Part 1 Base Information

1.	Project Title	**US 285/Broadway Interchange Reconstruction**
2.	Project *Start/End* points or Geographic Area *Provide a map with submittal, as appropriate*	US 285 limits extend from the touchdown points at the westerly entrance and exit ramps on Broadway to the touchdown points at the easterly entrance and exit ramps on Broadway; Broadway limits extend from 200 feet south of the signalized intersection of the entrance/exit ramps to/from US 285, north to the Little Dry Creek overflow culvert.
3.	Project Sponsor *(entity that will construct/ complete and be financially responsible for the project)*	City of Englewood, Colorado
4.	Project Contact Person, Title, Phone Number, and Email	Maria D'Andrea, Director of Public Works 303-762-2506/mdandrea@englewoodco.gov
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: Englewood Comprehensive Plan (pgs. https://www.englewoodco.gov/home/showdocument?id=17175 ☒ Other(s): Urban Land Institute, Building Healthy Places Initiatives (report attached) *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:

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

MV objective 2 – Contain urban development in locations designated for urban growth and services. The project is located within a DRCOG-designated urban center which extends along US 285 from Santa Fe Blvd. (US 85) to Downing Street. The adjacent area serves more than 18,500 employees. This number is expected to grow to 26,500

employees by 2040. By relieving traffic congestion on US 285 and Broadway, traffic flow is improved thus ensuring employees can access their jobs efficiently and businesses want to expand knowing their employees can consistently get to work on time. The widened bridge will allow for improved movement along both US 285 and Broadway for all modes of traffic. Additionally, users will benefit from improved safety due to the elimination of the lane drops.

9. Define the **scope** and **specific elements** of the project.
This project proposes to reconstruct the Broadway bridge over US 285 to widen it to allow for lengthened turn lanes onto US 285 as well as provide for improved pedestrian and bicyclist access. This would necessitate reconstructing all four of the entrance/exit ramps. The widened bridge would also accommodate three lanes of traffic in both directions on US 285 thus eliminating a significant bottleneck on US 285. Improved bicycle & pedestrian connections would also be provided through this area.

10. What is the status of the proposed project?

No work on this proposed project has been initiated.

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		**$9,500,000**
2. Total amount of DRCOG Subregional Share Funding Request	**$7,600,000**	**80% 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**
Colorado Department of Transportation	$800,000	8%
City of Englewood	$1,100,000	12%
	$	
	$	
	$	
	$	
Total amount of funding provided by other funding partners *(private, local, state, Regional, or federal)*	**$1,900,000**	20%

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	$	$	$3,000,000	$4,600,000	**$7,600,000**
State Funds	$400,000	$400,000	$	$	**$800,000**
Local Funds	$550,000	$550,000	$	$	**$1,100,000**
Total Funding	$950,000	$950,000	$3,000,000	$4,600,000	**$9,500,000**
4. Phase to be Initiated *Choose from Design, ENV, ROW, CON, Study, Service, Equip. Purchase, Other*	ENV/Study	DESIGN	CON	CON	

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

Part 2 Evaluation Criteria, Questions, and Scoring

A. Subregional significance of proposed project

WEIGHT **40%**

*Provide **qualitative and quantitative** (derived from Part 3 of the application) responses to the following questions on the subregional significance of the proposed project.*

1. Why is this project important to your subregion?

   Between 2020 to 2040 the population is expected to increase by 7.5% and the employment by 32%. The Englewood Comprehensive Plan identifies this area as "the commercial heart of the community," and notes that it will, "continue to improve and grow into a true downtown for the south suburban community over time (II)." This is a corridor that is projected to see major increases in the economic activity for this region and will see densification and the need to move more people. The proposed project will improve vehicle and transit capacity while also providing facilities for pedestrians and cyclist. As the area becomes more dense, moving all modes will continue to increase in importance as the right of way is limited. Additionally, with increased demand of land and denser development allowing for non-vehicular access

   US-285 and Broadway is the convergence of two arterials that are critical to the Arapahoe Subregion. This interchange connected to multiple transit options, including bus and light rail, and other arterials and highways that have regional importantance (US 85, US 88, I-25 and E-470).

   The Urban Land Institute met with area leaders and identified the area of this interchange as a key component to redevelopment. The vision is that this is the intersection of "main and main," and that all four quadrants should have strong neighborhoods. This area is critical to residents, employees and visitors, who arrive from the area and the broader region.

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

   Yes, Glendale, unincorporated Arapahoe County, Englewood, Sheridan, Cherry Hills Village and Centennial are all within proximity to this interchange. US 285 serves roughly 60,000 vehicles a day, many of which use this as a regional commuting route. It serves as a major regional arterial providing east-west connectivity between C-470 and I-25. Additionally, this area is a regional commercial and healthcare hub and would facilitate greater emergency access. Overall, the improved interchange would make accessing this economic and healthcare center easier and also reduce travel delay for regional commuters.

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

   Yes, and communuters using this as an alternative route to highways during congestion will benefit from these improvements and may include persons from Aurora, Lakewood, Sheridan, Cherry Hills Village, Jefferson County, City and County of Denver and/or Douglas County. Users from these regions access this area as a major employment sector. LEHD data shows that roughly 16,000 employees commute to a one mile radius of the interchange. According to LEHD data, derived from US Census Data, over 1,000 employees are traveling greater than 50 miles to work from this area and roughly 30% of the employees who leave this area for work are traveling 10 to 50 miles. This areas demonstrates a hub of both in flow to this subregion and outflow to other subregions for employment and housing. Improving this interchange will keep these critical connections and exchange flowing.

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

   The current zoning for the area includes mixed use central business district and mixed use general arterial business district as well as high density residential districts. A great amount of growth is planned and anticipated for this area. This growth is supported by the community and one of the key points in the Englewood Comprehensive Plan

focuses on the mobility of the area: "The public desires continued investment along Broadway that benefits all modes while enhancing the identify of the City's most important commercial corridor (2-12)".

The interchange of these two major arterials will see increased demand from all modes as the subregion continues to cluster density around these facilities. In order to move more people through the area and maintain access to the increasingly dense community, a redesign to improve safety for all modes and increase efficiency is necessary.

The project aims to reduce current congestion with additional capacity for vehicles and transit, improve pedestrian and cyclist options with safer infrastructure and improved access to the on and off ramps and better routing and connectivity through the area. Without improvements this interchange will act as a pinch point within the network that reduces the mobility, as well as the safety, of all modes at a critical economic and residential hub.

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?

   Based on DRCOG generalized zoning data, this area is designated mixed use commercial and currently offers a wealth of employment opportunities and in the future will offer even more housing and employment options given the higher density zoning. Area economic drivers, such as two hospitals and multiple health service providers both bring employees into the area and also support secondary services to support these large scale employers. This was noted as a high concentration employment area according to DRCOG. Access to this area, the many employment opportunities, and services will be improved with increased vehicle through movement, improved active transportation access and reduced delays for regionally connected transit services.

   The Urban Land Institute Healthy Corridors work notes that improving multi-modal connections through this interchange in a way that active transportation users feel safe is critical to the economic development and placemaking of the area.

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

   Wider sidewalks that offer space for pedestrians and cyclists to have distance from moving vehicles improves safety and comfort for active transportation users. Additionally, improved crossings and routing could reduce time and improve safety.

   Broadway offers bus service via the 0 and 0L and 285 offers access to bus route 35. Route 35 connects to the Englewood City Center Light Rail Station and bus lines 0, 12 and 51. The proposed project would improve first and final mile connections to transit with improved active transportation facilities and also allow for operational improvements for transit and decreased delay time with higher roadway capacity.

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

   The Colorado Department of Transportation has committed to providing $800,000 for this project. The City of Englewood will provide $1,100,000.

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).**

   Within 1 mile of the proposed project there are 3,317 minorities, 1,487 low-income households, 1,628 individuals with disabilities, 1,234 households without a motor vehicle and 36 health service facilities. Craig Hospital is nearby and a world renowned spinal rehabilitation facility, helping wheel chair users overcome challenges and gain independence. The concentration of healthcare facilities in this area is unique, with a regional draw to speciality services and a local asset for preventative care and emergency treatment.

A strong network that is safe for all vulnerable users, from low-income users who do not have another choice than to access this interchange via foot or bike as well as wheel chair users who rely on safe infrastructure to navigate through their community. Additionally, by increasing emergency vehicle access, this project will promote decreased response times.

In addition there are 1,789 persons over the age of 65 and 1,657 youth 6-17. The demographics of this area make a strong case for needed infrastructure that is safe for all ages and capabilities. Not only are these users present in the area but critical services and commercial opportunities abound that they would want and need to access.

The Denver Regional Equity Atlas shows that this area has experiences a 32% increase since 2010 in free and reduced lunches for school children. This is substantial and shows that access to multimodal and low-income solutions for transportation are vital in this area.

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

The current pedestrian and cyclist conditions at the interchange are unsafe and present conditions evident in "high-stress" active transportation networks. The sidewalks on the ramps and overpass are very narrow, roughly 4.5 feet, and also have segments of disappearing sidwalks. Given the vehicle speeds, the sidewalks and the crossings do not adequalty protect active transportation users from vehicles. A re-design of these facilities offers the opportunity to provide safer conditions, which encourages greater use.

On the overpass the sidewalk widths range from roughly six to 10 feet. Again, given the speeds and traffic volumes, wider sidealks with a physical barrier between active transportation users and motorists would greatly improve the reilability of the multimodal network.

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

There have been 135 crashes at this intersection over the past five most recent years of data. There is a clear opportunity to improve the crash record by changing the geometry of the road, improving multimodal user facilities and updating operational functionality.

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 DRCOG generalized zoning for this area is mixed use commerical. This is a dense area with the Downtown Englewood Core, which includes a designated medical district and has been identified as an area for catalytic activity. The area includes Swedish Medical Center, Craig Hospital, several high density residential developments, Englewood High School, Middle School and Englewood Leadership Academy as well as Saint Louis Parochial School.

The current infrastructure is moving 59,810 vehicles east and west on 285 and 33,252 north and south on Broadway. These numbers are projected to increase, along with delay unless interchange improvements are made. Additionally, there are projected to be 21,340 residents and 25,174 employees within a mile of this area by 2040.

Employees and residents within a mile will greatly benefit form improved active transportation options at the interchange.

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 Englewood City Center Urban Center, the Craig Hospital and Swedish Medical Center and the Southmoor Park TOD are all accessible along US 285 and via transit. The Evans Station Urban Center, Broadway Station TOD and Alameda Station are all urban centers that are accessible along South Broadway. This project will improve multimodal access at the junction of these two arterials and provide improve safety and connectivity for multimodal users. The Dartmouth Avenue and High Line Canal bike routes offer a nearby facility running parallel to Hampden, while S Grant St., and S. Elati St. offer facilities parallel to Broadway. Improved connections to these facilities can assist with multimodal access between the interchange and regional connections. These facilities can encourage other modes when accessing dense housing and mixed-use commercial development and facilitate development that requires less parking.

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 interchange connects people to regional transit services via RTD bus route 35 with connections to the Englewood City Center Light Rail Station and Southmoor Ligh Rail Station and via RTD bus routes 0, 12 and 51.

The E-9 bike route along S. Sherman St, the E-7 route along E. Kenyon Ave. and S. Elati St. offer nearby regional bike routes. The E-9 can also connect to the Little Dry Creek Trail, which offers trail through the north side of the interchange. The Dartmouth Avenue regional bike route provides a parrallel on street bike facility, while the S. Clarkson St., S Grant St., High Line Canal Trail, Denver D-15 and D-22 bike routes provide north to south crossings. These facilities could be better connected to the interchange. All of these facilities would benefit in connectivity and safety with improved conditions at the interchange.

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*

While allowing for more vehicles will increase GHG emissions, better connections to transit for facilities for active transportation users also offers the opportunity to off set these increases.

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 Little Dry Creek trail run along US 285 from roughly Bannock Street to S Clarkson St. There is an opportunity to better incorporate this safe active transportation route through the proposed redesign. This trail connected to Englewood High School and Middle School. Miller Field is in close proximity to the interchange and would benfit from multimodal access.

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 Denver Equity Atlas shows that there was a greater than 22% increase in adult obesity from 2009 to 2013 in this area. This is substaintial and the need to access trails and recreational opportunities is acute. The Malley Senior Recreation Center is located near the interchange, as is Miller Field and the recreational resources at the Englewood High and Middle Schools. Better connections to these assets and to regional bike and trail systems (Little Dry Creek and bike routes E-7 and E-9) would all improve options for active transportation and accessing healthy resources.

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 area has multiple environmental justice analysis zones as identified by DRCOG. The south west quadrant of the interchange demonstrates concentrations of low-income and minority residents, the south east has low-income residents as does the north each. The north west quadrants has a high concentration of commerical activity and employment opportunities and connection between all quadrants will help low-come and minority communities access opportunity via active transportation options.

The DRCOG employment concentrations data shows that all sides of the interchange fall within the high employment concentration designation, making this area a regionally significant employment area. Improvements will also results in better response time for emergency vehicles.

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 area is attracting many employees, with diverse economic opportunities. However, if mobility to this area becomes overly constrained it could limit success and growth within the key sectors that are present in this area and higher than the national average. DRCOG data shows that low and medium concentrations of technology employees, medium concentration of healthcare and energy. These are industries that can continue to thrive as the area densifies and will also spur secondary service industries and commerce. Allowing for more people to access the corridor by improving transit connections, active transportation reducing congestion will support these sectors.

The Pearl Street Health and Rehabilitation Center, MCPN Englewood Clinic, Swedish Medical Center, Cherry Hills Health Care Center, Meridian Healthcare Center, Craig Hospital and Englewood Fire Department are all within close

proximity to this interchange. Better connectivity, mobility and multi-modal access through the interchange will help access critical health, employment and safety resources.

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

Part 3 Project Data Worksheet – Calculations and Estimates

(Complete all subsections applicable to the project)

A. Transit Use

1. Current ridership weekday boardings	0 0L 35
2. Population and Employment	

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

Transit Use Calculations	Year of Opening	2040 Weekday Estimate
3. Enter estimated additional daily transit boardings after project is completed. *(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:

The boarding and alighting data for bus routes 0, 0l and 35 through the interchange was not available via the DRCOG provided data sources or readily available data from RTD.

B. Bicycle Use

1. Current weekday bicyclists	No current data available
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	19,722	17,202	**36,924**

2040	21,340	25,174	**46,514**

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)	No current data available
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	19,722	17,202	**36,924**
2040	21,340	25,174	**46,514**

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	1,789
	2. Minority persons	3,317
	3. Low-Income households	1,487
	4. Linguistically-challenged persons	214
	5. Individuals with disabilities	1,628
	6. Households without a motor vehicle	1,234
	7. Children ages 6-17	1,657
	8. Health service facilities served by project	36

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	66,360 (E/W US285) 33,252 (N/S Broadway)
2. 2040 ADT estimate	70,184 (US 285)
3. Current weekday vehicle hours of delay (VHD) (before project)	See discussion in #9

Travel Delay Calculations	Year of Opening
4. Enter calculated future weekday VHD (after project)	0
5. Enter value of **{#3 - #4}** = Reduced VHD	0
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:
There is evidence to suggest that vehicular delays at the study intersection would be reduced with the proposed improvements. Adding a travel lane in each direction on CO 285 reduces the bottleneck that currently exists and improves the capacity of that section of roadway. West of the existing 4 lane section under the Broadway bridge currently serves 66,000 cars per day. General planning level data indicates that a 4 lane road can operate at LOS D/E with 36,800 vehicles. Widening to 6 lanes would increase that capacity to 55,300 vehicles per day, operating at an LOS D/E. Based on this data, the proposed widening of this section of road will significantly reduce delays.

Broadway currently serves approximately 33,000 vehicles per day, of which approximately 7,000 vpd travel to and from CO 285 to the west. Assuming ½ of those vehicles are traveling from Broadway to CO 285 WB would mean that the NB left and SB right turn movements are accommodating 3,500 vpd or approximately 350 cars during peak hours. General planning level data indicates that a single left turn lane can accommodate approximately 300 cars during the peak hour. However, due to the proximity the of the ramp intersections, the storage length needed to accommodate those vehicles does not exist. As a result, left turning vehicles block vehicles desiring to travel thru the intersection, causing unnecessary congestion. The addition of dual left turn lanes from Broadway to CO 285 would greatly decrease delays for left turning and through moving vehicles.

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	0	
Serious Injury crashes	2	
Other Injury crashes	33	
Property Damage Only crashes	186	
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	Choose an item
2. Describe current pavement issues and how the project will address them.	
3. Average Daily User Volume	0

Bicycle/Pedestrian/Other Facility	
4. Current bicycle/pedestrian/other facility condition	Fair
5. Describe current condition issues and how the project will address them.	
6. Average Daily User Volume	0

H. Bridge Improvements

1. Current bridge structural condition from CDOT The bridge has a sufficiency rating of 64.5, which falls below the rating of 80 for federal replacement.	
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.	Studies show that when you add lanes to a road the number of crashes initially decline because of lower traffic volume and density per lane, but that as traffic reroutes, roads with more lanes are expected to have higher crash rates that are attributable to the increased opportunities for lane change-related conflicts.
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: One study compared average accident rates on 4-lane, 6-lane and 8-lane roads in Colorado and showed a 25% increase in crashes between four-lane and six-lane roadways. This could be explained by the increase in possible conflict points due to the additional lanes, or by the increase in average speed of traffic and speed differential as a result of more available lanes.	

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?
   No. No work has yet begun on this project.

2. Are there challenges with the project (right-of-way, environmental, utilities, etc.)?
   If yes, explain the challenge and how agency plan to address.
   Yes, some right-of-way acquisition is anticipated. Also, CDOT is making removal of the traffic signal at Sherman Street a condition of project funding.

3. Are there other environmental or controversial issues associated with the project?
   Yes, removal of the traffic signal will be controversial.

4. Does the project or program benefit more than just the sponsoring agency and considered subregionally significant/transformative?
   Yes, US 285 carries commuter traffic to and from I-25 and to points further east. Removing the bottleneck on US 285 assists in moving traffic at this pinch point and reduces the weaving that currently occurs as vehicles move into the through lanes from the outer, "exit only" lanes as you approach Broadway in both directions.

5. Does the agency have capacity and expertise to manage a federal project?
   a. Explain experience, approach, etc.
   Yes. Director has extensive project management experience including various federally funded projects. Engineering consultant assistance will be procured to provide design, environmental clearance and construction administration services.

6. Is the project a next logical phase of a project funded in previous TIP cycles?
   No. No work has yet begun on this project.

7. Of the partnerships described in Section A, Question 7, are the partnerships providing funding?
   a. Describe the partnerships and funding of such.
   Yes, CDOT is willing to participate in the funding of the project subject to removal of at least one traffic signal in the vicinity of the project.

8. Are there any other "special considerations" the committee should consider in evaluating the application?
   No.