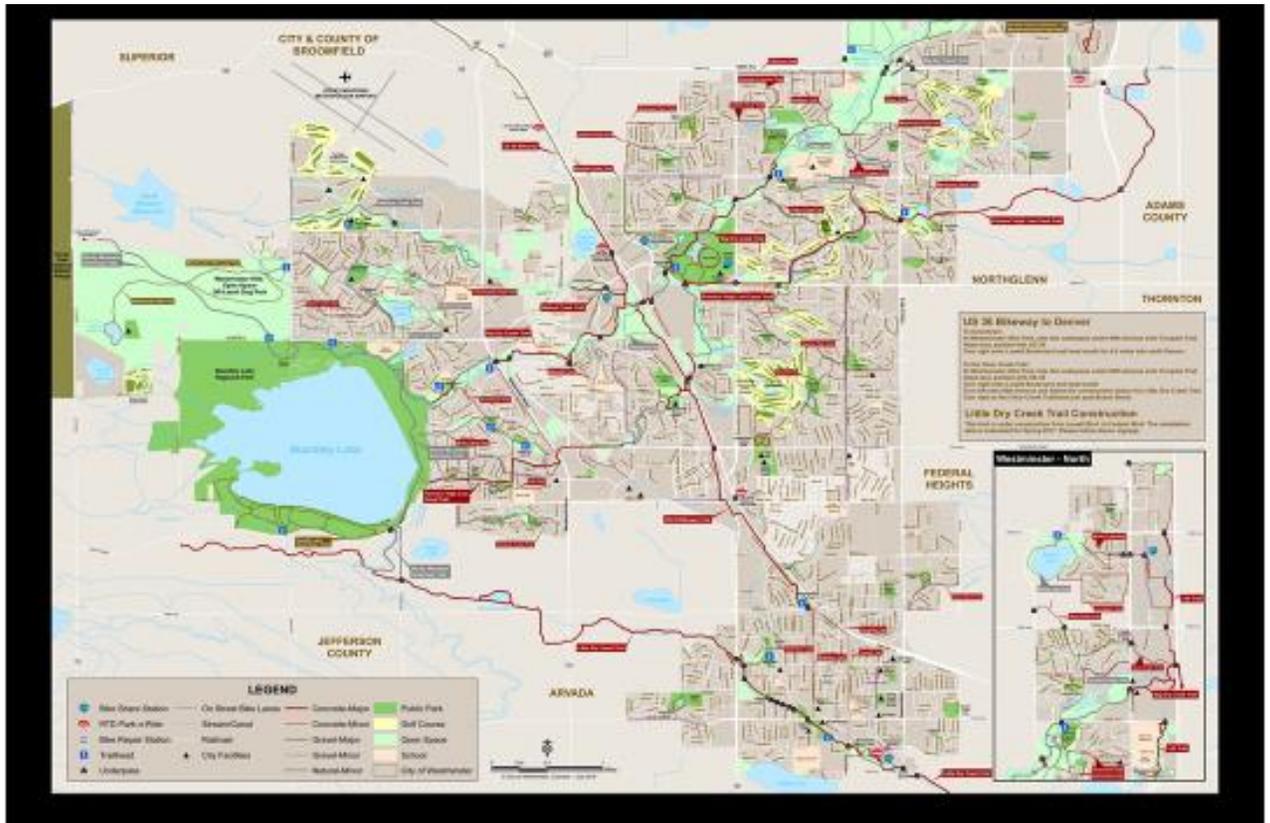
Connect people to natural resource or recreational areas.

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?

Yes No

Describe, including supporting quantitative analysis

This project will improve connectivity to 6,200 acres of open space and trails in Westminster, as well as linking to our neighbor’s important open space and active recreation opportunities.



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

The underpass project connects to four regional trails:

- The Little Dry Creek Trail provides Westminister’s connection to the Denver regional trail system. Just south of Westminister, the trail connects to the Clear Creek Trail, which in turn connects to the South Platte River Trail. The Little Dry Creek Trail also extends several miles northwest through Arvada to near Standley Lake Regional Park.
- The Rocky Mountain Greenway Trail connects the Rocky Mountain Arsenal National Wildlife Refuge in Commerce City to the Rocky Flats National Wildlife Refuge, which directly abuts Westminister’s western boundary at Indiana Street. The City has partnered with the Federal Highway Administration to construct the trail in Arvada, Westminister and Broomfield.
- The Big Dry Creek Trail meanders nearly 12 miles from Standley Lake Regional Park to Interstate 25 and beyond into Thornton.
- The Farmers’ High Line Canal is one of Westminister’s signature trails as it winds from near Standley Lake to Northglenn’s EB Raines Park and beyond to Thornton.

Safe pedestrian infrastructure will encourage people to connect to active living.



[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 Sheridan underpass provides a direct connection from Downtown Westminster to nearly 500 buses a day that run out of the RTD US 36/Sheridan Station. Some of the major direct destinations include Civic Center Station in Denver, the Aschutz Medical Center in Aurora, Denver’s medical hubs and Denver Union Station. There isn’t a better regionally connected location than what is provided through this Sheridan Underpass project.

The underpass will improve access to local educational including the Front Range Community College, where most students are local commuters, CU Denver and Boulder, the Auraria Higher Education Center and Metropolitan State University.

The City also holds large regional events that are free and open to the public, including the Harvest Fest, that attract well over 34,000 people of all ages and demographic backgrounds from the entire Front Range region.

This project provides improved access and connectivity to transportation options.

[MV objective 14](#)

Improve the region’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

With continued demand on office space in the Denver-Boulder US-36 corridor, the Downtown Westminster site is poised to create two to three million square feet of office space in the next 10-15 years. This site will be the primary economic driver for the City of Westminster. The full build-out of Downtown Westminster will comprise over \$1.5 billion in private investment in the site alone. It is also anticipated that growth in surrounding areas will be spurred by the success of the Downtown site, with approximately \$2.0 billion of additional development anticipated. Over time, the resulting job growth and activity will contribute to the economic vitality of Westminster as well as adjacent communities and jurisdictions.

D. Project Leveraging		WEIGHT 10%
9. What percent of outside funding sources (non-DRCOG-allocated Subregional Share funding) does this project have?	35%	60%+ outside funding sources High 30-59%Medium 29% and belowLow

Part 3 Additional Considerations

The ADCOG Subregional Forum has established five additional considerations to guide project selection within the subregional process. These considerations may be used by the ADCOG Subregional Forum in the project evaluation process in combination with the above listed criteria. The five additional considerations are:

- Does the project benefit a small community, which for this process is defined as a community with a population of less than 50,000 people?
No
- Is this project a suburban connector?
Yes, it plays an important role in connecting Adams, Broomfield and Jefferson counties to each other and to the Denver Metropolitan area.
- Does the project address a gap in existing service?
Yes, it completes a first and final mile connection between RTD’s US 36/Sheridan Park n Ride to Downtown Westminster and the US 36 Bikeway.
- Is this the logical next step of a project?
Yes, Westminster is underway with 30% project design and underpass structure selection.
- Is the project construction ready?
The project requests funding for final design and construction.

Applicants should provide an attachment to the application to address these additional considerations.

(Note: the considerations are addressed above.)

Part 4 Project Data Worksheet – Calculations and Estimates *(Complete all subsections applicable to the project)*

A. Transit Use	
1. Current ridership weekday boardings	2,067
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	15,932	11,754	27,686
2040	20,932	23,754	44,686

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>	83	1,075
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>	21	286
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>	21	286
6. = Number of SOV one-way trips reduced per day (#3 – #4 – #5)	41	503
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>	369	4,527
8. = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)	350	4,300
9. If values would be distinctly greater for weekends, describe the magnitude of difference: Downtown Westminster will be programmed with various community events throughout the year. These events are anticipated to increase transit ridership on routes serving the US 36/Sheridan BRT Station. For example, Westminster's 2018 Harvest Festival had over 30,000 attendees from throughout the Denver region - highlighting the importance of providing transportation options, including transit, to access these events. This underpass will create an important convenient and safe connection between the US 36/Sheridan BRT Station and Downtown Westminster, by providing transit users with direct access between the Station and Downtown Westminster and its associated events, businesses, and other uses.		
10. If different values other than the suggested are used, please explain here: 1. August 2018 RTD transit ridership used for current weekday boardings at the US 36/Sheridan Station. 2. Existing population based on 2018 data and does not assume full buildout of Downtown Westminster. Projected 2040 population and employment is estimated based on assumed full buildout of Downtown Westminster. 3. Transit calculations estimate a 4% increase in ridership for a 2020 year of project opening and assumes Downtown Westminster is not at full buildout in 2020.		

B. Bicycle Use

1. Current weekday bicyclists	96
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
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2020	15,932	11,754	27,686
2040	20,932	23,754	44,686

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.	96	288
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)	48	144
5. = Initial number of new bicycle trips from project (#3 – #4)	48	144
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)	14	43
7. = Number of SOV trips reduced per day (#5 - #6)	34	101
8. Enter the value of {#7 x 2 miles} . (= the VMT reduced per day) (Values other than 2 miles must be justified by sponsor)	68	202
9. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	64	191
10. If values would be distinctly greater for weekends, describe the magnitude of difference: Bicycle use will be higher during the weekends due to the increase of recreational bicycling. Community events programmed in Downtown Westminster are also anticipated to increase bicycle use.		
11. If different values other than the suggested are used, please explain here: 1. Current bicycle counts shown in Box 1 were obtained from CDOT bicycle counter data. Additional data resources providing an overview of bicycle use included video recordings by All Traffic Data. 2. Existing population based on 2018 data and does not assume full buildout of Downtown Westminster. Projected 2040 population and employment is estimated based on assumed full buildout of Downtown Westminster. 3. Bicycle use calculations are estimated based on a 2020 year of project opening and assumes Downtown Westminster is not at full buildout in 2020.		

C. Pedestrian Use

1. Current weekday pedestrians (include users of all non-pedaled devices)	133
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	15,932	11,754	27,686
2040	20,932	23,754	44,686

Pedestrian Use Calculations	Year	2040
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	of Opening	Weekday Estimate
3. Enter estimated additional weekday pedestrian one-way trips on the facility after project is completed	113	339
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)	57	170
5. = Number of new trips from project (#3 – #4)	56	169
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)	17	51
7. = Number of SOV trips reduced per day (#5 - #6)	39	118
12. Enter the value of {#7 x .4 miles} . (= the VMT reduced per day) (Values other than .4 miles must be justified by sponsor)	16	47
8. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	15	44
9. If values would be distinctly greater for weekends, describe the magnitude of difference: Pedestrian use will be higher during the weekends due to the increase of recreational use. Community events programmed in Downtown Westminster are also anticipated to increase pedestrian use		
10. If different values other than the suggested are used, please explain here: 1. Pedestrian counts shown in Box 1 were obtained from CDOT pedestrian counter data. Additional data resources providing an overview of pedestrian use included video recordings by All Traffic Data and signal system data. The signal system data was reviewed for the week of 6/25/18 - 6/29/18 for the number of times the pedestrian push button was engaged for crossing Sheridan. The data showed 806 events (approximately 161 events a day) - indicating that at least 161 people activating/crossing Sheridan. Assuming at every 10 th crossing/push button activation there was 2 people, then it there is an estimated 177 daily users. 2. Existing population based on 2018 data and does not assume full buildout of Downtown Westminster. Projected 2040 population and employment is estimated based on assumed full buildout of Downtown Westminster. 3. Pedestrian use calculations are estimated based on a 2020 year of project opening and assumes Downtown Westminster is not at full buildout in 2020.		

D. Vulnerable Populations

	Vulnerable Populations	Population within 1 mile
Use Current Census Data	1. Persons over age 65	1,840
	2. Minority persons	5,214
	3. Low-Income households	542
	4. Linguistically-challenged persons	299
	5. Individuals with disabilities	1,376
	6. Households without a motor vehicle	175
	7. Children ages 6-17	2,127
	8. Health service facilities served by project	7

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	64,000
3. Current weekday vehicle hours of delay (VHD) (before project)	59.29

Travel Delay Calculations	Year of Opening
4. Enter calculated future weekday VHD (after project)	44.64
5. Enter value of {#3 - #4} = Reduced VHD	14.65
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>	20.51
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>	5.38 seconds
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 17-25, NCHRP Report 617, or DiExSys methodology)</i> .
Fatal crashes	1	
Serious Injury crashes	4	
Other Injury crashes	14	
Property Damage Only crashes	417	
2. Estimated reduction in crashes <u>applicable to the project scope</u> <i>(per the five-year period used above)</i>		
Fatal crashes reduced	1	
Serious Injury crashes reduced	2	
Other Injury crashes reduced	6	
Property Damage Only crashes reduced	179	

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	Good
2. Describe current pavement issues and how the project will address them. CDOT milled and overlaid Sheridan from the US 36 bridge to approximately 68 th Avenue in 2011 with 2" of asphalt. There is some potholing. This project plans to mill and overlay the top 2-inches per CDOT approved material standards.	
3. Average Daily User Volume	55,000

Bicycle/Pedestrian/Other Facility

4. Current bicycle/pedestrian/other facility condition	Good
5. Describe current condition issues and how the project will address them. There is currently no direct connection to the RTD US 36/Sheridan Park n Ride and the US 36 Bikeway is not grade separated. With completion of this project, there will be only one non-grade separated crossing of the 18 mile long US 36 Bikeway. CDOT's traffic counters for the US 36 Bikeway are located at Uptown Avenue in Broomfield, and near the location of the proposed project in Westminster.	
6. Average Daily User Volume	The US 36 Bikeway carried 80,000 cycling trips in 2017.

H. Bridge Improvements

1. Current bridge structural condition from CDOT Not a part of project. The Sheridan Bridge over US 36 was replaced as part of the US 36 Express Lanes Project complete in 2016.	
2. Describe current condition issues and how the project will address them. Maximizes CDOT's investment in the bridge and interchange by constructing a six-lane cross section to match the bridge by constructing a southbound travel lane.	
3. Other functional obsolescence issues to be addressed by project NA	
4. Average Daily User Volume over bridge	55,000

I. Other Beneficial Variables *(identified and calculated by the sponsor)*

1.	Improved access to major free events, parks, and activities for both local residents and regional visitors. At build out of the Downtown, over 200 events and activities are anticipated to be held annually.
2.	The project will resolve current drainage issues with the RTD parking lot area.

3.

J. Disbenefits or Negative Impacts *(identified and calculated by the sponsor)*

1. Increase in VMT? *If yes, describe scale of expected increase*

Yes No

2. Negative impact on vulnerable populations

3. Other: