

Part 1**Base Information****1. Project Title****Dry Creek Road Eastbound Lane (I-25 to Inverness Drive East)****2. Project Start/End points or Geographic Area***Provide a map with submittal, as appropriate*

Dry Creek Road Eastbound from Northbound I-25 Off Ramp to Inverness Drive East

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

Arapahoe County

4. Project Contact Person, Title, Phone Number, and EmailBryan Weimer, Director, Public Works and Development, 720-874-6500, BWeimer@arapahoegov.com**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:*I-25/Dry Creek Road Interchange and Corridor Study, page 34:*
<http://www.arapahoegov.com/1427/I-25Dry-Creek-Rd-Interchange-Corridor-St>☐ 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.**

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

Grade Separation

- ☐ Roadway
- ☐ Railway
- ☐ Bicycle
- ☐ Pedestrian
- ☐ Roadway Pavement Reconstruction/Rehab
- ☐ Bridge Replace/Reconstruct/Rehab
- ☐ Study
- ☒ Design
- ☒ Transportation Technology Components
- ☐ Other:

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

Dry Creek Road is an important transportation corridor serving the growing business, commercial, and residential areas east and west of the I-25 corridor. Transportation improvements along the corridor are needed to address operations, safety, and local accessibility.

The Dry Creek Road Eastbound Lane (I-25 to Inverness Drive East) project will address the following Metro Vision TIP Focus Areas (detailed in Part 2C of this application):

- Improving mobility infrastructure and services for vulnerable populations – by reducing conflicts and congestion along eastbound Dry Creek Road and through corridor intersections and improving pedestrian/bicyclist access to/from the Dry Creek LRT Station;
- Increasing the reliability of the existing multimodal transportation network – with improved intersection efficiencies and improved weaving operations for drivers and improved access for pedestrians/bicyclists to the Dry Creek LRT Station; and
- Improving transportation safety and security – by reducing congestion-related and lane-changing vehicular crashes at the Dry Creek intersections east of I-25 and reducing crashes related to U-turns west of I-25.

Traffic along Dry Creek Road at the I-25 interchange is expected to increase significantly, with an almost 40% increase to over 65,000 vehicles per day immediately east of the interchange by 2040. Traffic along the cross streets of the Dry Creek corridor also will increase substantially as development occurs on undeveloped lands as well as redevelopment to more intensive uses within the area surrounding the interchange. Peak hour traffic operations are congested on the approaches to I-25 with low average travel speeds, poor levels of service, and long vehicle queues in the peak commuting directions of travel.

Overall lane utilization along Dry Creek Road between Clinton Street/Inverness Drive West and the interchange ramps is unbalanced due to the large volume of turning traffic on and off the ramps and the closely-spaced major intersections serving development immediately adjacent to the interchange.

Substantial eastbound traffic weaving maneuvers occur in the short (just under 250-foot) segment of Dry Creek Road between the northbound I-25 off-ramp and the Clinton Street/Inverness Drive West intersection. The eastbound lane drop at Inverness Drive West contributes to abrupt lane changes and weaving for drivers continuing east on Dry Creek Road.

Overall access to the Dry Creek LRT Station is confusing and limited. Vehicular ingress is limited to the right-in-only driveway from eastbound Dry Creek Road and egress is limited to a single exit onto Panorama Circle. Pedestrian and bicycle access is limited due to inconsistent or lack of facilities.

On the west side of I-25, westbound Dry Creek Road drivers destined for the Dry Creek LRT Station currently must make a U-turn movement at the Chester Street signal to access the right-in-only driveway from eastbound Dry Creek Road. This westbound U-turning traffic often conflicts with the heavy northbound Chester Street right turning movement, creating a relatively short (under 300-foot) multi-lane weave section.

The I-25/Dry Creek Road interchange area is increasingly traveled by pedestrians and bicyclists as mixed-use and transit-oriented development intensifies surrounding the Dry Creek LRT Station. Sidewalk widths are inconsistent, bicycle lanes or other facilities are limited, and wide arterial intersections are a discouraging environment and an overall barrier for pedestrian and bicycle activity.

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

The *I-25/Dry Creek Road Interchange and Corridor Study*, completed in 2016, identifies the project recommendations. This project will move the recommendations forward through environmental clearance, preliminary engineering, final design, and construction. Specific elements include:

- Extending the eastbound Dry Creek Road through/right lane from the Northbound I-25 Off Ramp to connect to the right turn lane at the Inverness Drive East intersection to reduce conflicting movements and improve weaving operations along eastbound Dry Creek Road.
- Sidewalk improvements along the south side of Dry Creek Road from the Southbound I-25 Ramps intersection to the Inverness Drive East intersection, continuing the 10-foot-wide multi-use path throughout the corridor.
- Signage and pavement markings on the southbound Clinton Street approach to Dry Creek Road to have southbound drivers destined for the Southbound I-25 On Ramp make a right turn from the through/right turn lane, while traffic destined for the Northbound I-25 On Ramp and westbound Dry Creek Road use the right turn lane.
- Construction of a new left turn lane providing direct access to the Dry Creek LRT Station for westbound Dry Creek Road drivers, eliminating the need to make a U-turn at the Chester Street signal to access the LRT station from the east.

10. What is the status of the proposed project?

The *I-25/Dry Creek Road Interchange and Corridor Study*, completed in 2016, analyzed alternatives for improving traffic operations, safety, and multimodal accessibility at and surrounding the I-25/Dry Creek interchange. The study recommended the improvements to be included in the project. This project is the next step in implementation of improvements at the interchange.

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.

It is our understanding that reducing the amount of federal funding is considered at the end of the evaluation and recommendation process. However, if this were to occur there are several options that the funding partners would consider to move the project forward in some fashion. This could include reallocation of partnership funding for the various partners, value engineering, and potential modification of the scope but still meet the goals of the project.

A. Project Financial Information and Funding Request

1. Total Project Cost		\$4,520,000
2. Total amount of DRCOG Subregional Share Funding Request	\$2,665,000	59% 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
Arapahoe County	\$371,000	8%
Denver South TMA/SPIMD	\$742,000	17%
Inverness Metropolitan District	\$371,000	8%
City of Centennial	\$371,000	8%
	\$	
	\$	
Total amount of funding provided by other funding partners (private, local, state, Regional, or federal)	\$1,855,000	

Funding Breakdown (year by year)*		<i>*The proposed funding plan is not guaranteed if the project is selected for funding. While DRCOG will do everything it can to accommodate the applicants' request, final funding will be assigned at DRCOG's discretion within fiscal constraint. Funding amounts must be provided in year of expenditure dollars using an inflation factor of 3% per year from 2019.</i>			
	FY 2020	FY 2021	FY 2022	FY 2023	Total
Federal Funds	\$	\$1,000,000	\$1,665,000	\$	\$2,665,000
State Funds	\$	\$	\$	\$	\$0
Local Funds	\$927,500	\$927,500	\$	\$	\$1,855,000
Total Funding	\$927,500	\$1,927,500	\$1,665,000	\$0	\$4,520,000
4. Phase to be Initiated Choose from Design, ENV, ROW, CON, Study, Service, Equip. Purchase, Other	Design, ENV	Design, CON	CON	Choose an item	

- 5. By checking this box**, the applicant's Chief Elected Official (Mayor or County Commission Chair) or City/County Manager for local governments or Agency Director or equivalent for others, has certified it allows this project request to be submitted for DRCOG-allocated funding and will follow all DRCOG policies and state and federal regulations when completing this project, if funded.



Part 2 Evaluation Criteria, Questions, and Scoring

A. 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?

Dry Creek Road is an important transportation corridor serving the growing business, commercial, and residential areas east and west of the I-25 corridor. Transportation improvements along the corridor are needed to address operations, safety, and local accessibility. Efficient access to/from I-25 is critical to the economic activity centers and residential areas surrounding the freeway in Arapahoe County and the City of Centennial. The I-25/Dry Creek Road interchange is an important connection to the regional transit links served by the Dry Creek LRT Station.

Safe and effective access to I-25 supports economic growth for the surrounding business community and quality of life for area residents. Traffic along Dry Creek Road at the I-25 interchange is expected to increase significantly, with an almost 40% increase to over 65,000 vehicles per day immediately east of the interchange by 2040.

Traffic operations are congested along eastbound Dry Creek Road, particularly during the AM peak periods, with low average travel speeds, poor levels of service, and long vehicle queues approaching the signalized intersections east of I-25. INRIX speed data for the Dry Creek Road corridor east of I-25 shows that over the last four years speeds in both directions have fallen dramatically with average speeds below 20 mph spreading beyond the peak hours and occurring throughout the day.

As mixed-use and transit-oriented development increases along Dry Creek Road, pedestrian and bicyclist access and travel paths are increasingly important to offer multimodal mobility opportunities. Multi-use path improvements will enhance the health and vitality for area residents and businesses.

Improving the direct access to the Dry Creek LRT Station for drivers, pedestrians, and bicyclists will also encourage more regional transit travel.

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

Yes, this project will reduce delay and improve mobility for the estimated 95,000 travelers through the I-25/Dry Creek Road interchange, to and from Arapahoe County, City of Centennial, City of Greenwood Village, City of Lone Tree, Douglas County, City and County of Denver, and beyond.

Reducing congestion and weaving movements along Dry Creek Road leading to and from I-25 will support economic growth for the surrounding municipalities, including Arapahoe County, City of Centennial, and City of Greenwood Village, and improve the quality of life for area residents.

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

Yes, by improving operations along Dry Creek Road east and west of I-25 the project will improve the connection for commuters living in the area surrounding the interchange destined for the employment centers in Downtown Denver and along I-25 in the south Denver Metropolitan area and Douglas County. Maintaining safe and efficient access to and from I-25 at this arterial serving the Denver Technology Center will improve access between the City and County of Denver, Arapahoe County, and Douglas County subregions.

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

Extending the eastbound Dry Creek Road through/right lane from the Northbound I-25 Off Ramp to connect to the right turn lane at Inverness Drive East will reduce conflicting movements and improve weaving operations along eastbound Dry Creek Road, reducing congestion and improving vehicular safety.

Widening the sidewalk along the south side of Dry Creek Road between the Southbound I-25 Ramps and Inverness Drive East intersections will improve the multimodal connections and mobility opportunities, as well as encourage active transportation connections to the Dry Creek LRT Station.

Signage and pavement markings channelizing the right turn movements from Clinton Street to the Northbound and Southbound I-25 On Ramps will improve intersection operations and reduce weaving along westbound Dry Creek Road approaching the interchange.

The new left turn lane providing direct access to the Dry Creek Road LRT Station from westbound Dry Creek Road will eliminate the need for drivers to make a U-turn at the Chester Street signal to access the LRT station. This will improve intersection operations and reduce conflict points and potential crashes at the traffic signal.

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?

This project will reduce delay and improve mobility for the estimated 95,000 travelers through the I-25/Dry Creek Road interchange, supporting economic growth for the surrounding business community and quality of life for area residents. The operational improvements at the Dry Creek Road intersections and the resulting reduction in congestion will improve the attractiveness for the adjacent economic activity centers and liveability of the neighborhoods and residential developments accessing Dry Creek Road.

Improving access to the Dry Creek LRT Station will encourage more regional transit travel. According to the National Association of City Transportation Officials (NACTO), enhanced multimodal facilities can result in increased property values.

Improving the direct access to the Dry Creek LRT Station for drivers, pedestrians, and bicyclists will also encourage more regional transit travel. Based on estimates from Part 3 of this application, the project will reduce VMT by about 2,800 miles per day by 2040. The project will save people auto fuel and maintenance costs, reduce air pollution, and create positive health impacts by encouraging people to use alternative transportation.

The reduction in congestion with the project will reduce crashes at intersections along Dry Creek Road. The project is expected to reduce crashes by about four crashes/year.

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

The project will improve pedestrian and bicyclist sidewalk/multi-use path connections to the Dry Creek LRT Station. The new left turn lane providing direct access to the station from westbound Dry Creek Road drivers will eliminate the need for drivers to make a U-turn at the Chester Street signal to access the LRT station. The improved transit accessibility will also enhance the overall multimodal connections beyond the Dry Creek LRT Station, encouraging more people to utilize transit for commuting and other daily trips.

Reduced congestion along Dry Creek Road will improve travel time reliability for the RTD Dry Creek and Inverness North FlexRide services, benefitting the over 1,200 weekday transit boardings within the project area.

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

Arapahoe County collaborated with CDOT, City of Centennial, and the Denver South TMA on the *I-25/Dry Creek Road Interchange and Corridor Study*, completed in 2016, and continues to work with agency stakeholders to prepare for the implementation of improvements recommended by the study.

Arapahoe County will fund \$371,000 of the project and Inverness Metropolitan District and the City of Centennial will each match Arapahoe County's contribution of \$371,000. The Denver South TMA and SPIMD will match the contribution of Arapahoe County and City of Centennial with \$742,000.

B. DRCOG Board-approved Metro Vision TIP Focus Areas

WEIGHT

25%

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).

Large populations of vulnerable individuals reside within one mile of the project. Currently living within one mile of the project area are:

- 3,131 adults over the age of 65
- 6,017 minority persons
- 702 households living in poverty
- 467 linguistically-challenged persons
- 685 persons with a disability
- 284 households without access to a vehicle

Vulnerable populations are more likely to rely on transit services for their daily mobility needs. Reduced congestion along Dry Creek Road will improve travel time reliability for the RTD Dry Creek and Inverness North FlexRide services, in addition to the overall improved multimodal direct access to the Dry Creek LRT Station, benefitting the vulnerable populations relying on transit access within the project area.

The congestion reduction along Dry Creek Road and improved travel time reliability for the area RTD FlexRide services will also improve access to the 50 CDPHE-regulated health service facilities within one mile of the project area.

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

There is a population of more than 21,600 people and more than 55,000 employees within one mile of the project area. The project will increase the reliability of the existing area transportation network with improved intersection efficiencies and reduced delay for drivers along Dry Creek Road and transit users accessing the Dry Creek LRT Station. Dry Creek Road currently carries about 47,000 vehicles per day east of I-25. The volumes are forecasted to increase almost 40% to over 65,000 vehicles per day immediately east of the interchange by 2040.

Intersection operational analyses shows a reduction of 406 person hours of travel delay per day along Dry Creek Road with the project. The reduced travel delays will improve operations for through traffic along Dry Creek Road, improving travel time reliability for the RTD Dry Creek and Inverness North FlexRide services, in addition to providing improved multimodal direct access to the Dry Creek LRT Station.

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

There were 94 crashes at the project area intersections along Dry Creek Road in the last five years, including 23 injury crashes. Comparing the crash types at the intersections to the statewide averages, the intersections have crash patterns that are above the predicted norm for similar intersections, including rear end, approach turn, and sideswipe same direction crashes.

Reducing the congestion at the project intersections and improving weaving operations for right turns along eastbound Dry Creek Road will reduce rear end, approach turn, and sideswipe same direction crashes. The project is expected to reduce crashes at the project intersections by about four crashes/year.

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

The project is within the I-25 Corridor urban center. The project will also provide improved access to the urban centers of Lincoln Station TOD, Ridge Gate West Village, and Ridge Gate City Center south of the project area, plus access to the Denver Technology Center and Belleview Station urban centers north of the project area.

With reduced congestion, the project will improve regional travel connections to the urban centers to focus and facilitate planned growth in identified areas along I-25.

[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

The project will improve pedestrian and bicyclist sidewalk/multi-use path connections to the Dry Creek LRT Station. The new left turn lane providing direct access to the station from westbound Dry Creek Road will eliminate the need for drivers to make a U-turn at the Chester Street signal to access the LRT station. The improved transit accessibility will also enhance the overall multimodal connections beyond the Dry Creek LRT Station, encouraging more people to utilize transit to connect to key destinations throughout the Denver Metropolitan area.

Reduced congestion along Dry Creek Road will also improve travel time reliability for the RTD Dry Creek and Inverness North FlexRide services, benefitting the over 1,200 weekday transit boardings within the project area. The improved LRT access will enhance the connections between the emerging and existing urban centers along the I-25 LRT corridor and beyond.

[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

Safe and effective access to I-25 and the Dry Creek LRT Station supports economic growth for the surrounding business community and quality of life for area residents. Reduced congestion along Dry Creek Road will improve travel time reliability for the RTD Dry Creek and Inverness North FlexRide services, in addition to general vehicular access to the Dry Creek LRT Station, benefitting the vulnerable populations relying on transit access within the project area.

[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*

The project will reduce congestion and queuing along Dry Creek Road and at the I-25/Dry Creek Road interchange, which will incrementally help improve all aspects of air quality.

Improving the multimodal facilities and providing new connections within the project area will make the use of the sidewalks/trails/paths and Dry Creek LRT Station more attractive as alternative modes of transportation. Encouraging mode changes will reduce the vehicular volumes, which will also improve air quality.

Based on estimates from Part 3 of this application, the project will reduce pounds of daily GHG emissions by over 2,700 pounds per day on an average weekday in 2040.

[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*

Improved pedestrian/bicyclist accessibility and mobility within the project area will enhance multimodal transportation improvements beyond the Dry Creek Road project corridor. For example, the improved multi-use path will provide increased active transportation accessibility to Inverness Golf Course.

The multi-use path improvements are part of Arapahoe County's *Bicycle and Pedestrian Master Plan* completed in 2017.

[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 improved sidewalk/multi-use path facilities along Dry Creek Road will encourage healthy behavior for residents and employees in the mixed-use developments, employment centers, and neighborhoods surrounding the I-25/Dry Creek Road interchange by providing improved walking and biking connections. The sidewalk/multi-use path connections to the Dry Creek LRT Station create an alternative transportation opportunity to recreate, travel to work, or connect to other regional economic centers.

Reduced congestion along Dry Creek Road will improve travel time reliability for the RTD Dry Creek and Inverness North FlexRide services, in addition to overall multimodal direct access to the Dry Creek LRT Station, benefitting the over 1,200 weekday transit boardings within the project area. The improved transit accessibility will also enhance the overall multimodal connections beyond the Dry Creek LRT Station, encouraging more people to utilize transit for commuting and other daily trips.

The congestion reduction along Dry Creek Road and improved travel time reliability for the area RTD FlexRide services will also improve access to the 50 CDPHE-regulated health service facilities within one mile of the project area.

[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

By providing improved opportunities for people to walk, bike, or take transit, the project will help address mobility barriers within the project area by enhancing the affordable and accessible transportation options for the almost 300 households within a mile of the project that do not own a car and/or are unable to drive.

The project will also improve accessibility for people living in the surrounding area to medical facilities and employment centers by improving the connection between the residential areas surrounding the interchange and regional activity centers, employment centers, and medical facilities along the I-25 corridor.

[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

Enhanced multimodal facilities and transit connections can result in higher retail sales and increased property values.

The project will encourage additional patronage to nearby businesses by reducing the frequent congestion within the project area. The overall multimodal mobility improvements will support economic growth for the surrounding business community and quality of life for area residents. The operational improvements at the Dry Creek Road intersections and the resulting reduction in congestion will improve the attractiveness for the adjacent economic activity centers and liveability of the neighborhoods and residential developments accessing Dry Creek Road.

D. Project Leveraging		WEIGHT	20%
9. What percent of outside funding sources (non-DRCOG-allocated Subregional Share funding) does this project have?	41%	41%+ outside funding sources High 31-40%Medium 30% and belowLow	

Part 3**Project Data Worksheet – Calculations and Estimates***(Complete all subsections applicable to the project)***A. Transit Use**

1. Current ridership weekday boardings	1,264
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	21,602	55,031	76,633
2040	24,267	68,586	92,853

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	632
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	158
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	158
6. = Number of SOV one-way trips reduced per day (#3 – #4 – #5)	0	316
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	2,844
8. = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)	0	2,702
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	115 bicyclists along Dry Creek Rd
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	21,602	55,031	76,633
2040	24,267	68,586	92,853

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	58
4. Enter number of the bicycle trips (in #3 above) that will be diverting from a different bicycling route. <i>(Example: {#3 X 50%} or other percent, if justified)</i>	0	29
5. = Initial number of new bicycle trips from project (#3 – #4)	0	29

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)	0	9
7. = Number of SOV trips reduced per day (#5 - #6)	0	20
8. Enter the value of {#7 x 2 miles} . (= the VMT reduced per day) (Values other than 2 miles must be justified by sponsor)	0	40
9. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	0	38
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)	475 pedestrians along Dry Creek Rd
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	21,602	55,031	76,633
2040	24,267	68,586	92,853

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	238
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)	0	119
5. = Number of new trips from project (#3 – #4)	0	119
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)	0	36
7. = Number of SOV trips reduced per day (#5 - #6)	0	83
12. Enter the value of {#7 x .4 miles} . (= the VMT reduced per day) (Values other than .4 miles must be justified by sponsor)	0	33
8. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	0	32
9. If values would be distinctly greater for weekends, describe the magnitude of difference:		
10. If different values other than the suggested are used, please explain here:		

D. Vulnerable Populations

Use Current Census Data	Vulnerable Populations	Population within 1 mile
	1. Persons over age 65	3,131
	2. Minority persons	6,017
	3. Low-Income households	702
	4. Linguistically-challenged persons	467
	5. Individuals with disabilities	685
	6. Households without a motor vehicle	284
	7. Children ages 6-17	4,553
	8. Health service facilities served by project	50

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	Dry Creek Rd east of I-25 = 47,300 vpd Dry Creek Rd west of I-25 = 30,600 vpd
2. 2040 ADT estimate	Dry Creek Rd east of I-25 = 65,300 vpd Dry Creek Rd west of I-25 = 52,700 vpd
3. Current weekday vehicle hours of delay (VHD) (before project)	Total project area = 1,686 VHD

Travel Delay Calculations	Year of Opening
4. Enter calculated future weekday VHD (after project)	Total project area = 1,396 VHD
5. Enter value of {#3 - #4} = Reduced VHD	290 VHD
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>	406 PHD
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>	31 sec/veh (24 veh-hr)
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	0	
Serious Injury crashes	-	
Other Injury crashes	23	
Property Damage Only crashes	71	
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	-	
Other Injury crashes reduced	6	
Property Damage Only crashes reduced	11	

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	Dry Creek Rd east of I-25 = 47,300 vpd

Bicycle/Pedestrian/Other Facility

4. Current bicycle/pedestrian/other facility condition	N/A
5. Describe current condition issues and how the project will address them.	
6. Average Daily User Volume	590 pedestrians and bicyclists along Dry Creek Rd

H. Bridge Improvements

1. Current bridge structural condition from CDOT N/A	
2. Describe current condition issues and how the project will address them. N/A	
3. Other functional obsolescence issues to be addressed by project N/A	
4. Average Daily User Volume over bridge	N/A

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? <i>If yes, describe scale of expected increase</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. Negative impact on vulnerable populations	
3. Other:	

Part 4

Special Considerations

Complete all answers with a YES/NO/UNSURE, and an explanation as warranted. Part 4 is not scored but will assist in project recommendation.

1. Is the project a construction- or implementable- ready project?

Yes, this project is implementable-ready. This project is a next step in implementation of improvements recommended in the *I-25/Dry Creek Road Interchange and Corridor Study*, completed in 2016. The study analyzed alternatives and recommended these project improvements for intersections along Dry Creek Road.

2. Are there challenges with the project (right-of-way, environmental, utilities, etc.)?

- a. If yes, explain the challenge and how agency plan to address.

Yes, there are project challenges, but they are typical for roadway and intersection reconstruction in constrained urban areas, related to elements like utilities and drainage. The challenges were identified and discussed with the area stakeholders during the *I-25/Dry Creek Road Interchange and Corridor Study*.

3. Are there other environmental or controversial issues associated with the project?

No. The recommendations from the previous study were evaluated and conceptually designed to minimize environmental impacts and controversial issues while meeting the project goals.

4. Does the project or program benefit more than just the sponsoring agency and considered subregionally significant/transformational?

Yes, this project will reduce delay and improve mobility for travelers along Dry Creek Road and through the I-25/Dry Creek Road interchange, to and from Arapahoe County, City of Centennial, City of Greenwood Village, City of Lone Tree, Douglas County, City and County of Denver, and beyond.

Dry Creek Road is an important transportation corridor serving the growing business, commercial, and residential areas east and west of the I-25 corridor. Transportation improvements along the corridor are needed to address operations, safety, and local accessibility. Efficient access to I-25 is critical to the economic activity centers and residential areas surrounding the freeway in Arapahoe County and the City of Centennial. Multimodal access is important to increase efficient utilization of the regional transit links served by the Dry Creek LRT Station.

The I-25/Dry Creek Road interchange serves as an alternate route for congestion relief at the adjacent I-25 interchanges at Arapahoe Road to the north and County Line Road to the south. Maintaining redundant capacity at interchanges in the Denver Technological Center is essential for maintaining vehicular and multimodal mobility along I-25 in the southern Denver Metropolitan area.

The Dry Creek Road corridor at the I-25 interchange experiences recurring peak traffic patterns of commuters traveling to and from adjacent business parks, and traveling to and from the residential neighborhoods west of I-25. Safe and effective access to and across I-25 supports economic growth for the surrounding business community and quality of life for area residents. Therefore, it is considered subregionally significant and transformational.

5. Does the agency have capacity and expertise to manage a federal project?

- a. Explain experience, approach, etc.

Yes, Arapahoe County Transportation staff have broad experience managing projects with federal funding. The County has a long history of successfully managing projects through the federal funding requirements, operational complexities, and stakeholder involvement needed.

6. Is the project a next logical phase of a project funded in previous TIP cycles?

The I-25/Dry Creek Road Interchange and Corridor Study, completed in 2016, analyzed alternatives for improving traffic operations, safety, and multimodal accessibility along Dry Creek Road. The study recommended the improvements to be included in the project. This project is the next step in implementation of improvements along Dry Creek Road.

7. Of the partnerships described in Section A, Question 7, are the partnerships providing funding?

- a. Describe the partnerships and funding of such.

Arapahoe County collaborated with CDOT, City of Centennial, Inverness Metropolitan District, and the Denver South TMA on the I-25/Dry Creek Road Interchange and Corridor Study, completed in 2016, and continues to work with agency stakeholders to prepare for the implementation of improvements recommended by the study.

Arapahoe County will fund \$371,000 of the project and Inverness Metropolitan District and the City of Centennial will each match Arapahoe County's contribution of \$371,000. The Denver South TMA and SPIMD will match the contribution of Arapahoe County and City of Centennial with \$742,000.

8. Are there any other "special considerations" the committee should consider in evaluating the application?

Although not a requested funding partner, RTD was actively involved on the Technical Advisory Committee for the I-25/Dry Creek Road Interchange and Corridor Study and endorsed the study recommendations.