

## Part 1

## Base Information

1. Project Title	30th Street (SH7/Arapahoe Avenue – Boulder Creek) Corridor Improvements		
2. Project Start/End points or Geographic Area <i>Provide a map with submittal, as appropriate</i>	SH7/Arapahoe Avenue – Boulder Creek		
3. Project Sponsor (entity that will construct/ complete and be financially responsible for the project)	City of Boulder		
4. Project Contact Person, Title, Phone Number, and Email	Gerrit Slatter, Principal Transportation Projects Engineer, 303-441-1978, <a href="mailto:slatterg@bouldercolorado.gov">slatterg@bouldercolorado.gov</a>		
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>		
6. What planning document(s) identifies this project?	<input checked="" type="checkbox"/> <a href="#">DRCOG 2040 Fiscally Constrained Regional Transportation Plan (2040 FC RTP)</a>		
	<input checked="" type="checkbox"/> Local plan:	<a href="#">City of Boulder Transportation Master Plan, East Arapahoe Transportation Plan, 30<sup>th</sup> and Colorado Corridors Study</a>	
	<input checked="" type="checkbox"/> Other(s):	<a href="#">Northwest Area Mobility Study, SH7 Planning and Environmental Linkages Study</a>	
	<i>Provide link to document/s and referenced page number if possible, or provide documentation with submittal</i>		
7. Identify the project's key elements.			
<input type="checkbox"/> Rapid Transit Capacity (2040 FC RTP) <input type="checkbox"/> Transit Other: <input checked="" type="checkbox"/> Bicycle Facility <input checked="" type="checkbox"/> Pedestrian Facility <input checked="" type="checkbox"/> Safety Improvements <input type="checkbox"/> Roadway Capacity or Managed Lanes (2040 FC RTP) <input 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. <b>Problem Statement</b> What specific Metro Vision-related subregional problem/issue will the transportation project address?			



*South side of 30<sup>th</sup> and SH7/Arapahoe Ave intersection*



*View looking at Southeast corner of 30<sup>th</sup> and SH7/Arapahoe*

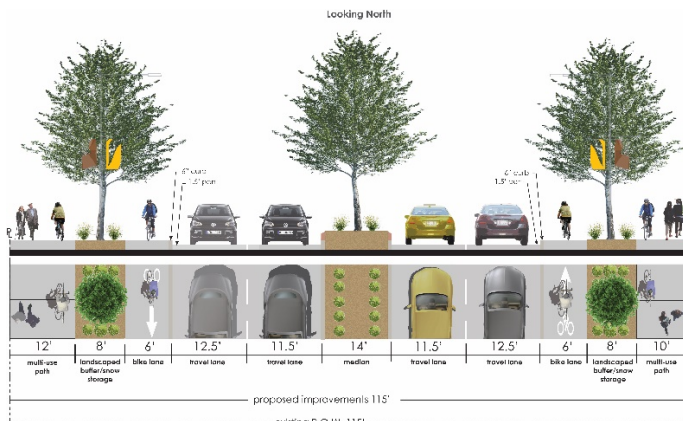
30<sup>th</sup> Street is a major travel corridor in the City of Boulder with 22,000 vehicles in this segment of the corridor and 444 daily boardings at the 30th/Arapahoe bus stops (see attached ridership figures). Bike and pedestrian counts during the am, noon and pm travel period showed over 500 users at the 30th/Arapahoe intersection and 360 users on 30<sup>th</sup> St, north of Boulder Creek. The posted speed limit is 35mph and the 85<sup>th</sup> percentile speed is 38mph. The 30<sup>th</sup> and SH7/Arapahoe Avenue intersection was identified as one of the top 10 crash locations in the City of Boulder Safe Streets Boulder Report with a high crash rate, high bicycle and pedestrian crash frequency, and high approach turn crash frequency (see attachment). 30<sup>th</sup> Street and Arapahoe Avenue are main transportation corridors in Boulder for local and regional travel trips. In the city's Transportation Master Plan (TMP), 30<sup>th</sup> Street is included in the 28<sup>th</sup> Street north-south multimodal corridor which is identified on the DRCOG Regional Roadway and Bikeway System maps. Similarly, Arapahoe Avenue is identified on the DRCOG Regional Roadway and Bus Rapid Transit (BRT) system maps.



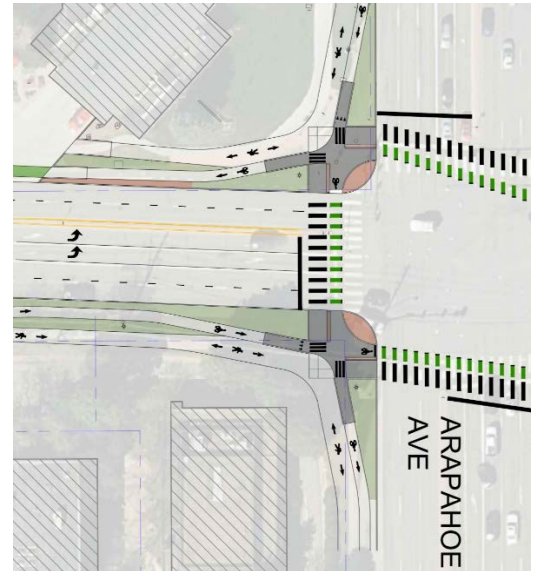
*30<sup>th</sup> Street northbound between near Scott Carpenter Park*

30<sup>th</sup> Street provides connections and access to Boulder Junction at Depot Square RTD bus station, University of Colorado, Scott Carpenter Park and the central business district including new Google campus and the 29<sup>th</sup> Street Retail District. In addition to the Flatirons Flyer BRT service that serves Boulder Junction, the SH119 BRT Study is making plans to operate some of the future SH-119 BRT service along 30<sup>th</sup> Street.

Recommended designs from the 30<sup>th</sup> and Colorado Corridors Study and the East Arapahoe Transportation Plan include raised protected bicycle lanes and wider sidewalks along 30<sup>th</sup> Street and a protected intersection, where the pedestrian, bicycle and vehicle facilities have designated and separate spaces from each other.



*Cross section of 30<sup>th</sup> Street recommended conceptual design option –  
Final placement of trees will be based on space constraints and existing trees*



*Protected Intersection for south side of 30<sup>th</sup>  
and Arapahoe Ave intersection*

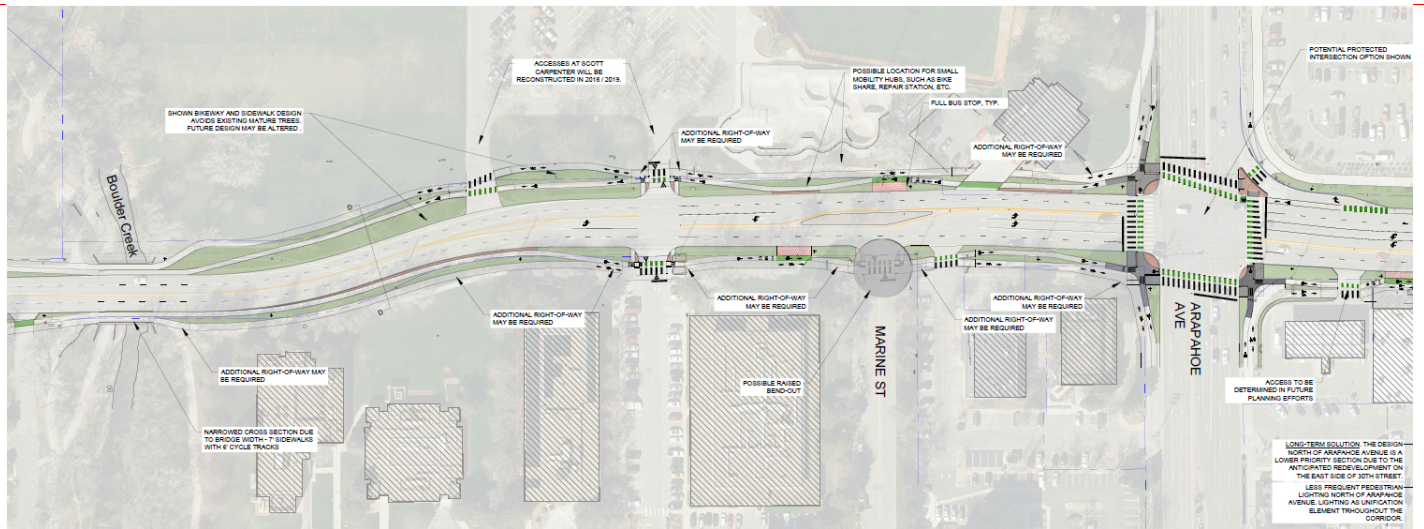
With the provision of this project's facilities, the three Metro Vision focus areas of safety, increasing the reliability of multimodal transportation network and serving a range of users including vulnerable populations are met. The new facilities will provide increased safety and travel comfort which appeals to users of a wider range of ages and abilities. These improvements support the connections to the adjacent transit stops and first and final mile access to the transit service along SH7/Arapahoe Avenue which is a future BRT corridor as well as 30<sup>th</sup> Street which is being identified for SH119 BRT service segments. This project addresses a high crash location with the intention of eliminating fatal and serious injury collisions and reducing other collisions helping to implement a goal of the city's Vision Zero program and TMP safety objective. This project would connect to the regional Boulder Creek Greenway path and improvements noted in the SH7/Arapahoe Avenue Multi-Use Path and Bus Stops TIP application.

Provision of these expanded options and safety improvements are intended to lead to shifts from single occupant vehicle (SOV) travel which helps to support the Metro Vision RTP goals, and Boulder TMP objectives of reduced VMT, reduced SOV travel and GhG emissions and a reduction in daily resident and non-resident VMT.

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

This project will build a protected intersection on the south side of the SH7/Arapahoe and 30<sup>th</sup> Street intersection and raised protected bicycle lanes, wider sidewalks and install replacement trees and landscaping on the east and west sides of 30<sup>th</sup> Street from Arapahoe Avenue to Boulder Creek.





This conceptual plan and cost estimate are included at the end of the application.

**10. What is the status of the proposed project?**

The project is in the preliminary design phase.

**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.*

Improvements would be focused on the west side of 30<sup>th</sup> Street and the south side of 30<sup>th</sup> St/Arapahoe Ave.

## A. Project Financial Information and Funding Request

<b>1. Total Project Cost</b>	<b>\$4,300,000</b>	
<b>2. Total amount of DRCOG Subregional Share Funding Request</b>	<b>\$2,580,000</b>	<b>60%</b> of total project cost
<b>3. Outside Funding Partners (other than DRCOG Subregional Share funds)</b> List each funding partner and contribution amount.	<b>\$\$</b> <b>Contribution Amount</b>	<b>% of Contribution</b> <b>to Overall Total</b> <b>Project Cost</b>
University of Colorado Boulder – see attached Letter of support and project match	\$200,000	5%
City of Boulder	\$1,520,000	35%
	\$	
	\$	
	\$	
	\$	
<b>Total amount of funding provided by other funding partners</b> (private, local, state, Regional, or federal)	<b>\$1,720,000</b>	<b>40%</b>

**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
<b>Federal Funds</b>	\$	\$387,000	\$258,000	\$1,935,000	<b>\$2,580,000</b>
<b>State Funds</b>	\$	\$	\$	\$	<b>\$0</b>
<b>Local Funds</b>	\$	\$258,000	\$172,000	\$1,290,000	<b>\$1,720,000</b>
<b>Total Funding</b>	\$0	\$645,000	\$430,000	\$3,150,000	<b>\$4,300,000</b>
<b>4. Phase to be Initiated</b> <i>Choose from Design, ENV, ROW, CON, Study, Service, Equip. Purchase, Other</i>	Choose an item	Design	ROW	Construction	
<b>5. By checking this box</b> , 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.					<input checked="checked" type="checkbox"/>

## 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?**

The 30<sup>th</sup> Street corridor is a key north-south corridor in the City of Boulder with important regional employment centers such as University of Colorado, the 29<sup>th</sup> Street retail center, Boulder Junction, and the new Google campus as well as other residential and commercial uses. According to 2010 census data, the population and employment within 1 mile of this project location totals over 85,000 (40,432 residents and 45,355 jobs).

Over 22,000 vehicles travel along this section of 30<sup>th</sup> Street each day and the Boulder Creek Path Greenway is both part of the local pedestrian and bicycle network and a regional recreational facility and destination. Boulder Junction at Depot Square transit station provides the US 36 Flatirons Flyer BRT service and the RTD Airport service. Likewise, SH7/Arapahoe Avenue is a key east-west travel corridor for local and regional travel connecting Boulder to I-25/Brighton and 44,000 employees who work in the corridor to destinations throughout the city. There are over 12 health facilities within 1 mile of the 30<sup>th</sup> Street corridor. The SH7/Arapahoe Avenue corridor includes the city's major health center, Boulder Community Health, as well as supporting health and medical professional offices.

This project supports improved bicycling and pedestrian facilities designed for a wider range of ages and abilities and addresses safety issues for all travel modes at one of the city's highest crash locations. These improvements support safer and more comfortable travel for pedestrians and bicyclists accessing regional and local transit services as well as planned future BRT services. These multiple benefits within an area of several regional employers benefits the Boulder County subregion by supporting safer travel to employees and residents in the area.

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

Yes, while the physical improvements are in the City of Boulder, 30<sup>th</sup> Street connects to Boulder Junction at Depot Square with the Flatirons Flyer and RTD Airport transit services and Arapahoe Avenue/SH7 is a major east-west travel corridor connecting Boulder to Brighton. The project benefits residents and employees accessing the local and regional transit services with safer and improved facilities for users of a wider range of ages and abilities during their first and final mile accessing transit.

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

Yes, the project's benefits support the first and final mile access to transit which benefits the residents and employees of Boulder, Broomfield, Adams, Weld and Denver subregions who utilize the regional transit services.

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

Recommended designs from the 30<sup>th</sup> and Colorado Corridors Study and the East Arapahoe Transportation Plan include raised protected bicycle lanes and wider sidewalks along 30<sup>th</sup> Street and a protected intersection, where the pedestrian, bicycle and vehicle facilities have designated and separate spaces from each other. These project elements help to fulfill the three Metro Vision focus areas of safety, increasing the reliability of multimodal transportation network and serving a range of users including vulnerable populations.

The new facilities are following latest designs from the Urban Street Design Guide from the National Association of City Transportation Officials (NACTO), American Association for State and Highway Transportation officials (AASHTO) Bike Design Guide and other industry organizations that are shown to provide increased safety and travel comfort that appeal to users of a wider range of ages and abilities including youth, seniors and people with

disabilities. According to DRCOG provided 2010 census data, over 7% of the population within 1 mile of this project are aged 65 or over, 5% of the population are children and youth ages 6-17 years old and over 8% of the population have a disability.

These improvements improve the reliability of the multimodal network by improving the connections to the adjacent transit stops and first and final mile access to the transit service along SH7/Arapahoe Avenue which is a future BRT corridor and 30<sup>th</sup> Street which is being identified for SH119 BRT service segments. The project will also improve and enhance transit stops in this segment of the corridor to make them BRT ready.

This project addresses a high crash location with the intention of eliminating fatal and serious injury collisions and reducing other collisions which supports the Metro Vision focus area of transportation safety and is a goal of the city's Vision Zero program and TMP safety objective.

5. One foundation of a sustainable and resilient economy is physical infrastructure and transportation. How will the **completed** project allow people and businesses to thrive and prosper?

The safety improvements planned at the 30<sup>th</sup> and Arapahoe Avenue intersection support thriving and prosperous business and quality of life by eliminating or reducing fatal and serious injury crashes at this location which is one of the top 10 crash locations in the city. This project fulfills economic sustainability goals by increasing access and connections for all modes of travel modes, which benefits local businesses through improved transportation for customers, goods, services and employees. The raised protected bicycle lanes and wider sidewalks facilities are also designed to accommodate a wider range of ages and abilities to comfortably travel by foot or wheel. As evidenced by transportation investments along other city corridors including 30<sup>th</sup> Street, north of Arapahoe Avenue, and the US 36/28<sup>th</sup> Street corridor, private economic investment dollars follow public infrastructure investment. Additionally, as evidenced by the past federal stimulus efforts, construction of transportation infrastructure is considered a good mechanism for stimulating local economies through the creation of direct construction jobs and supporting positions and the purchases of goods and services.

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

The first and final mile access to and from transit for walking and bicycling will be improved with the installation of raised protected bicycle lanes and wider sidewalks as these are facilities designed to accommodate a wider ranges of ages and abilities to comfortable travel by foot or wheel. Transit stops in the project footprint will also be enhanced and make way for future BRT ready amenities.

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

The University of Colorado administration and other department offices are located along the east side of this section of 30<sup>th</sup> Street and have provided a match in the amount of \$200,000 in funds. The University of Colorado has been involved with both 30<sup>th</sup> & Colorado and the East Arapahoe Transportation Plan corridor studies and are highly supportive of the recommended transportation designs.

## 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 proposed facilities for bicycling and walking will improve the mobility infrastructure in this key corridor section which will benefit all community members, including older adults (7% of the population within 1 mile), low-income households (59% of the households within 1 mile) and people with disabilities (8% of the population within 1 mile of the project location).

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

Increased reliability of the existing multimodal transportation network is supported by this project by expanding the options to a wider range of current and potential users. The protected intersection elements proposed for the south side of 30<sup>th</sup> St and SH7/Arapahoe Ave provide separated facilities from the other modes and increased visibility of each mode lending to the reliability of the multimodal transportation network. The raised bicycle lanes and wider sidewalk designs are anticipated to appeal to a broader range of ages and abilities which increases the reliability, comfort and useability of those modes in the multimodal network. The separated bicycle facilities will also provide a continuous “off-street” connection from the regional Boulder Creek Path to the multi-use path along SH-7.

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

The projects components of raised bicycle lanes, wider sidewalks and protected intersection provides separate facilities which will reduce or eliminate the number of crashes at the 30<sup>th</sup> St and SH7/Arapahoe Ave intersection as well as provide travel comfort and security for users of a wider range of ages and abilities which is a TMP safety objective in the City of Boulder. These improvements are designed to address the city’s Vision Zero safety goals at this high crash location.

**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

This project is within the City of Boulder’s Area 1 Planning Area, as defined in the [Boulder Valley Comprehensive Plan](#) (BVCP) which fully supports growth and development where urban-level infrastructure already exists and/or there are plans in place for infrastructure and service expansion. Consistent with the BVCP, the urban level infrastructure has been planned to accommodate any and all future redevelopment.

[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

This project is within the central Boulder residential area which is a higher density area in town linking to regional transit service at Boulder Junction at 30/Pearl and connecting regional commuters to employment areas along 30<sup>th</sup> Street.

[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 30<sup>th</sup> Street Corridor Improvements provide clear and direct multimodal connections to the existing and adjacent pedestrian, bicycle and transit stop facilities and services and are within the Boulder urban center and the CU-Boulder campus. The improved facilities will facilitate first and last mile connections to existing and anticipated regional transit services.

[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*

This project supports and encourages the shift towards active transportation and transit modes which reduces single occupant vehicle trips and supports a reduction in greenhouse gas (GhG) emissions.

[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 30<sup>th</sup> Street (SH7/Arapahoe Ave to Boulder Creek Greenway) Corridor Improvements expands the connection to users of a wider range of ages and abilities to the Boulder Creek Greenway which serves as both a local and regional commuting and recreational facility and the adjacent Scott Carpenter Park.

[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 30<sup>th</sup> Street (SH7/Arapahoe Ave to Boulder Creek Greenway) Corridor Improvements supports the active transportation modes of walking and bicycling. Additionally, numerous studies support the health benefits of transit commuting over driving due to the associated walking portions of the transit trip.

[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*

Providing a multimodal transportation network that is designed to appeal to residents, employees and visitors of a wider range of ages and abilities connecting is anticipated to promote reliable transportation connections to local and regional transit service and key destinations and employers along 30<sup>th</sup> Street such as the University of Colorado, 29<sup>th</sup> Street Retail Center and Google. This project will support first and last mile access to current transit services at Boulder Junction (US 36 Flatirons Flyer BRT service and the AB Airport bus) and anticipated SH119 and SH7BRT services. The improvements will support safety and access for employees, residents and customers to access their jobs and/or daily activities.

[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*

Completing the multimodal system and connections to local and regional transit increases options for residents and employees to this employment center which includes regional employers such as the University of Colorado as well as other key businesses including Google and 29<sup>th</sup> Street Retail Center.

D. Project Leveraging		WEIGHT	10%
9. What percent of outside funding sources (non-DRCOG-allocated Subregional Share funding) does this project have?	40%	60%+ outside funding sources ..... High 30-59% .....Medium 29% 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	440
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	40,432	45,355	85,787
2040	42,627	55,859	98,486

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) <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. (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	760
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	40,432	45,355	85,787
2040	42,627	55,859	98,486

Bicycle Use Calculations	Year of Opening	2040 Weekday Estimate
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3. Enter estimated additional weekday one-way bicycle trips on the facility after project is completed.	58	580
4. Enter number of the bicycle trips (in #3 above) that will be diverting from a different bicycling route. (Example: <b>{#3 X 50%}</b> or other percent, if justified)	29	290
5. = Initial number of new bicycle trips from project (#3 – #4)	29	290
6. Enter number of the new trips produced (from #5 above) that are replacing an SOV trip. (Example: <b>{#5 X 30%}</b> or other percent, if justified)	9	87
7. = Number of SOV trips reduced per day (#5 - #6)	20	203
8. Enter the value of <b>{#7 x 2 miles}</b> . (= the VMT reduced per day) (Values other than 2 miles must be justified by sponsor)	40	406
9. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	38	385
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)	890
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	40,432	40,860	81,292
2040	42,627	55,859	98,486

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	22	222
4. Enter number of the new pedestrian trips (in #3 above) that will be diverting from a different walking route (Example: <b>{#3 X 50%}</b> or other percent, if justified)	11	111
5. = Number of new trips from project (#3 – #4)	11	111
6. Enter number of the new trips produced (from #5 above) that are replacing an SOV trip. (Example: <b>{#5 X 30%}</b> or other percent, if justified)	3	33
7. = Number of SOV trips reduced per day (#5 - #6)	8	78
12. Enter the value of <b>{#7 x .4 miles}</b> . (= the VMT reduced per day) (Values other than .4 miles must be justified by sponsor)	3	31



8. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	2	29
9. If values would be distinctly greater for weekends, describe the magnitude of difference:		
10. If different values other than the suggested are used, please explain here:		

## D. Vulnerable Populations

Use Current Census Data	Vulnerable Populations	Population within 1 mile
	1. Persons over age 65	3,423
	2. Minority persons	10,591
	3. Low-Income households	5,024
	4. Linguistically-challenged persons	835
	5. Individuals with disabilities	4,011
	6. Households without a motor vehicle	2,351
	7. Children ages 6-17	2,641
	8. Health service facilities served by project	12

## 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	0
2. 2040 ADT estimate	0
3. Current weekday vehicle hours of delay (VHD) (before project)	0

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} = <b>Reduced person hours of delay</b> <i>(Value higher than 1.4 due to high transit ridership must be justified by sponsor)</i>	0
7. <b>After project peak hour congested average travel time reduction</b> 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>	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*)

<b>Fatal</b> crashes	0
<b>Serious Injury</b> crashes	8
<b>Other Injury</b> crashes	47
<b>Property Damage Only</b> crashes	144

2. Estimated reduction in crashes applicable to the project scope (*per the five-year period used above*)

<b>Fatal</b> crashes reduced	0
<b>Serious Injury</b> crashes reduced	0
<b>Other Injury</b> crashes reduced	0
<b>Property Damage Only</b> crashes reduced	0

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*).

## 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	Choose an item
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
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
<b>I. Other Beneficial Variables</b> <i>(identified and calculated by the sponsor)</i>	
1.	
2.	
3.	
<b>J. Disbenefits or Negative Impacts</b> <i>(identified and calculated by the sponsor)</i>	
1. Increase in VMT? <i>If yes, describe scale of expected increase</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. Negative impact on vulnerable populations	
3. Other:	