

Part 1

Base Information

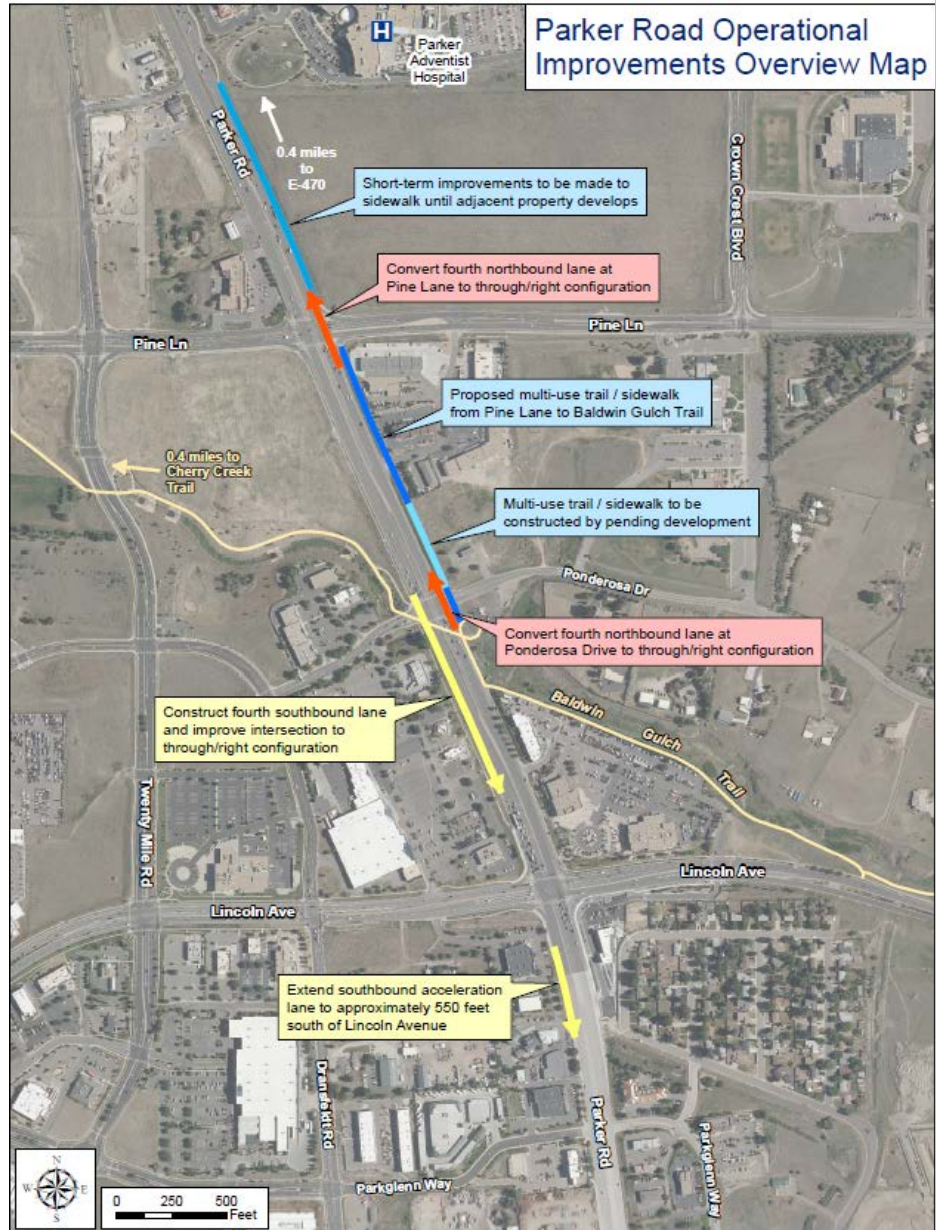
1. Project Title

North Parker Road Operational Improvements

2. Project Start/End points or Geographic Area

Provide a map with submittal, as appropriate

Approximately 500' south of Lincoln Avenue north to approximately 1500' north of Pine Lane



3. Project Sponsor (entity that will construct/ complete and be financially responsible for the project)

Town of Parker in partnership with Douglas County and CDOT

4. Project Contact Person, Title, Phone Number, and Email

Chris Hudson P.E., Public Works Manager, 303.805.3203, chudson@parkeronline.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?	<input checked="" type="checkbox"/> DRCOG 2040 Fiscally Constrained Regional Transportation Plan (2040 FC RTP)
	<input checked="" type="checkbox"/> Local plan: North Parker Road Traffic Operational Improvements Study (Summary Report attached)
	<input type="checkbox"/> Other(s):
<i>Provide link to document/s and referenced page number if possible, or provide documentation with submittal</i>	

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 checked="" type="checkbox"/> Roadway Operational	<p>Grade Separation</p> <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?

Parker Road (State Highway 83 or SH 83), a major regional arterial, extends from El Paso County on the south to central Denver on the north, serving as a key north-south connection through Douglas County, Parker, Arapahoe County, Castle Rock, Foxfield, Aurora, and Denver plus also serves as a connection to western Elbert County. The Town of Parker is currently developing the Parker Road Corridor Plan which forecasts an increase in daily traffic on Parker Road north of Lincoln Avenue from 59,000 vehicles per day currently to 83,000 in 2040. Recognizing existing and growing congestion on Parker Road, the MetroVision plan shows additional lanes on Parker Road between E-470 and Hilltop Road as an unfunded Vision project. The Parker Road Corridor Plan is expected to include recommendations to consider a Parker Road grade-separated interchange at Lincoln Avenue and other major intersection reconfigurations at Mainstreet and Hilltop Road.

This operational improvement project would address short and mid-term issues on Parker Road in northern incorporated Parker with intersection improvements requiring little or no new right-of-way, including:

- **Congestion Relief:** Improves intersection level of service (LOS) from E to C in the AM peak period at the Pine Lane intersection and reduces corridor delay by improving lane continuity.
- **Safety:** Improves safety by reducing peak period congestion and reducing weaving movements by right-turning vehicles
- **Bicycle/Pedestrian Mobility:** Enhances connectivity and safety for bicyclists and pedestrians by adding a new multi-use path from south of Ponderosa Drive (at the Baldwin Gulch Trail) to Pine Lane and widening the existing narrow/attached walk north of Pine Lane

See Attachment A – N Parker Rd Improvements Summary Report

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

1. Pine Lane Intersection Northbound Improvements (\$1.0 million)
 - a. Restripe for 2nd Northbound Left-turn Lane with Signal Modifications
 - b. Convert 4th Northbound Lane to Through/Right
 - c. Change Westbound Right-turn Lane to a Right-Angle Turn at Signal with Storage

2. Ponderosa Dr Intersection Northbound Improvement (\$0.5 million)
 - a. Convert 4th Northbound Lane to Through/Right
 - b. Change Westbound Right-turn Lane to Right-Angle at Signal
 - c. Narrow West Leg to 1 Lane EB; Widen WB for 1 Right, 1 Through and 1 Left

3. Ponderosa Dr Intersection Southbound Improvement (\$0.7 million)
 - a. Convert 4th SB Lane to Through/Right
 - b. Extend 4th SB Lane to Lincoln Ave

4. Add Multi-Use Path on East Side of Parker Rd (\$1.2 million)
 - a. New path south of Ponderosa Dr to Pine Lane
 - b. Widen existing path north of Pine Drive to 8 foot minimum

5. Extend Southbound Acceleration Lane South of Lincoln (\$0.6 million)

Total Cost: \$4.0 million

10. What is the status of the proposed project?

Conceptual design and planning-level cost estimates have been prepared. The Town of Parker plans to complete design in 2019/2020 using Town funds. The package of improvements has been developed to avoid major right-of-way impacts preparing the project for an anticipated categorical exclusion, design, and construction.

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.

Elements 1, 2, & 5 would form a \$2.1 million package of highest priority traffic operational and safety improvements.

Elements 1, 2, 3, & 5 would form a \$2.8 million package of all proposed traffic operational and safety improvements.

A. Project Financial Information and Funding Request

1. Total Project Cost	\$4,000,000	
2. Total amount of DRCOG Subregional Share Funding Request	\$2,000,000	50% 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

Applicant/Town of Parker Contribution	\$1,000,000	25%
CDOT	\$500,000	12.5%
Douglas County	\$500,000	12.5%
Total amount of funding provided by other funding partners (private, local, state, Regional, or federal)	\$2,000,000	50%

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 2019.</i>				
	FY 2020	FY 2021	FY 2022	FY 2023	Total
Federal Funds	\$0	\$0	\$2,000,000	\$0	\$2,000,000
State Funds	\$0	\$0	\$ 500,000	\$0	\$500,000
Local Funds	\$0	\$0	\$1,500,000	\$0	\$1,500,000
Total Funding	\$0	\$0	\$4,000,000	\$0	\$4,000,000
4. Phase to be Initiated <i>Choose from Design, ENV, ROW, CON, Study, Service, Equip. Purchase, Other</i>			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?

Traffic volumes on Parker Road (State Highway 83) south of E-470 have increased steadily over many years and congestion and delays are growing, especially northbound in the AM peak period and southbound in the PM peak. Observations show that actual delays are often greater than suggested by the calculated peak hour LOS E at the Pine Lane Intersection and LOS D at the Lincoln Avenue intersection, as even minor accidents or incidents can greatly magnify congestion issues.

With significant growth continuing throughout Parker, Douglas County and Castle Rock, as well as in Elbert and El Paso counties, traffic volumes on Parker Road are forecast to grow by approximately 40 percent by 2040 in the Parker Road/Lincoln Avenue area. Grade-separated interchanges or major intersection reconfigurations are anticipated to be needed in the longer term at the busiest Parker Road intersections, including Lincoln Avenue, Mainstreet, and Hilltop Road/20-Mile Road but those improvements are likely to take many years to complete due to all the necessary planning, environmental, right-of-way, design and financing challenges.

These operational improvements will provide needed short-range relief to congestion and improve the ability to maintain traffic flow in response to accidents and incidents. Additionally the multiuse path extension and improvements on the east side of Parker Road will provide important connections for bicyclists and pedestrians, including connections between central Parker and destinations including services, jobs and Parker Adventist Hospital to the north.

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

In addition to being the north-south spine for the Town of Parker, Parker Road (SH 83) provides a key regional route for Franktown and other parts of Douglas County including Castle Rock.

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

Parker Road is also a key regional connector between Elbert County and El Paso County on the south and Arapahoe County, Foxfield, Aurora, and Denver on the north.

It is important to note that Arapahoe County, Aurora, and CDOT have been working together to implement major upgrades to Parker Road to the north, including major interchange improvements at I-225, grade-separated interchanges now in place at Hampden Avenue and Arapahoe Road, and major at-grade intersection improvements planned at Quincy Avenue. These upgrades have and will increase the capacity of the Parker Road corridor north of the Town of Parker allowing growing travel demand to reach and place additional pressure on the Town's section of the regional corridor.

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

Congestion Relief: Estimate to reduce daily person hours of delay by 385 hours. Improves intersection LOS E to C in the AM peak period at the Pine Lane intersection and reduces corridor delay by improvement lane continuity.

Safety: Improves safety by reducing peak period congestion and reducing weaving movements by right-turning vehicles (see B. 3. below for additional detail)

Bicycle/Pedestrian Mobility: Enhances connectivity and safety for bicyclists and pedestrians by adding a new multiuse path from south of Ponderosa Drive (Baldwin Gulch Trail which connects to the Cherry Creek Trail) to Pine Lane and widening the existing narrow/attached walk north of Pine Lane

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?

The project will help maintain the functionality of one of the primary regional connector roadways for the Town of Parker and eastern Douglas County. It will support the continued residential and employment base for the Town and surrounding parts of Douglas and Elbert counties.

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

In addition to vehicular benefits discussed above, the project will improve connectivity for other modes:

Transit:

- Improve travel times and reliability for RTD Route 483 throughout the project corridor and Route P, which uses Parker Road south of Lincoln Avenue.
- Improve access to the Nine Mile Transit Station and the R and H light rail lines
- Improve access to the Parker, Pinery and Lincoln/Jordan Park-n-Rides to the south and west

Bicycles and Pedestrians:

- The new multiuse path connecting from the Baldwin Gulch Trail (connection south of Ponderosa Drive) to Pine Lane will provide a bicycle and pedestrian connection between neighborhoods and commercial developments on the south and uses on the north. In addition, the Baldwin Gulch Trail connects to the Cherry Creek Trail located west of the project which is a regional trail paralleling Parker Road through the Town with connection to Denver (north) and Franktown (south).
- Improvements to the existing narrow, attached sidewalk north of Pine Lane will create a safer and more comfortable path for pedestrians and bicyclists
- Adding and improving the multiuse path on the east side of Parker Road will reduce the need for pedestrian and bicycle crossings of at-grade intersections and provide better access to existing underpass at Baldwin Gulch (south of the Ponderosa Drive intersection)

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

#3 above partially describes the project partnership established among Parker, Douglas County, and CDOT. State Highway 83 (Parker Road) is an important north-south regional roadway to the southeast Denver metro area. Douglas County, Parker and CDOT have committed funds to the project for both safety and operational improvement considerations to this state highway.

In addition, the Town of Parker is pursuing a related improvement project by providing a connection between the E-470/Parker Road eastbound off-ramp and an extended Twenty Mile Road. This improvement is planned as a reliever to this section of Parker Road. This project is planned to be financed and implemented as a joint project between the Town of Parker and the E-470 Authority.

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).

Providing greater access and connectivity to alternative transportation provides a significantly decreased transportation cost option for vulnerable populations. This project will provide better accessibility to many of the 12 health service facilities located within a mile of the project including the Parker Adventist Hospital.

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

This project is another opportunity for Parker to improve streets and the transportation network for all users. Proposed efficiency improvements to Parker Road (SH83) will directly benefit the motorists and operations along this roadway segment and will also provide safe, connected and comfortable lower stress trail and sidewalk connections. The components of this project will increase the reliability of the Town's existing multi-modal transportation network by creating an accessible and interconnected community that encourages multi-modal options. The proposed sidewalk and trail segments will connect to Parker's vast trail and sidewalk network via existing undercrossing of Parker Road (SH83) via the Baldwin Gulch Trail.

In addition to vehicular benefits discussed above, the project will improve connectivity for other modes:

- Improve travel times and reliability for RTD Route 483 throughout the project corridor and Route P, which uses Parker Road south of Lincoln Avenue
- Improve access to the Nine Mile Transit Station and the R and H light rail lines
- Improve access to the Parker, Pinery and Lincoln/Jordan Park-n-Rides to the south and west

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

Safety is the top priority when evaluating and planning improvements for an active transportation network. Parker's Transportation Master Plan and Complete Streets Policy provide the Town with policies and strategies to ensure a safe, efficient and sustainable transportation network – including the opportunity to evaluate all transportation projects and account for the needs of all users on the roadway network.

Although no crash reduction factors were found in industry accepted publications listed, several features of the proposed project may be beneficial for safety in the corridor:

- Extension of the southbound acceleration south of Lincoln to AASHTO and CDOT standards can be expected to reduce southbound Parker Rd crashes in the vicinity of Lincoln Ave (5 injury and 42 property damage only crashes occurred in the last 5 years). The current southbound acceleration lane length is approximately half of the required 550-foot standard (based on the 45-MPH speed limit of Parker Road) and is a repeated area of concern by the Parker Police Department due to the high rate of accidents. Industry standard safety publications do not provide substantial guidance on potential crash reduction regarding substandard acceleration lane lengths. Parker Police and Engineering/Public Works believe that the substandard length "surprises" the traveling public and contributes to the amount of crashes. The Town's professional consultant (Felsburg, Holt & Ullevig) engaged to evaluate the project is also of the opinion that improving the acceleration lane to standards should help to reduce the number of crashes.
- Conversion of right-turn lanes to shared through/rate lanes at Ponderosa Dr. (northbound and southbound) and at Pine Lane (northbound) will reduce the need for weaving and lane changes
- Developing separate left and through lanes to replace the shared lane on the westbound Ponderosa approach
- The new and improved multi-use paths will create a safer environment for pedestrians and bicyclists, although no pedestrian or bicycle crashes occurred in the last 5 years in this area. The added multi-use path connection to the Baldwin Gulch grade separation crossing will reduce the amount of potential at-grade crossings of Parker Road.

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

WEIGHT **15%**

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

These proposed operational improvements to Parker Road directly support growth (development & redevelopment) in the central and eastern part of the Town of Parker including the historic downtown.

[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

Improves multimodal connections within and between the Parker Urban Center as well as key destinations.

[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 help increase mobility choices within the Town and subregion. As previously described, the project will improve predictability of the region's transit system (RTD) service in the area, improve bicycle and pedestrian accessibility by linking to Parker's extensive trail and sidewalk network - which ultimately connects to the Cherry Creek Regional Trail.

[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

Reduced congestion can be expected to result in a small reduction in greenhouses gases and pollutants but reductions have not been quantified.

[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*

Completion of this missing link provides connectivity to the Cherry Creek Regional Trail and also expands active transportation opportunities. The project improvements link to the Cherry Creek Regional Trail and the miles long Cherry Creek open space corridor within the region via the Baldwin Gulch Trail. This connectivity will help to improve multimodal access to the regions natural resources and recreational areas.

[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*

New trail connections expands active transportation opportunities. This transportation project will increase access to amenities that support healthy & active lifestyles. This project links to the Cherry Creek Regional Trail and the miles long Cherry Creek open space corridor via the Baldwin Gulch Trail.

The improvements also take into consideration the Town’s Complete Streets Policy – to ensure safe, convenient and comfortable travel options and access for users of all ages and abilities, regardless of travel mode.

[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*

This project will help promote reliable automobile, bicycle, pedestrian and transit connections to health service facilities including the Parker Adventist Hospital and medical offices immediately to the north, more than 10,000 jobs in the immediate project vicinity (within 1-mile), and improve access to additional local goods and services, housing, and regional employment centers and regional transportation facilities in the greater Parker and Douglas County area.

[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*

This project improves a critical and important link for Parker and eastern Douglas County with the rest of the Denver metro area. The proposed infrastructure investment will contribute to the region’s high quality of life by improving the multimodal transportation system for all users - benefiting residents, visitors, business and the area work force.

D. Project Leveraging

WEIGHT 15%

9. What percent of outside funding sources (non-DRCOG-allocated Subregional Share funding) does this project have?	50%	60%+ outside funding sources High 30-59%Medium 29% 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	0
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	11113	9548	20,661
2040	11397	11108	22,505

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 {#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>	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	11113	9548	20,661
2040	11397	11108	22,505

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.	15	20
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)	5	5
5. = Initial number of new bicycle trips from project (#3 – #4)	10	10
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)	3	3
7. = Number of SOV trips reduced per day (#5 - #6)	7	7
8. Enter the value of {#7 x 2 miles} . (= the VMT reduced per day) (Values other than 2 miles must be justified by sponsor)	14	14
9. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	13	13
10. If values would be distinctly greater for weekends, describe the magnitude of difference: It is anticipated that weekend use of the multi-use trail aspect of the project would be higher due to typical Parker area weekend use of the Parker area trail network that includes the Cherry Creek Trail system (consistently significantly higher weekend use). The project improvements link to the Baldwin Gulch Trail and ultimately the Cherry Creek Trail.		
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	11113	9548	20,661
2040	11397	11108	22,505

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	30	50
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)	15	25
5. = Number of new trips from project (#3 – #4)	15	25
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)	5	8

7. = Number of SOV trips reduced per day (#5 - #6)	10	17
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>	4	7
8. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	4	7
9. If values would be distinctly greater for weekends, describe the magnitude of difference: It is anticipated that weekend use of the multi-use trail aspect of the project would be higher due to typical Parker area weekend use of the Parker area trail network that includes the Cherry Creek Trail system (consistently significantly higher weekend use). The project improvements link to the Baldwin Gulch Trail and ultimately the Cherry Creek Trail.		
10. If different values other than the suggested are used, please explain here:		

D. Vulnerable Populations

	Vulnerable Populations	Population within 1 mile
Use Current Census Data	1. Persons over age 65	735
	2. Minority persons	791
	3. Low-Income households	269
	4. Linguistically-challenged persons	94
	5. Individuals with disabilities	No Data
	6. Households without a motor vehicle	67
	7. Children ages 6-17	1328
	8. Health service facilities served by project	10

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	58,300
2. 2040 ADT estimate	82,000
3. Current weekday vehicle hours of delay (VHD) (before project)	1,438

Travel Delay Calculations	Year of Opening
4. Enter calculated future weekday VHD (after project)	1,163
5. Enter value of {#3 - #4} = Reduced VHD	275
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>	385

<p>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></p>	9
<p>8. If values would be distinctly different for weekend days or special events, describe the magnitude of difference.</p>	
<p>9. If different values other than the suggested are used, please explain here:</p>	

F. Traffic Crash Reduction

<p>1. Provide the current number of crashes involving motor vehicles, bicyclists, and pedestrians (<i>most recent 5-year period of data</i>)</p>	<p>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>).</p>				
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Fatal crashes</td> <td style="width: 20%; text-align: center;">0</td> </tr> </table>			Fatal crashes	0	0
Fatal crashes			0		
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Serious Injury crashes</td> <td style="width: 20%; text-align: center;">0</td> </tr> </table>			Serious Injury crashes	0	0
Serious Injury crashes			0		
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Other Injury crashes</td> <td style="width: 20%; text-align: center;">57</td> </tr> </table>			Other Injury crashes	57	57
Other Injury crashes			57		
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Property Damage Only crashes</td> <td style="width: 20%; text-align: center;">419</td> </tr> </table>			Property Damage Only crashes	419	419
Property Damage Only crashes			419		
<p>2. Estimated reduction in crashes <u>applicable to the project scope</u> (<i>per the five-year period used above</i>)</p>					
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Fatal crashes reduced</td> <td style="width: 20%; text-align: center;">0</td> </tr> </table>	Fatal crashes reduced	0	0		
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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	
<p>1. Current roadway pavement condition</p>	Choose an item
<p>2. Describe current pavement issues and how the project will address them.</p>	
<p>3. Average Daily User Volume</p>	0
Bicycle/Pedestrian/Other Facility	
<p>4. Current bicycle/pedestrian/other facility condition</p>	Choose an item
<p>5. Describe current condition issues and how the project will address them.</p>	
<p>6. Average Daily User Volume</p>	0

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: