

# Part 1

# Base Information

1. Project Title	South Platte Regional Trail Improvements
2. Project <i>Start/End</i> points or Geographic Area <i>Provide a map with submittal, as appropriate</i>	From just south of the Santa Fe Drive crossing of the South Platte River north to the BNSF Railroad undercrossing.
3. Project Sponsor ( <i>entity that will construct/ complete and be financially responsible for the project</i> )	Denver Parks and Recreation
4. Project Contact Person, Title, Phone Number, and Email	Jason Coffey, DPR Trails Planner, 720-913-0676 and jason.coffey@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?  Yes  No  
*If yes, provide applicable concurrence documentation with submittal*

6. What planning document(s) identifies this project?

[DRCOG 2040 Fiscally Constrained Regional Transportation Plan \(2040 FC RTP\)](#)

Local plan: [Denver Moves: Pedestrians and Trails, Game Plan, for a Healthy City.](#)

Other(s):

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

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

<input type="checkbox"/> Rapid Transit Capacity (2040 FC RTP) <input type="checkbox"/> Transit Other: <input checked="" type="checkbox"/> Bicycle Facility <input checked="" type="checkbox"/> Pedestrian Facility <input checked="" type="checkbox"/> Safety Improvements <input type="checkbox"/> Roadway Capacity or Managed Lanes (2040 FC RTP) <input type="checkbox"/> Roadway Operational	<b>Grade Separation</b> <input type="checkbox"/> Roadway <input type="checkbox"/> Railway <input type="checkbox"/> Bicycle <input type="checkbox"/> Pedestrian <input type="checkbox"/> Roadway Pavement Reconstruction/Rehab <input type="checkbox"/> Bridge Replace/Reconstruct/Rehab <input type="checkbox"/> Study <input type="checkbox"/> Design <input type="checkbox"/> Transportation Technology Components <input type="checkbox"/> Other:
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8. **Problem Statement** What specific Metro Vision-related subregional problem/issue will the transportation project address?

The South Platte Regional Trail is one of the most important regional trails in the Denver Metro Area, connecting communities through Denver County from Douglas County to Adams County. The South Platte Regional Trail is the trunk trail for a trunk and feeder style trail network (where one main trail has other trails feed onto it) with other regional trails connecting to it, including: Bear Creek Regional Trail, Cherry Creek Trail, Sand Creek Regional Trail, Clear Creek Trail and other collector and local trails in the Metro Area. Safety improvements are needed on segments of the trail which currently have failing retaining walls and slopes constraining the usable trail width. Despite its vital role in the regional multi-use trail network, these segments do not meet the current design guidelines for regional trails as defined in the updated Denver Moves: Pedestrians and Trails plan.

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

Design and construct regional trail, to include NEPA, realigning the trail, trail and bridge removal, earth work, concrete work, flood plain work, landscaping and re-vegetation, bridge construction, retaining walls, slope mitigation, concrete paving, signs and markings, railings and other appurtenances as necessary.

10. 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.*

The smaller project would include only the phase A segment (see project map). From E. Ohio Avenue south along the South Platte River Trail to midway between US 85 and the Overland Pond bicycle and pedestrian bridge, with a total length of .8 miles. This segment features a major safety issue: the failing timber retaining wall, and the trail does not meet the regional trail standards. The new regional trail cross section in Denver Moves: Pedestrians and Trails (2019) is 12' of concrete with a 4' crusher fines side path. The goal of the project is to achieve this standard, or given site conditions, come as close to this standard as possible.

The scope is: design and construct regional trail, to include NEPA, realigning the trail, concrete work, earth work, flood plain work, landscaping and re-vegetation, retaining walls, slope mitigation, concrete paving, signs and markings, railings and other appurtenances as necessary.

Costs for the smaller project is \$10,930,224. Cost break down and phases are shown in the table below.

	2020	2021	2022	Total
Federal	\$1,059,818.		\$7,684,381.	\$8,744,199.
Local	\$264,954.		\$1,921,090.	\$2,186,044.
Total	\$1,324,772.		\$9,605,452.	<b>\$10,930,224.</b>
Phase	Design/ ENV		Construction	

## A. Project Financial Information and Funding Request

<b>1. Total Project Cost</b>		<b>\$21,879,935</b>
<b>2. Total amount of DRCOG Subregional Share Funding Request</b>	<b>\$17,503,948</b>	<b>80%</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 Contribution</b> <b>to Overall Total</b> <b>Project Cost</b>
City and County of Denver	\$4,375,987	20%
	\$	
	\$	
	\$	
	\$	
	\$	
<b>Total amount of funding provided by other funding partners</b> <i>(private, local, state, Regional, or federal)</i>	<b>\$4,375,987</b>	

**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
<b>Federal Funds</b>	\$1,935,795.	\$	\$15,568,153.	\$	<b>\$17,503,948.</b>
<b>State Funds</b>	\$	\$	\$	\$	<b>\$0</b>
<b>Local Funds</b>	\$483,949.	\$	\$3,892,038.	\$	<b>\$4,375,987.</b>
<b>Total Funding</b>	\$2,419,744.	\$	\$19,460,191.	\$	<b>\$21,879,935.</b>
<b>4. Phase to be Initiated</b> <i>Choose from Design, ENV, ROW, CON, Study, Service, Equip. Purchase, Other</i>	Design/ ENV		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 **30%**

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?

The South Platte River Trail is the main north/south regional trail in the Denver metro region. Portions of the trail were constructed many years ago. These older segments are 8' wide and do not meet the current regional trail standards for trail width. The segments addressed by this project have additional challenges caused by a leaning timber retaining wall and the squeeze created by sighting the trail between I-25 and the South Platte River on a very narrow bench. These conditions make maintenance access difficult and create severely constrained conditions when trail users and maintenance vehicles are present at the same time. The safe and enjoyable use of Denver trails is vital to encourage people to choose active transportation options and for the public health benefits associated with recreation and access to Open Space. The South Platte River Trail is a highly used and much beloved Denver community asset and requires upgrading to meet current and future use patterns.

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

The trail begins by Chatfield Lake south of Denver as the Mary Carter Greenway Trail, and ends in the north by Brighton Road and 136<sup>th</sup> Avenue. The South Platte River Trail connects Littleton, Englewood, Denver, Commerce City and Thornton. There is a trail along the South Platte River throughout most of the Denver metro region. The South Platte River Trail is the backbone of Denver metro areas' regional trail system. It is also part of the Colorado Front Range Trail which, when completed, will span Colorado from New Mexico to Wyoming.

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

Yes, the project will provide improved trail access to Arapahoe and Adams Counties, as well as to the City and County of Denver. The project benefits all users of South Platte River Trail and will improve bicycle and pedestrian infrastructure, enhancing connectivity between Arapahoe County and Adams County, in addition to the benefits to the City and County of Denver.

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

As site conditions allow, this project will meet the new Denver Moves: Pedestrians and Trails standards of 12' of concrete trail and a 4' crusher fines side path. Phase A will reconstruct the retaining wall and Phase B will shift the alignment of the trail to the west side of the river as shown on the project map. Rebuilding the retaining wall north of W. Mississippi Avenue and adjacent to South Platte River Drive (US-85), identified as Phase A on the project map, must take place for the trail to be reconstructed as close to the current standards as possible given site conditions and to eliminate the hazard created by the leaning timber retaining wall. The realignment of the trail from the very narrow bench between the steep river bank and I-25 is also needed to bring the trail up to the desired standard. The realignment to the west bank of the river will require a new bicycle and pedestrian bridge to be built near the Denver Wastewater Building and will improve maintenance access and trail capacity, and greatly enhance the trail user experience.

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?

Urban trails serve as active transportation and recreation corridors and the infrastructure associated with both uses promotes healthy lifestyles. The trail promotes the Denver metro areas' leadership position in the outdoor

recreation space. Improving the South Platte River Trail is an investment in the type of amenity that attract world-class employers and attract and retain a strong and healthy workforce.

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

This is a bicycle and pedestrian project that will encourage mode shift by enhancing the type of low-stress/high comfort active transportation network conducive to meeting the Denver Mobility Action Plan's commute mode share goal of 30% mode shift by 2030.

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

Denver Parks and Recreation is coordinating with Urban Drainage and Flood Control District to ensure the project meets the long-term goals of the South Platte River corridor and is in alignment with any planned in-stream improvements.

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

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).

### 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](#):

The South Platte River Trail is a major trail running approximately north-south through the City of Denver. It connects to all other regional trails in Denver except the High Line Canal Trail. The trail provides safe, convenient, alternative transport to the central business district in downtown Denver, where a diverse range of employment opportunities are available. Our data show that the South Platte River Trail is used primarily as a commuter trail, with usage increasing just slightly on the weekends. Improving the trail will serve to increase user enjoyment of the trail and will encourage users who are “on the fence” to try commuting via the trail. These residents will have the opportunity to actively commute, rather than contributing to traffic congestion by sitting in traffic. DRCOG data indicates that in some block groups along the project area, as many as 63% of households do not have access to a vehicle. Block groups within one mile of the project site have as many as 71% of households facing poverty. This is an area with a high population of minorities, children, and linguistically isolated people. Removing barriers to active transportation will provide vulnerable populations with safe, convenient ways to recreate and commute around the city, without need for a vehicle. There are approximately 15 CDPHE regulated health facilities within a mile of the project boundary. Since the trail provides connections throughout the city, it increases opportunity to access a variety of jobs, recreational options, and other services, including access to health facilities.

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 Blueprint Denver Public Review Draft 2 (1/7/19) shows the Vision for an Inclusive City in Chapter 2.2. “Improving Access to Opportunity” is one of the three equity concepts and is directly addressed by this project. Pages 34 and 35 of the 1/7/19 draft of Blueprint Denver show the Measuring Access to Opportunity map. The South Platte River corridor is one of the boundaries between neighborhoods. The map (p. 34-35) highlights both the difference in access on the west side of the river versus the east side and shows how many communities in need of more access to opportunity are along the river corridor. Access to high comfort/low stress bicycle and pedestrian facilities, like what is provided by the South Platte River Trail, increases opportunity for active lifestyles to improve health outcomes and offer transportation options for people who don’t drive or can’t drive. On the Vulnerable Populations map series attached to this application packet, the map labeled “number of households without a vehicle,” shows several census tracts have between 101 and 250 households without a vehicle. The South Platte River Trail is a vital connection to transit stops found off the trail in Auraria, along Lakewood Gulch, and at Union Station. Investing in improving the trail by addressing the site conditions, widening the trail, and improving safety for trail users are the types of investments that improve access to opportunity for people without access to automobiles as well as those who want safe active transportation.

### 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 proposed to the South Platte River Trail will increase capacity for bicycles and pedestrians by widening the trail. As site conditions allow, the improved trail would be 12' wide and have a 4' crusher fines side path. Phase A of this project seeks to eliminate barriers to widening the trail by repairing the leaning railroad tie retaining wall between Santa Fe Drive and the trail. Phase B would realign the trail to the west side of the river and remove the segment of trail squeezed in between I-25 and the steep river bank. These improvements will allow for greater numbers of trail users to comfortably and safely utilize the trail. A safer, more comfortable trail will encourage multi-modal use of the trail for recreation and as an alternative transportation option to personal vehicle use.

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

The high comfort/low stress bicycle and pedestrian facilities that multi-use trails provide are key to encouraging Denver residents to embrace mode shift. In order for 30% of commuters to be walking, biking or taking transit to work by 2030 we must improve existing, and provide new high comfort/low stress bicycle and pedestrian facilities. Central to reaching the 60% of the population who are "interested but concerned" (2009, Portland Bureau of Transportation, <https://www.portlandoregon.gov/transportation/44597?a=237507>) about bicycling is providing high comfort/low stress facilities like trails. Expanding the capacity of trails increases the likelihood someone will choose to ride a bike to work.

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

Page 19 of the Denver Strategic Transportation Plan (2008) outlines "setting priorities to maximize our investment." The South Platte River Trail Improvements project falls directly in line with the priorities outlined. Planning documents have identified the need to make major improvements that "define future transportation options." This project will "provide multimodal improvements," "maximize efficiency and safety," and "maintain existing infrastructure." The proposed project meets all these criteria by improving safety, increasing capacity and investing in existing infrastructure to help Denver increase person-trip capacity.

## TRANSPORTATION SAFETY AND SECURITY

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

The purpose of this project is to improve the main north/south regional trail in the Denver metro area. The South Platte River Trail is a regional trail featuring grade separated crossings for enhanced safety free from conflicts with automobile traffic. Phase A of this project provides further safety enhancements by repairing the railroad tie wall leaning into the trail north of W. Mississippi Avenue. The railroad tie wall reduces the useable width of the trail, is a hazard to trail users, and creates conflicts when maintenance vehicles must access the trail. Phase B of the project realigns the trail to the west side of the river to get the trail off the narrow bench between I-25 and the steep river bank. This very narrow section does not have adequate recovery zones for trail users and is very difficult to maintain because maintenance vehicles can barely access the trail segment. Better maintenance and improved safety for trail users will be achieved by this project.

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

The South Platte River Trail is a regional trail with grade separated crossings of arterial roadways. These types of facilities provide the high comfort/low stress bicycle and pedestrian experience for active transportation and



recreation without the threat of death from automobiles. Increasing the trail’s capacity and attractiveness will encourage more people to choose this active form of transportation and reduce the chances for hazardous encounters between bicyclists/pedestrians and vehicles.

### C. Consistency & Contributions to Transportation-focused Metro Vision and Denver Plans, Goals, and Objectives

WEIGHT **30%**

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. In addition, provide information related to the consistency with Denver goals, objectives, plans, and priorities.

[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

The South Platte River Trail follows the South Platte River corridor and is fully developed on both sides. The January 2019 [Blueprint Denver Public Review Draft 2](#) shows the entire project area surrounded by Value Manufacturing and Innovation/Flex Districts and Regional Center as shown of the map on page 143. These Future Places have the infrastructure to support, and are designated for, growth and development.

[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

The South Platte River Trail is a multimodal facility, specifically a multi-use trail designed for bicycle and pedestrian use. The South Platte Regional Trail connects to other regional trails including: Bear Creek Regional Trail, Cherry Creek Trail, Sand Creek Regional Trail, Clear Creek Trail and other collector and local trails in the Metro Area. It connects more than 50 miles of trail throughout the City and County of Denver alone. The trail provides access to downtown and proposed Regional Centers as shown on the Future Places map in the [Blueprint Denver January 2019 Public Review Draft 2](#) on page 143. This project improves the existing multimodal network.

- 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 January 2019 Public Review Draft 2 of Blueprint Denver shows the Future Places map on page 143. This project proposes improvements to the existing trail to implement the latest trail design standards and improve capacity and safety. The trail runs along industrial areas, regional and community centers, green spaces, and residential areas. It also connects to Community Corridors, such as Alameda Avenue. These improvements are vital to the continued success of Denver’s multimodal network since the South Platte River Trail provides access to downtown employment and proposed Regional Centers.

**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*

As a multi-use trail project, this project is focused on improving mobility for people. The project would increase capacity on the South Platte River Trail by addressing site conditions constraining the ability to expand the width of the trail. Within the proposed project area, the average daily user count is 730. According to [Blueprint Denver, Public Review Draft 2](#), January 2019, page 51, the population growth projections show an increase in population of 189,000 by 2040. The South Platte River Trail must be improved and expanded to keep pace with this growth, especially since the trail connects the metro region as the main north/south multi-use trail corridor. The future demands on the trail will not just be determined by Denver's population growth but the growth of Arapahoe County and Adams County communities.

**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.)

[Denver Moves: Pedestrians and Trails, January 2019](#), in the key findings from the Existing Conditions report shows Goal 5: Safety, and then shows that only 7% of trails citywide meet the proposed guidelines for regional trails, collector and local trails. The South Platte River Trail is specifically called out because it is one of the three regional trails with weekend user counts over 1000 (p.53). In the Infrastructure section under Complete Network, widening of existing trail segments, is a project type identified because it establishes the Complete Network (p.54). The project funding application seeks to implement the Complete Network and address capacity and safety needs of the South Platte River Trail in accordance with Denver Moves: Pedestrians and Trails.

[Game Plan for a Healthy City, 1/7/2019 Draft](#), in the Guiding Principles and Goals identifies the need for trail improvements. The Guiding Principle of Every Dollar has Goal #11, explore alternative and additional funding options for park, trail, and recreation needs (p.16). This project application is for federal funding for trail improvements to supplement existing CIP funds. The Guiding Principle of Uniquely Denver has the supporting Goal #16, protect and enhance Denver's legacy pathways: its parkways, greenways, and trails (p.16). If funded, this project directly implements goals in support of 2 of the 4 Guiding Principles for Game Plan for a Healthy City.

The word trail appears 83 times in the Game Plan. This fact highlights the significance of improving the trail network to implementing the Guiding Principles of the plan.

MV objective 6a

**Improve air quality and reduce greenhouse gas emissions.**

**4.A.** 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*

This project application is for funding improvements to the bicycle and pedestrian facilities network. Specifically, The South Platte River Trail is the type of regional high comfort/low stress active transportation facility that helps to encourage commuters to get out of their automobiles. Cyclists and pedestrians produce no measurable emissions during their commute while a typical vehicle in the U.S. emits about 404 grams of CO<sub>2</sub> per mile, or 4.6 metric tons of carbon dioxide per year (<https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle>).

**4.B.** If applicable, describe how this project is consistent with, or helps implement, Denver’s [80x50 Climate Action Plan](#), which set the City’s target to **reduce greenhouse gas emissions to 80% below 2005 levels by 2050**, and/or Denver’s [2020 Sustainability Goals](#).

Similar to 4.A, at a high level, improvements to the low stress/high comfort active transportation network increase the likelihood of commuters choosing to get out of their automobiles. This anticipated mode switch will reduce the number of automobiles on the road, thereby reducing emissions of ground-level ozone, greenhouse gases, carbon monoxide, and other pollutants. According to the EPA, transportation contributes equivalent greenhouse gas emissions to energy production in the U.S. (<https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>). Encouraging Denver citizens to find alternatives to automobile transit for work or leisure will play a significant role in meeting the City’s sustainability goals and improving air quality.

**4.C.** If applicable, describe if this project contains **water quality and green infrastructure** consistent with project types and focus areas identified in Denver’s [Green Infrastructure Implementation Strategy](#):

The South Platte River Watershed is specifically addressed in Section 2, “Denver Urban Watersheds & Water Quality Basins” of the Green Infrastructure Implementation Strategy. Part 2.5, “Benefits of Green Infrastructure”, page 11, has a paragraph titled “improved public health outcomes” that discusses the physical design of communities and “features of neighborhood design, such as multi-modal transportation, walkability, and places for recreation impact residents’ ability to maintain healthy lifestyles.” (p. 11) This proposed project is intended to improve multi-modal transportation infrastructure and access to recreation within the South Platte River corridor. This project positively impacts the benefits of green infrastructure as called for in Denver’s Green Infrastructure Implementation Strategy.

MV objective 7b

**Connect people to natural resource or recreational areas.**

**5.A.** 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 complete missing links to the improved segments of the South Platte River Trail. The trail has developed over time and has been improved when possible when projects touch the trail. This has led to gaps in the improved segments and this project would fill two of those gaps by addressing site conditions that are

currently preventing the trail from meeting the current standards. The trail provides bicycle and pedestrian access to the South Platte River Greenway open space and to the numerous parks built along the river corridor.

**5.B.** If applicable, describe how your project meets the goals, objectives and priorities of the Denver Department of Parks and Recreation’s [Game Plan for a Healthy City \(Public review draft 2018\)](#).

The [Game Plan for a Healthy City](#), Revised Plan- 1/7/19, lays out the vision for a healthy city on Page 60. This vision includes the line “trails provide for both recreation and transportation” in the context of the all infrastructure composing a healthy city. The Game Plan has four guiding principles, Every Drop, Every Person, Every Dollar, and Uniquely Denver, and each of these guiding principles has goals to focus implementation. Two of the Guiding principles are specific to trails. Every Dollar Goal 11 (p. 69) states: “explore alternative and additional funding options for park, trail, and recreation needs,” and this project application is geared toward additional funding for the trail network. The Game Plan guiding principle of Uniquely Denver includes Goal 16 (p.71) “protect and enhance Denver’s legacy pathways: its parkways, greenways and trails.” If funded, this project will allow for the enhancement of the South Platte River Trail, one of the first and most important regional trails in the Denver metro area, and help to implement the goals and guiding principles of the Game Plan for a Healthy City.

[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*

Multi-use trails provide the type of comfortable, low stress bicycle and pedestrian facilities that enable people to lead healthy and active lifestyles. For Denver to meet the Mobility Action Plan goal of 30% commute mode split by 2030 then we must reach the large percentage of the population who are interested but concerned about bicycling (Portland Office of Transportation, <https://www.portlandoregon.gov/transportation/44597?a=237507>). To reach the folks who would bicycle or walk if they had safer, more comfortable options we must improve our high comfort/low stress network, and regional multi-use trails are vital to this network. This project will address site conditions preventing improvements to the South Platte River Trail, backbone of the Denver metro area’s multi-use trail network.

[MV objective 13](#)

**Improve access to opportunity.**

**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?

Yes  No

Describe, *including supporting quantitative analysis*

The South Platte River Trail already connects to key destinations like the Denver Central Business District, National Western Center, and 3 Regional Centers as shown in the Future Growth Areas in Blueprint Denver Public Review Draft 2. The South Platte River Trail connects neighborhoods shown as having less access to opportunity on the Measuring Access to Opportunity map in Blueprint Denver (p. 35), and these neighborhoods get vital access to light rail stops in Auraria, Lakewood Gulch, and Union Station from the trail. Improving the trail will help improve access to key destinations and transit for residents of neighborhoods who stand to benefit most from improved access.

**7.B.** Describe how your project addresses the neighborhood inequities related to transportation as depicted and mapped in the **Denver Neighborhood Equity Index** 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?

General information on the Neighborhood Equity Index is on the Denvergov website:

<https://www.denvergov.org/content/denvergov/en/environmental-health/community-health/health-in-all-policies.html>

See the interactive map, by opening this [link](#) 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.

The Denver Neighborhood Equity Index, shows the over all Equity Index, a combination of each sub-index (socio-economic, built environment, access to care, morbidity, and mortality), and the South Platte River Trail serves neighborhoods ranking at the bottom of the index for equity. Improving the trail to increase capacity and improve safety make the trail a more viable option for active transportation and recreation, and improves equity and access for populations identified as being most valuable to the negative consequences of inequity.

**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 South Platte River Trail by removing barriers to widening the trail will help Denver meet the recreation and active transportation needs produced by a projected population increase of 189,000 by 2040 (Blueprint Denver 1/7/19 Public Review Draft 2). The highest average weekend user counts on the trail exceeded 1000 in 2017, the last time counts were taken, and if we are going to meet user needs as population increases we must expand capacity of the trail. Our competitive advantage as a region depends on maintaining and growing our reputation as leader in outdoor recreation and if we are going to meet or Mobility Action Plan goal of 30% commute mode share by 2030 we must make investments as a subregion in our multi-use trails. Trails are the type of high comfort/low stress active transportation and recreation facility that people seek out. This improves health outcomes, improves access to transit for people without access to vehicles, and helps demonstrate Denver’s commitment to active and healthy lifestyles for all residents.

**D. Project Leveraging**

**WEIGHT 10%**

9. What percent of outside funding sources (non-DRCOG-allocated Subregional Share funding) does this project have?	%	60%+ outside funding sources ..... High 30-59% .....Medium 29% and below .....Low
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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	0
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	0	0	0
2040	0	0	0

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>	0	0
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>	0	0
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>	0	0
6. = Number of SOV one-way trips reduced per day (#3 – #4 – #5)	0	0
7. Enter the value of <b>{#6 x 9 miles}</b> . (= 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>	0	0
8. = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)	0	0
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	0
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	0	0	0
2040	0	0	0

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.	0	0
4. Enter number of the bicycle trips (in #3 above) that will be diverting from a different bicycling route. (Example: <b>{#3 X 50%}</b> or other percent, if justified)	0	0
5. = Initial number of new bicycle trips from project (#3 – #4)	0	0
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)	0	0
7. = Number of SOV trips reduced per day (#5 - #6)	0	0
8. Enter the value of <b>{#7 x 2 miles}</b> . (= the VMT reduced per day) (Values other than 2 miles must be justified by sponsor)	0	0
9. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	0	0
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)	0
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	0	0	0
2040	0	0	0

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	0	0
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)	0	0
5. = Number of new trips from project (#3 – #4)	0	0
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)	0	0
7. = Number of SOV trips reduced per day (#5 - #6)	0	0



<b>12.</b> Enter the value of <b>{#7 x .4 miles}</b> . (= the VMT reduced per day) <i>(Values other than .4 miles must be justified by sponsor)</i>	0	0
<b>8.</b> = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	0	0
<b>9.</b> If values would be distinctly greater for weekends, describe the magnitude of difference:		
<b>10.</b> 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
	<b>1.</b> Persons over age 65	
<b>2.</b> Minority persons		0
<b>3.</b> Low-Income households		0
<b>4.</b> Linguistically-challenged persons		0
<b>5.</b> Individuals with disabilities		0
<b>6.</b> Households without a motor vehicle		0
<b>7.</b> Children ages 6-17		0
<b>8.</b> Health service facilities served by project		0

## 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.*

<b>1.</b> Current ADT (average daily traffic volume) on applicable segments	0
<b>2.</b> 2040 ADT estimate	0
<b>3.</b> Current weekday vehicle hours of delay (VHD) (before project)	0

Travel Delay Calculations	Year of Opening
<b>4.</b> Enter calculated future weekday VHD (after project)	0
<b>5.</b> Enter value of <b>{#3 - #4}</b> = Reduced VHD	0
<b>6.</b> Enter value of <b>{#5 X 1.4}</b> = <b>Reduced person hours of delay</b> <i>(Value higher than 1.4 due to high transit ridership must be justified by sponsor)</i>	0
<b>7.</b> <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>	0
<b>8.</b> 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	0	
Serious Injury crashes	0	
Other Injury crashes	0	
Property Damage Only crashes	0	
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	0	
Property Damage Only crashes reduced	0	

## 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	Choose an item
2. Describe current pavement issues and how the project will address them.	
3. Average Daily User Volume	0

### Bicycle/Pedestrian/Other Facility

4. Current bicycle/pedestrian/other facility condition	Fair
5. Describe current condition issues and how the project will address them.	
<p>Within the project boundaries identified, two phases are proposed: phase A and B both address barriers to upgrading the trail due to existing site conditions. The phase A and B segments (see project map) have 8' wide concrete paths and the concrete surface is in good condition. However, the updated Denver Moves: Pedestrians and Trails plan sets a new regional trail standard of 12' wide concrete trail with a 4' crusher fines side path, and site conditions must be improved for both phase A and B segments for the trail to be widened. Phase A has a failing timber railroad tie retaining wall constraining the available space for the trail, and the retaining wall must be replaced, and slope improvements made on the river side of the trail for any increase in trail width. Once the improvements are made, and as site conditions permit, the new trail standard will be implemented. The phase A segment will upgrade the trail cross section between two segments north and south that have been improved through other projects. Phase A fills a gap in trail improvements that can only take place once the retaining wall is replaced.</p>	

Phase B of the project, within the boundaries identified, contains a segment of the trail squeezed between I-25 and a steep river bank. There is no room to expand the trail to meet the new Denver Moves: Pedestrians and Trails standard with the trail in its current location. Phase B of the project proposes to relocate the trail to the west side of the river, to property currently owned by the City and County of Denver where there is more room to implement the new standard. Site conditions will need to be evaluated during the design phase of the project to determine if the 12' wide concrete trail and 4' wide crusher fine side path can both be constructed. Moving the phase B segment to the west side of the river will require construction of a new bicycle and pedestrian bridge near the Denver Waste Water Building. The existing bicycle and pedestrian bridge and the remaining trail on the east side between the river and I-25 would be removed.

The user counts for the South Platte River Trail do not differentiate between bicyclists and pedestrians. The nearest location with available count data is right at the northern portion of phase A of the proposed project. The average weekday count between 04/25/17 and 07/30/17 is 631, and the average weekend count for the same time period is 972. The average for both weekday and weekend is shown below. South of the project area the user counts are higher. From 05/01/17 to 07/27/17 the average weekday count is 789 and the average weekend count is 1,347. The average for both weekday and weekend is below.

6. Average Daily User Volume @ Santa Fe Drive (Phase A northern boundary)	730
7. Average Daily User Volume @ Grant Frontier Park West (south of the project area)	943

## H. Bridge Improvements

1. Current bridge structural condition from CDOT

2. Describe current condition issues and how the project will address them.

3. Other functional obsolescence issues to be addressed by project

4. Average Daily User Volume over bridge

0

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

1.

2.

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:**