

Part 1

Base Information

1. Project Title	Bridge Street & I-76 Interchange
2. Project <i>Start/End</i> points or Geographic Area <i>Provide a map with submittal, as appropriate</i>	I-76 and Bridge Street
3. Project Sponsor (<i>entity that will construct/ complete and be financially responsible for the project</i>)	City of Brighton
4. Project Contact Person, Title, Phone Number, and Email	Christopher Montoya, Public Works Engineering Manager, 303-655-2037, Cmontoya@brightonco.gov

5. Does this project touch CDOT Right-of-Way, involve a CDOT roadway, access RTD property, or request RTD involvement to operate service?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, provide applicable concurrence documentation with submittal</i>
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6. What planning document(s) identifies this project?	<input checked="" type="checkbox"/> DRCOG 2040 Fiscally Constrained Regional Transportation Plan (2040 FC RTP)
	<input checked="" type="checkbox"/> Local plan: City of Brighton Transportation Master Plan (Adopted 2016)
	<input checked="" type="checkbox"/> Other(s): I-76 and Bridge Street Interchange Environmental Assessment (2015) <i>Provide link to document/s and referenced page number if possible, or provide documentation with submittal</i>

7. Identify the project's key elements .	
<input type="checkbox"/> Rapid Transit Capacity (2040 FC RTP) <input type="checkbox"/> Transit Other: <input type="checkbox"/> Bicycle Facility <input type="checkbox"/> Pedestrian Facility <input type="checkbox"/> Safety Improvements <input checked="" type="checkbox"/> Roadway Capacity or Managed Lanes (2040 FC RTP) <input checked="" type="checkbox"/> Roadway Operational	Grade Separation <input type="checkbox"/> Roadway <input type="checkbox"/> Railway <input type="checkbox"/> Bicycle <input type="checkbox"/> Pedestrian <input type="checkbox"/> Roadway Pavement Reconstruction/Rehab <input type="checkbox"/> Bridge Replace/Reconstruct/Rehab <input type="checkbox"/> Study <input type="checkbox"/> Design <input type="checkbox"/> Transportation Technology Components <input type="checkbox"/> Other:

8. Problem Statement What specific Metro Vision-related subregional problem/issue will the transportation project address?
<p>The I-76 and Bridge interchange is at the center of high growth urban development, where growth has been accompanied by more affordable housing outside of the heart of the Denver Metro area. On the contrary, the demand for transportation in this area has restricted access to the I-76 interstate, resulting in significant congestion at I-76 and Bromley Lane, as well as I-76 and Baseline Rd. (WCR 2) interchanges. To further complicate matters, there is limited access to public transportation or alternative forms of transportation. The congestion currently extends across Weld and Adams County, however, the interchange is located at the north-east corridor of Adams County in the City of Brighton, as well as just south of congested areas in the Town of Lochbuie.</p>

An interchange at this location will reduce significant traffic delays and queues at alternate route intersections, and enhance access to the I-76 interstate for growth. This interchange will allow capitalization of existing infrastructure, and integrated multi-modal facilities will connect into long-term planned trail systems and bike facilities, as well as extend the life of the currently used alternate route infrastructure for an additional 5 years. The subsequent extension of life span will allow Brighton to direct funding to more appropriate infrastructure needs.

References: I-76 & Bridge Street Interchange Environmental Assessment (January 2015).

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

The scope of work is to design a new interchange using existing bridge infrastructure located at I-76 and Bridge street. This includes possible roundabouts at the frontage road as identified in the environmental assessment.

10. What is the status of the proposed project?

The interchange has been identified as a major capital improvement project for the City of Brighton, when the Environmental Assessment was completed in January 2015. The City of Brighton has designed and is currently under construction to make improvements at I-76 and Bromley Lane to help mitigate traffic impacts in the larger impacted area. The I-76 and Bridge interchange is ready to be solicited for design and is planned to begin design in 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		\$1,000,000.00
2. Total amount of DRCOG Subregional Share Funding Request	\$300,000.00	30 % 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
N/A	\$0	
	\$	
	\$	
	\$	
	\$	
	\$	
Total amount of funding provided by other funding partners <i>(private, local, state, Regional, or federal)</i>	\$0	

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	\$0	\$	\$	\$	\$0
State Funds	\$ 0	\$	\$	\$	\$0
Local Funds	\$1,000,000.00	\$	\$	\$	\$0
Total Funding	\$1,000,000.00	\$0	\$0	\$0	\$0
4. Phase to be Initiated <i>Choose from Design, ENV, ROW, CON, Study, Service, Equip. Purchase, Other</i>	Design	Choose an item	Choose an item	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 the region near I-76 and Bridge Street within the City of Brighton, which is also the north side of Adams County and south side of Weld County, there are limited thoroughfare roadway segments to support the increased land development. The 3 major east to west arterials in this area are Baseline Rd (WCR 2), Bridge Street, and Bromley Lane, with no current interchange at Bridge Street and I-76. Both of the existing arterials connecting to I-76 have experienced significant degradation of level of service, where development and traffic growth have occurred, resulting in levels of service of E and F.

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

Adams County, Weld County, Town of Lochbuie, and City of Brighton.

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

The project is not located in other subregions, however it will relieve traffic congestion at Baseline Rd. and I-76, which is located in Weld County.

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

Reduce congestion, improve level of service at adjacent intersections and interchanges, provide pedestrian and multi-modal facilities. Further more, the interchange will improve regional connectivity.

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?

In reducing congestion, time delays are reduced and allow more time to be allocated in more productive and meaningful ways. Further more, housing affordability typically results in development beyond the central metro area of Denver, increasing the travel miles for the area. It is ideal for these miles to be efficient and excessive delays mitigated. Providing better access, in this instance direct access, to the interstate system will enhance all the above said factors. I-76 and US85 are both used for freight as well, which will retain similar benefits.

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

Sidewalks and trails will be incorporated in the project connecting to regional and local trail systems and walkways.

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

The City of Brighton currently does not have any project partnerships given the interchange is solely confined within the City of Brighton jurisdictional limits.

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)**.

The primary benefit will be access to trails and sidewalks, however the benefits to vulnerable populations is limited.

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

Increased connectivity to regional and local trail and sidewalk systems.

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

Given the current configuration, the intersections are not as safe at the frontage road as any of the proposed options. It is anticipated that there would be a reduction of traffic incidents at this locaiton (percentage based on traffic volume), as well as a reduction at the other current intersections and interchanges that are utilized in leiu of proposed interchange.

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

Yes, the area is actually already developing, both residentially and commercially. Recently a 1.7 million square foot building was proposed and is under construction. Further, there are multiple residential developments being completed, under construction, and proposed around this area.

[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

Even though multimodal implementation will be incorporated, direct connections to the interstate for multimodal will be incorporated, however limited application to as a connection between ubran centers or other key destinations. There is consideration of addition a pedestrian underpass to connect north and south trails, allowing greater connectivity to the local and regional trail system.

[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*

The primary beneficiary will be vehicles, both passenger and commercial.

[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 environmental assessment did not indicate any air quality improvements.

[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*

[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*

[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*

[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 area of development near the proposed interchange will experience improved traffic conditions and reduced time delay from congestion.

D. Project Leveraging

WEIGHT **10%**

9. What percent of outside funding sources (non-DRCOG-allocated Subregional Share funding) does this project have?	%	60%+ outside funding sources High 30-59%Medium 29% and belowLow
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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?
The City of Brighton has approximately 41,000 residents. The Town of Lochbuie has approximately 6,500 residents. The combination of both of these still is less than 50,000 residents, which would classify as a small community.
- Is this project a suburban connector?
The interchange is not a suburban connector, however, it does provide better connection to arterial and collector roadways, which could be construed as a suburban connector from the suburban area of Brighton to the interstate system.
- Does the project address a gap in existing service?
As development originally began in the early 2000's, the City of Brighton identified the prospect interchange for connection to the interstate system. An Environmental Assessment was completed, which also evaluated the existing interchange and connecting roadway systems at Bromley Lane and Baseline Road.
- Is this the logical next step of a project?
The next logical step would be to proceed with design, currently budgeted for the 2020 fiscal year by the City of Brighton, followed by construction in about 5 years, contingent on available funds. The City of Brighton currently has significant traffic impact fees, which would be subject to contribution towards the interchange at Bridge Street & I76.
- Is the project construction ready?
The project is not construction ready, as plans need to be designed and reviewed, in addition to submittals to CDOT for review and approval prior to construction. There will also be a traffic signal to be eventually added just west of the future interchange to help mitigate traffic flows, which is planned for around 2022 and will be budgeted fully by the City of Brighton. This signal was also identified in the Environmental Assessment.

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	N/A
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	N/A	N/A	N/A
2040	N/A	N/A	N/A

Transit Use Calculations	Year of Opening	2040 Weekday Estimate
3. Enter estimated additional daily transit boardings after project is completed. <i>(Using 50% growth above year of opening for 2040 value, unless justified)</i> <i>Provide supporting documentation as part of application submittal</i>	0	0
4. Enter number of the additional transit boardings (from #3 above) that were previously using a different transit route. <i>(Example: {#3 X 25%} or other percent, if justified)</i>	0	0
5. Enter number of the new transit boardings (from #3 above) that were previously using other non-SOV modes (walk, bicycle, HOV, etc.) <i>(Example: {#3 X 25%} or other percent, if justified)</i>	0	0
6. = Number of SOV one-way trips reduced per day (#3 – #4 – #5)	0	0
7. Enter the value of {#6 x 9 miles} . (= the VMT reduced per day) <i>(Values other than the default 9 miles must be justified by sponsor; e.g., 15 miles for regional service or 6 miles for local service)</i>	0	0
8. = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)	0	0
9. If values would be distinctly greater for weekends, describe the magnitude of difference: N/A		
10. If different values other than the suggested are used, please explain here: N/A		

B. Bicycle Use

1. Current weekday bicyclists	0
2. Population and Employment	

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

Bicycle Use Calculations	Year of Opening	2040 Weekday Estimate
3. Enter estimated additional weekday one-way bicycle trips on the facility after project is completed.	0	0
4. Enter number of the bicycle trips (in #3 above) that will be diverting from a different bicycling route. <i>(Example: {#3 X 50%} or other percent, if justified)</i>	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: N/A		
11. If different values other than the suggested are used, please explain here: N/A		

C. Pedestrian Use

1. Current weekday pedestrians (include users of all non-pedaled devices)	0
2. Population and Employment	

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

Pedestrian Use Calculations	Year of Opening	2040 Weekday Estimate
3. Enter estimated additional weekday pedestrian one-way trips on the facility after project is completed	0	0
4. Enter number of the new pedestrian trips (in #3 above) that will be diverting from a different walking route (Example: {#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. Minority persons		0
3. Low-Income households		0
4. Linguistically-challenged persons		0
5. Individuals with disabilities		0
6. Households without a motor vehicle		0
7. Children ages 6-17		0
8. Health service facilities served by project		0

E. Travel Delay *(Operational and Congestion Reduction)*

Sponsor must use industry standard Highway Capacity Manual (HCM) based software programs and procedures as a basis to calculate estimated weekday travel delay benefits. *DRCOG staff may be able to use the Regional Travel Model to develop estimates for certain types of large-scale projects.*

1. Current ADT (average daily traffic volume) on applicable segments	36,000
2. 2040 ADT estimate	81,000
3. Current weekday vehicle hours of delay (VHD) (before project)	81.2 (2,596.4)

Travel Delay Calculations	Year of Opening
4. Enter calculated future weekday VHD (after project)	12.5 (817.3)
5. Enter value of {#3 - #4} = Reduced VHD (Using Bridge Street Projected)	68.7 (1,779.1)
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>	96.18 (2,490.74)
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>	3 minutes
8. If values would be distinctly different for weekend days or special events, describe the magnitude of difference. N/A	
9. If different values other than the suggested are used, please explain here: The after project completion VHD on line 4 was for Bridge Street only. The better comparison would be the 2035 no action and the 2035 preferred alternative, which is 2,596.4 (no action) vs. 817.3 (action), which are shown in parentheses on each of those line items. Given the environmental assessment was conducted using 2013 numbers and project 2035 figures, it is being proposed to use the study projects for 2035.	

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	2	
Serious Injury crashes	N/A	
Other Injury crashes	N/A	
Property Damage Only crashes	N/A	
2. Estimated reduction in crashes <u>applicable to the project scope</u> (<i>per the five-year period used above</i>)		
Fatal crashes reduced	N/A	
Serious Injury crashes reduced	N/A	
Other Injury crashes reduced	N/A	
Property Damage Only crashes reduced	N/A	

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	Good-Fair
2. Describe current pavement issues and how the project will address them. The pavement would be milled and overlaid and re-constructed where necessary. Many components would simply be new infrastructure.	
3. Average Daily User Volume	7,000

Bicycle/Pedestrian/Other Facility

4. Current bicycle/pedestrian/other facility condition	Not Existing
5. Describe current condition issues and how the project will address them. There will be addition of pedestrian/trails to connect into regional and existing infrastructure, which is primarily located to the west.	
6. Average Daily User Volume	0

H. Bridge Improvements

1. Current bridge structural condition from CDOT Good	
2. Describe current condition issues and how the project will address them. Maintenance activities only. The existing bridge infrastructure would be incorporated into the design of the interchange, creating substantial value engineering, where most interchange projects require substantial bridge infrastructure work, such as Bromley and US 85 in the City of Brighton, which has a project cost of nearly four times.	

3. Other functional obsolescence issues to be addressed by project	N/A
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4. Average Daily User Volume over bridge	2,000
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I. Other Beneficial Variables *(identified and calculated by the sponsor)*

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|----|---|
| 1. | Benefit of pursuing the project in advance to waiting for excessive congestion, resulting in additional costs for alternative interchange routes. |
| 2. | Cost benefit of conducting construction in approximately 2025 vs. 2035, with design in 2020. Exact cost is difficult to calculate, however assuming a 3% to 4% annual cost increase, the grand total savings could approach \$400,000 to \$500,000 of construction costs saving, based on a \$15,000,000 project. |
| 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
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N/A

2. Negative impact on vulnerable populations
Even with the interstate improvement, there currently is not transit located in the area. Other more feasible travel alternatives are more desired, but not available at this time.

3. Other:
N/A