Part 1 Base Information

1. Project Title — **U.S. 85/120th Avenue Interchange - ROW Acquisiton Activities**

2. Project *Start/End* points or Geographic Area
Provide a map with submittal, as appropriate — U.S. 85 from 112th Ave to 124th Avenue and 120th Avenue from Brighton Road to Peoria Street. See map in Attachment 1.1.

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

4. Project Contact Person, Title, Phone Number, and Email — Joe Wilson, Director of Public Works, 303-289-8156, jwilson@c3gov.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 FCRTP)

☒ Local plan:
- Imagine Adams County Transportation Plan, 2012
- Riverdale Regional Park Master Plan, 2018
- C3 Vision Transportation Plan, 2010

☒ Other(s):
- U.S. 85 Planning & Environmental Linkage Study
- U.S. 85 Environmental Assessment, Interstate 76 to 124th Avenue
- CDOT 10-Year Development Program
- 2040 Colorado Statewide Transportation Plan, Statewide Major Corridor

See Attachment 1.2 for links to planning documents and referenced page numbers

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

Grade Separation
- ☒ Roadway
- ☒ Railway
- ☐ Bicycle
- ☐ Pedestrian

- ☒ Roadway Pavement Reconstruction/Rehab
- ☐ Bridge Replace/Reconstruct/Rehab
- ☐ Study
- ☐ Design
- ☐ Transportation Technology Components
- ☒ Other: Right of Way Acquisition

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

The project will mitigate ongoing safety and operational concerns along the U.S. 85 corridor by preserving right of way for a future grade-separated interchange and constructing operational improvements for the U.S. 85/120th Avenue intersection, improving regional mobility.

9. Define the **scope** and **specific elements** of the project.
The proposed interchange design is a six-lane diverging diamond, with two bridge structures (over U.S. 85 and the Union Pacific Railroad). Ramps from U.S. 85 will be constructed to 120th Avenue, with operational improvements on adjacent arterial roads to improve interchange operations. This phase of the project will consist of the following scope and specific elements:

- Right-of-way acquisition activities for future interchange construction.

10. What is the status of the proposed project?

CDOT is currently completing an Environmental Assessment and 30% design for the interchange project. A draft document is anticipated in early 2019 and the Record of Decision to be issued in mid-2019.

11. Would a smaller DRCOG-allocated funding amount than requested be acceptable, while maintaining the original intent of the project? ☐ Yes ☒ No

If yes, define smaller meaningful limits, size, service level, phases, or scopes, along with the cost for each.

A. Project Financial Information and Funding Request

1. Total Project Cost		**$12,600,000**
2. Total amount of DRCOG Subregional Share Funding Request	**$6,300,000**	**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**
Adams County	$2,300,000	18%
City of Commerce City	$3,000,000	24%
CDOT	$1,000,000	8%
	$	0%
	$	0%
See Attachment 1.3 for letters of funding commitment and support	$	0%
Total amount of funding provided by other funding partners *(private, local, state, Regional, or federal)*	**$6,300,000**	

Funding Breakdown (year by year)*

**The proposed funding plan is not guaranteed if the project is selected for funding. While DRCOG will do everything it can to accommodate the applicants' request, final funding will be assigned at DRCOG's discretion within fiscal constraint. Funding amounts must be provided in year of expenditure dollars using an inflation factor of 3% per year from 2019.*

	FY 2020	FY 2021	FY 2022	FY 2023	Total
Federal Funds	$	$4,200,000	$2,100,000	$	**$6,300,000**
State Funds	$	$	$	$	**$0**
Local Funds	$	$4,200,000	$2,100,000	$	**$6,300,000**
Total Funding	$0	$8,400,000	$4,200,000	$0	**$12,600,000**
4. Phase to be Initiated *Choose from Design, ENV, ROW, CON, Study, Service, Equip. Purchase, Other*	Choose an item	ROW	ROW	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?
   For decades, U.S. 85 has served as a National Security Route and conduit for agricultural products and natural resources, while 120th Avenue is a major east/west regional arterial, connecting U.S. 36 to E-470. Over time, these vital connections have become congested and overburdened. The corridor is estimated to carry 30 to 40 million tons of freight per year and is the transportation backbone, serving numerous industries that rely on U.S. 85 and the adjacent rail line as its lifeblood to deliver goods and materials.

   While the proximity of the railroad is an economic benefit, it also creates major safety issues. Intersections along the U.S. 85 corridor, especifically the U.S. 85 and 120th Avenue intersection, provide many conflict points. Slow moving and parked trains often cause major delays, threaten emergency response, hinder regional mobility, and impede access to various amenities such as schools, businesses, and civic resources.

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

   Yes. The City of Brighton and the City of Commerce City share a jurisdictional boundary along 120th Avenue. Both agencies identify 120th Avenue as a major arterial with complementary mixed-use and commercial development. Slow moving/stopped trains at the intersection routinely impact residents and businesses in both municipalities, further burdening local arterials with increased congestion. Moreover, public safety response is impacted as local fire and police departments are unable to rapidly respond to incidents on the opposite side of U.S. 85. The project will enable future construction of a grade-separated interchange that can address increased capacity needed for planned growth along the 120th Avenue corridor, eliminate train/vehicle conflicts, and construct operational improvements in the interim that will enhance the intersection's operation. The City of Thornton also benefits from improved access to existing and new employment/commercial centers, with direct access to the freight corridor.

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

   A grade-separated crossing at U.S. 85 and 120th Avenue benefits Weld County by increasing the reliability of freight travel times and farm-to-market commodities.

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

   Enabling construction of a new, grade-separated interchange will allow for more efficient movement of trucks, trains, and the traveling public through the most congested portion of the U.S. 85 corridor. When coupled with immediate arterial operational improvements along 120th Avenue and U.S. 85/112th Avenue, regional mobility and safety will improve for more than 12,500 individuals who live and work 1-mile adjacent to the area, a number that is anticipated to grow by 34 percent by 2040 (Part 4).

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?
   A grade-separated interchange provides redundancy to the east/west regional arterial network, providing free-flow access without train delays from U.S. 36 to E-470. Moreover, it reduces the number of at-grade intersections along U.S. 85, which improves travel time reliability for anticipated freight demand along the corridor. During the AM Peak hour, for example, travel times are expected to decrease by over 35 percent for

U.S. 85 northbound and almost 20 percent for U.S. 85 southbound in 2040. During the PM Peak hour, travel times are projected to decrease by over 45 percent for U.S. 85 northbound and almost 40 percent for U.S. 85 southbound (Part 4).

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

   The grade-separated interchange is being designed as a six-lane diverging diamond (similar to McCaslin Boulevard/U.S. 36), complete with pedestrian movements and accommodating existing bus stops along 120th Avenue. The project would provide safe, grade-separated connections for adults and students alike to the regional trail network, Stampede Park, Adams County Regional Park, the new Second Creek Open Space, Prairie View High School, Prairie View Middle School, Bison Ridge Recreation Center, and Buffalo Run Golf Course.

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

   This project has been a top priority for the Adams County region and Commerce City in particular, given the number of train/vehicle conflicts that occur within the community. Local agencies (Adams County, Brighton, Commerce City, Thornton) have consistently partnered not only with CDOT but also Weld County and their municipalities to complete planning, environmental, and design activities as well as seek funding for this critical corridor. The collective agencies joined together to submit federal BUILD grants in 2017 and 2018; this regional funding request is consistent with past efforts to advance the project. Letters of financial commitment and support are included in Attachment 1.3.

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).**
   There are four environmental justice traffic analysis zones within the project area, three of which are "minority concentrated" while one is "low-income and minority concentrated." Based on block group data from the 2016 Census Bureau, most block groups had similar or lower minority populations when compared to greater Adams County (See Attachment 1.4, Part 3).

   Providing reasonable travel options such as reliable travel times, convenient public transportation, and safe pedestrian facilities to individuals who do not own vehicles is a critical factor to ensure vulnerable populations have access to jobs and a higher quality of life. Proposed operational arterial roadway improvements will further benefit the mobility of vulnerable populations. Additionally, crossing U.S. 85 today is difficult given the high travel speeds and traffic volumes along the corridor.

   A grade-separated interchange will allow safer pedestrian crossings (adults and students) over US 85 than at present. For example, this project will help connect residents to the Riverdale Regional Park, an 1,100 acre park with two 18-hole golf courses, a disc golf course, picnic areas, and the county fairgrounds at the core of the site. The Park will move its primary entrance to 120th Avenue in 2019, recognizing the road's importance as a regional connection to US 85, I-25, and I-76. Future uses planned at Riverdale Regional Park include expanded recreational opportunities, expansive water resources, and regionally significant cultural and educational facilities. As a result, it is anticipated that corridor demands for biking and walking trips east-west across the U.S. 85 corridor and access to transit along US 85 are expected to increase as a result (See Attachment 1.2).

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

Existing daily traffic volumes along U.S. 85 range from approximately 5,400 vehicles per day (vpd) in the northern end of the study area between Pierce and Nunn to 33,000 vpd on the south end of the study area through Commerce City. Daily traffic volumes north of Brighton through Greeley range from approximately 21,000 to 29,000 vpd, In addition, most of the corridor is experiencing substantial daily truck volumes of greater than 2,000 trucks per day. Because of varying land uses and community needs, U.S. 85 traffic impacts mobility along the entire study corridor. In Adams County, many substandard cross-streets/intersections like 120th Avenue impact the ability of the corridor to provide the travel speeds and travel time reliability intended for the high functional classification indicative of that stretch of U.S. 85 (See Attachment 1.5).

Congestion caused by intersections hinders regional mobility along U.S. 85 and 120th Avenue is among the worst performing intersections. Based on recent travel time data, drivers experience up to eight minutes of congestion-related daily delay through Commerce City and Brighton between 104th Avenue and 168th Avenue. Because of the many intersections through these congested areas, U.S. 85 does not function as intended. The high truck volumes and many access points along the corridor create situations where slow-moving truck traffic negatively affects desired speeds of passenger cars.

Due to forecasted household and employment growth along the U.S. 85 corridor and the surrounding area, traffic volumes through the corridor are projected to increase. During the AM peak hour in 2040, volumes are expected to increase by approximately 50 to 90 percent along U.S. 85 compared to the 2017 existing condition. During the PM peak hour, travel times are projected to increase by almost 20 percent for northbound U.S. 85 and almost 30 percent for southbound U.S. 85 in 2040. By 2035, 21 signalized intersections (including 120th Avenue) will operate at Level of Service E or F. The traffic volume within the study area impacts regional arterials that provide east-west connectivity through the area and intersect with U.S. 85 (See Attachment 1.5).

As traffic volumes on these regional facilities and US 85 continue to increase, there will be additional impacts to intersection operations and overall corridor mobility, making access onto and across the highway difficult. Maximum queues are projected to worsen for almost all approaches in all peak periods in 2040. Due to the expected increase in east-west traffic volumes within the network, many approaches to U.S. 85 could experience significant increases in queue length. Specifically, travel times will increase, and corridor travel speeds will be reduced to half the posted speed limit. A grade-separated interchange at U.S. 85 and 120th Avenue can improve highway and arterial movements to a Level of Service B, reducing queue lengths and travel times (See Attachment 1.5).

3. Describe how the project will **improve transportation safety and security.**
Grade-separating 120th Avenue will help address safety of the U.S. 85 corridor. The crash history for the most recent five-year period reveals that there were 591 total reported crashes in the study corridor. Most crashes (about 76 percent) were property damage only crashes that occurred during peak hours, followed by injury crashes (about 24 percent) and fatalities (less than 1 percent) Most fatal crashes involved overturning, followed by crashes involving fixed objects and approach turns. The number of crashes along intersections such as 120th Avenue was higher than non-intersections.

Because most U.S. 85 cross-street intersections cross the railroad at-grade, when routine train blockages exceed 10 minutes, vehicles attempting to enter, exit, or simply cross U.S. 85 queue significantly. This difficulty is further compounded by a higher than average (30 percent) truck modal split. As a result, intersections such as 120th

Avenue are not adequate to safely accommodate the significant queues that form when a train is present between U.S. 85 and the Union Pacific Railroad, as well as along the highway. One large truck can overwhelm the available distance between them, resulting in the truck trailer overhanging the railroad tracks while waiting to turn on to (or cross) U.S. 85. Because of the difficulty entering or crossing U.S. 85 during peak hours of traffic, the rear of a truck may sit on the tracks for a long period, or it may be forced to encroach into traffic on U.S. 85 (See Attachment 1.6).

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

WEIGHT **20%**

*Provide **qualitative and quantitative** responses (derived from Part 3 of the application) to the following items on how the proposed project contributes to Transportation-focused Objectives (in bold) in the adopted Metro Vision plan. Refer to the expanded Metro Vision Objective by clicking on links.*

MV objective 2 **Contain urban development in locations designated for urban growth and services.**

1. Will this project help focus and facilitate future growth in locations where urban-level infrastructure already exists or areas where plans for infrastructure and service expansion are in place? ☒ Yes ☐ No

Describe, *including supporting quantitative analysis*
The area in and around the U.S. 85 corridor is forecast for substantial growth. By 2035, the North Front Range Metropolitan Planning Organization and the Denver Regional Council of Governments project an additional

45,700 households and 49,300 jobs within the transportation analysis zones intersected by a 2-mile buffer of the corridor. This growth represents a 77 percent increase of households and a 73 percent increase of employment. Within a mile of the U.S. 85/120th Avenue intersection, growth is expected to increase by 34 percent alone. Local land use plans within Adams County, Brighton, and Commerce City focus mixed-use and commercial development along the corridor, where infrastructure and services already exist.

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*
120th Avenue is a regional arterial from U.S. 36 to E-470. It serves as a direct connection to Denver International Airport and connects urban centers of Thornton, Commerce City, and Adams County. A grade separated interchange at this location improves free-flow east/west movements by reducing vehicle/freight conflicts, enables transit along 120th Avenue to expand and provides safe pedestrian and bicycle connections to regional and local trails.

For example, this project will help connect residents to the Riverdale Regional Park, an 1,100 acre park with two 18-hole golf courses, a disc golf course, picnic areas, and the county fairgrounds at the core of the site. The Park will move its primary entrance to 120th Avenue in 2019, recognizing its importance as a regional connection to US 85, I-25, and I-76. Future uses planned at Riverdale Regional Park include expanded recreational

opportunities, expansive water resources, and regionally significant cultural and educational facilities. As a result, it is anticipated that corridor demands for biking and walking trips east-west across the U.S. 85 corridor and access to transit along US 85 are expected to increase as a result (See Attachment 1.2).

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*

Congestion caused by intersections hinders regional mobility along U.S. 85, with 120th Avenue being one of the worst performing intersections. Based on recent travel time data, drivers are experiencing up to eight minutes of daily congestion-related delay through Commerce City and Brighton between 104th Avenue and 168th Avenue. Because of the many intersections through these congested areas, U.S. 85 does not function as intended. The high truck volumes and many access points along the corridor create situations where slow-moving truck traffic negatively affects desired speeds of passenger cars. Moreover, maximum queues are projected to worsen for almost all approaches in all peak periods by 2040. Due to the expected increase in east-west traffic volumes within the network, 120th Avenue approaching U.S. 85 will also experience significant queue length increases (See Attachment 1.5).

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 Denver region is designated as an ozone non-attainment area. The transportation sector is the second largest contributor to greenhouse gas emissions in Colorado, accounting for 28 percent of Colorado's gross greenhouse gas emissions. Reductions in congestion-related delay and idling time will help reduce emission impacts, especially on a heavily-used freight corridor.

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*
The ability for all travel modes to cross and to access US 85 is an important component of local mobility for the communities along the corridor. Many see U.S. 85 as a barrier to local mobility. The speed and volume of traffic and roadway width, combined with insufficient pedestrian facilities, turn lanes, and acceleration/deceleration lanes, hinder the ability of all travel modes to access or cross the highway at 120th Avenue.

The project would provide grade separation and safe connections to the regional trail network, Stampede Park, Adams County Regional Park, the new Second Creek Open Space, Prairie View High School, Prairie View Middle School, Bison Ridge Recreation Center, and Buffalo Run Golf Course The primary entrance to Riverdale Regional Park (complete with golf courses, picnic areas, and future recreational expansions) will move to 120th Avenue in 2019. As a result, it is anticipated that corridor demands for biking and walking trips east-west across the U.S. 85 corridor and access to transit along US 85 are expected to increase as a result (See Attachment 1.2).

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 project would provide grade separation and safe connections to the regional trail network, Stampede Park, Adams County Regional Park, the new Second Creek Open Space, Prairie View High School, Prairie View Middle School, Bison Ridge Recreation Center, and Buffalo Run Golf Course that currently do not exist for adjacent residents and students.

Riverdale Regional Park will move its primary entrance to 120th Avenue in 2019, recognizing the road's importance as a regional connection to U.S. 85, I-25, and I-76. The 1,100 acre park currently has two 18-hole golf courses, a disc golf course, picnic areas, and the county fairgrounds at the core of the site. Future uses planned at Riverdale Regional Park include expanded recreational opportunities, expansive water resources, and regionally significant cultural and educational facilities. As a result, it is anticipated that corridor demands for biking and walking trips east-west across the U.S. 85 corridor and access to transit along US 85 are expected to increase as a result (See Attachment 1.2).

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*
There are four environmental justice traffic analysis zones within the project area, three of which are "minority concentrated" while one is "low-income and minority concentrated." Based on block group data from the 2016 Census Bureau, most block groups had similar or lower minority populations when compared to greater Adams County (See Attachment 1.4, Part 3).

Adams County has populations below federal poverty level and low-income populations that are higher than the statewide average. By 2035, 75 percent more households and 70 percent more jobs are expected along the U.S. 85 corridor. Substantially higher growth in households is anticipated in the southern portion of the corridor (generally from Platteville south). Higher growth in employment is anticipated in the northern portion of the corridor (generally from Gilcrest north). This trend will likely result in a balancing of commuter travel demand for employment access along the corridor; that is, more people will commute from the southern portion of the corridor to the Greeley area for work.

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*
The 120th corridor has been a primary focal point for CDOT and local jurisdictions' planning and investment because of its east-west connectivity between Boulder and eastern Adams County, including the north entrance to Denver International Airport. A lot of investment has gone into the 120th corridor over the last 20 years from CDOT's I-76/railroad interchange complex in 1998-99; to building the missing 120th segment from Quebec to US 85 completed in 2006; Thornton's widening of the segment from Quebec to Holly in 2008; to the current Broomfield reconfiguration of the 120th connect at US 36/ CO 128, which started in 2009 and just recently opened to traffic.

The combination of these critical infrastructure improvements creates an important east-west connection for local and regional traffic movements across the north metro area. The two critical pieces remaining to be built along
120th are: a grade-separated interchange at U.S. 85 and the Union Pacific Railroad and the widening of 120th

Avenue from U.S 85 east to E470/Tower Road (the eastern portion of which is included in the 2019 capital improvement plan for Commerce City).

D. Project Leveraging

WEIGHT **10%**

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 below ..... Low

Part 3 Additional Considerations

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

- Does the project benefit a small community, which for this process is defined as a community with a population of less than 50,000 people?
- Is this project a suburban connector?
- Does the project address a gap in existing service?
- Is this the logical next step of a project?
- Is the project construction ready?

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

Part 4 Project Data Worksheet – Calculations and Estimates

(Complete all subsections applicable to the project)

A. Transit Use

1.	Current ridership weekday boardings	978
2.	Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	10,986	1,579	**12,565**
2040	16,297	2,841	**19,138**

Transit Use Calculations	Year of Opening	2040 Weekday Estimate
3. Enter estimated additional daily transit boardings after project is completed. *(Using 50% growth above year of opening for 2040 value, unless justified)* *Provide supporting documentation as part of application submittal*	0	0
4. Enter number of the additional transit boardings (from #3 above) that were previously using a different transit route. (Example: **{#3 X 25%}** *or other percent, if justified)*	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.) (Example: **{#3 X 25%}** *or other percent, if justified)*	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**) *(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)*	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	10,986	1,579	**12,565**
2040	16,297	2,841	**19,138**

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: **{#3 X 50%}** *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: **{#5 X 30%}** *(or other percent, if justified)*	0	**0**
7.	= Number of SOV trips reduced per day (#5 - #6)	0	0
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	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	10,986	1,579	**12,565**
2040	16,297	2,841	**19,138**

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: **{#3 X 50%}** *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: **{#5 X 30%}** *or other percent, if justified)*	0	0
7. = Number of SOV trips reduced per day (#5 - #6)	0	0
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	0
8. = Number of pounds GHG emissions reduced (#8 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:

D. Vulnerable Populations

	Vulnerable Populations	Population within 1 mile
Use Current Census Data	**1.** Persons over age 65	2,053
	2. Minority persons	684
	3. Low-Income households	363
	4. Linguistically-challenged persons	1,037
	5. Individuals with disabilities	1,948
	6. Households without a motor vehicle	87
	7. Children ages 6-17	5,547
	8. Health service facilities served by project	3

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	340,434
2.	2040 ADT estimate	510,651
3.	Current weekday vehicle hours of delay (VHD) (before project)	

Travel Delay Calculations		Year of Opening
4.	Enter calculated future weekday VHD (after project)	
5.	Enter value of **{#3 - #4}** = Reduced VHD	
6.	Enter value of **{#5 X 1.4}** = **Reduced person hours of delay** *(Value higher than 1.4 due to high transit ridership must be justified by sponsor)*	0
7.	**After project peak hour congested average travel time reduction** per vehicle (includes persons, transit passengers, freight, and service equipment carried by vehicles). *If applicable, denote unique travel time reduction for certain types of vehicles*	0

8. If values would be distinctly different for weekend days or special events, describe the magnitude of difference.

9. If different values other than the suggested are used, please explain here:

F. Traffic Crash Reduction

1.	Provide the current number of crashes involving motor vehicles, bicyclists, and pedestrians *(most recent **5-year** period of data)*		Sponsor must use industry accepted crash reduction factors (CRF) or accident modification factor (AMF) practices *(e.g., NCHRP Project 17-25, NCHRP Report 617, or DiExSys methodology).*
	Fatal crashes	4	
	Serious Injury crashes	140	
	Other Injury crashes	0	
	Property Damage Only crashes	447	
2.	Estimated reduction in crashes applicable to the project scope *(per the five-year period used above)*		
	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	Fair

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

Pavement maintenance near the intersection is decreased on US 85 from stopping vehicles rutting the pavement. Obtaining right-of-way to construct a grade separated interchange will reduce road maintenance by removing pavement surrounding the rail and removing an intersection with US 85.

3. Average Daily User Volume	340,434

Bicycle/Pedestrian/Other Facility

4. Current bicycle/pedestrian/other facility condition	Poor

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

There are substandard pedestrian and bicycle facilities on 120th Avenue to cross U.S. 85. The project will preserve right-of-way to construct a future grade separated interchange to improve the safety of these connections.

6. Average Daily User Volume	0

H. Bridge Improvements

1. Current bridge structural condition from CDOT

NA

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. Refer to Attachment 1.6 for additional information.
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: