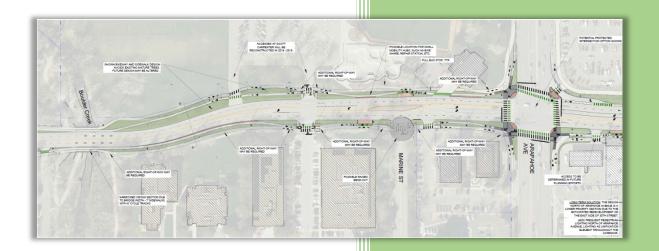
# City of Boulder

## 30th Street (SH7/Arapahoe Avenue – Boulder Creek) Corridor Improvements



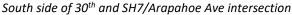




2020-2023 DRCOG Transportation Improvements Program (TIP) Subregional Share Project Application Form

Part 1 Base Informa			forma	tion		
1. Project Title				30th Street (SH7/Arapahoe Avenue – Boulder Creek) Corridor Improvements		
2.	2. Project Start/End points or Geographic Area Provide a map with submittal, as appropriate			-	rapahoe Avenue – Boulder Cre	eek
3.	Project Spor	OSOr (entity that aplete and be find the project)		City of	City of Boulder	
4.	•	tact Person, Ti ber, and Emai			Slatter, Principal Transportations	on Projects Engineer, 303-441-1978,
5.	5. Does this project touch CDOT Right access RTD property, or request RT		_	-	-	Yes No  If yes, provide applicable concurrence documentation with submittal
			□     □	RCOG 204	40 Fiscally Constrained Regiona	al Transportation Plan (2040 FCRTP)
6.	What plannidocument(s) this project?	nt(s) identifies placet?	⊠ Lo plan:	<u>City of Boulder Transportation Master Plan, East Arapahoe</u> <u>Transportation Plan, 30<sup>th</sup> and Colorado Corridors Study</u>		
			⊠ Ot	ther(s): Northwest Area Mobility Study, SH7 Planning and Environment Linkages Study		
					ocument/s and referenced page n	umber if possible, or provide documentation
7.	7. Identify the project's key elements.  Rapid Transit Capacity (2040 FCRT Transit Other: Bicycle Facility Pedestrian Facility Safety Improvements Roadway Capacity or Managed La (2040 FCRTP) Roadway Operational		CRTP)	Bridge Replace/F Study Design	n ent Reconstruction/Rehab Reconstruct/Rehab echnology Components	
8.	Problem Statement What specific Metro Vision-related subregional problem/issue will the transportation project address?					







View looking at Southeast corner of 30th 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.



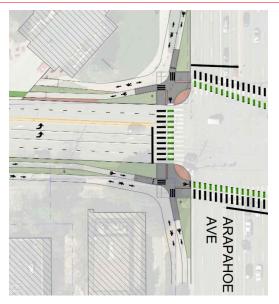
30th Street northbound between near Scott Carpenter Park

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



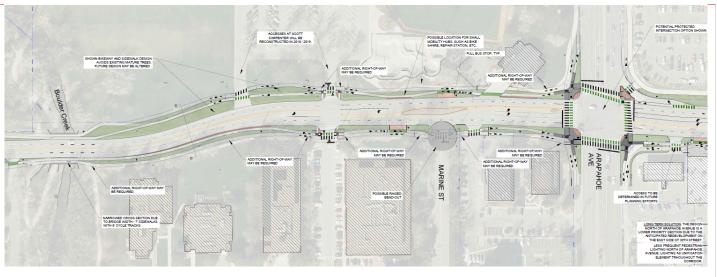
Protected Intersection for south side of 30<sup>th</sup> and Arapahoe Ave intersection

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?

X Yes	No
V 1 . C3	 

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

1.	Total Project Cost		\$4,300,000
2.	Total amount of DRCOG Subregional Share Funding Request	\$2,580,000	60% 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
	University of Colorado Boulder – see attached Letter of support and project match	\$200,000	5%
	City of Boulder	\$1,520,000	35%
		\$	
		\$	
		\$	
		\$	
То	tal amount of funding provided by other funding partners (private, local, state, Regional, or federal)	\$1,720,000	40%

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	\$	\$387,000	\$258,000	\$1,935,000	\$2,580,000
State Funds	\$	\$	\$	\$	\$0
Local Funds	\$	\$258,000	\$172,000	\$1,290,000	\$1,720,000
Total Funding	\$0	\$645,000	\$430,000	\$3,150,000	\$4,300,000
4. Phase to be Initiated Choose from Design, ENV, ROW, CON, Study, Service, Equip. Purchase, Other	Choose an item	Design	ROW	Construction	

**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 <u>qualitative and quantitative</u> (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 bicyle 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 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 properous 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 <u>qualitative and quantitative</u> (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 multiuse path along SH-7.

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

The projects components of raised bicyle lanes, wider sidewalks and protected intersection provides separate facilties 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 <u>qualitative and quantitative</u> 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?

X Yes		No
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Describe, including supporting quantitative analysis

This project is within the City of Boulder's Area 1 Planning Area, as defined in the <u>Boulder Valley Comprehensive</u> <u>Plan</u> (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?

X Yes		No
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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?

X Yes	П	No
	ш	

	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?				
	Describe, including supporting quantitative analysis				
		rts and encourages the shift towards active transportation and transit mode hicle trips and supports a reduction in greenhouse gas (GhG) emissions.	s which re	educes	
	MV objective 7b	Connect people to natural resource or recreational areas.			
5.		lp complete missing links in the regional trail and greenways network or timodal connections that increase accessibility to our region's open space	X Yes	☐ No	
	Describe, including	supporting quantitative analysis			
	to users of a wider	7/Arapahoe Ave to Boulder Creek Greenway) Corridor Improvements expan range of ages and abilities to the Boulder Creek Greenway which serves as I g 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 ex	pand opportunities for residents to lead healthy and active lifestyles?	X Yes	☐ No	
	Describe, including	supporting quantitative analysis			
	transportation mod	7/Arapahoe Ave to Boulder Creek Greenway) Corridor Improvements suppodes of walking and bicycling. Additionally, numerous studies support the he over driving due to the associated walking portions of the transit trip.			
	MV objective 13	Improve access to opportunity.			
7.	by promoting relial	Ip reduce critical health, education, income, and opportunity disparities ble transportation connections to key destinations and other amenities?	∑ Yes	☐ No	
	_	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 he health and vitality?	lp support and contribute to the growth of the subregion's economic	⊠ Yes	☐ No	

Describe, including supporting quantitative analysis

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	weighт <b>10%</b>	
9. What percent of outside funding sources		60%+ outside funding sources High
(non-DRCOG-allocated Subregional Share	40%	30-59%Medium
funding) does this project have?		29% and belowLow

#### Part 3

#### **Project Data Worksheet – Calculations and Estimates**

(Complete all subsections applicable to the project)

#### A. Transit Use

1. Current ridership weekday boardings 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)  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: <b>{#3 X 25%}</b> 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: <b>{#3 X 25%}</b> 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 <b>{#6 x 9 miles}</b> . (= <b>the VMT reduced per day</b> ) (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

Ricyclo Uso Calculations	Year	2040
Bicycle Use Calculations	of Opening	Weekday Estimate

<b>3.</b> 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: {#3 X 50%} or other percent, if justified)	29	290			
<b>5.</b> = 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: {#5 X 30%} (or other percent, if justified)	9	87			
7. = Number of SOV trips reduced per day (#5 - #6)	20	203			
8. Enter the value of {#7 x 2 miles}. (= 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	1				

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

8. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)
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				
	1. Persons over age 65	3,423				
Use Current	2. Minority persons	10,591				
Census Data	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} = Reduced person hours of delay (Value higher than 1.4 due to high transit ridership must be justified by sponsor)	0
7. After project peak hour congested average travel time reduction per vehicle (includes persons, transit passengers, freight, and service equipment carried by vehicles). If applicable, denote unique travel time reduction for certain types of vehicles	0

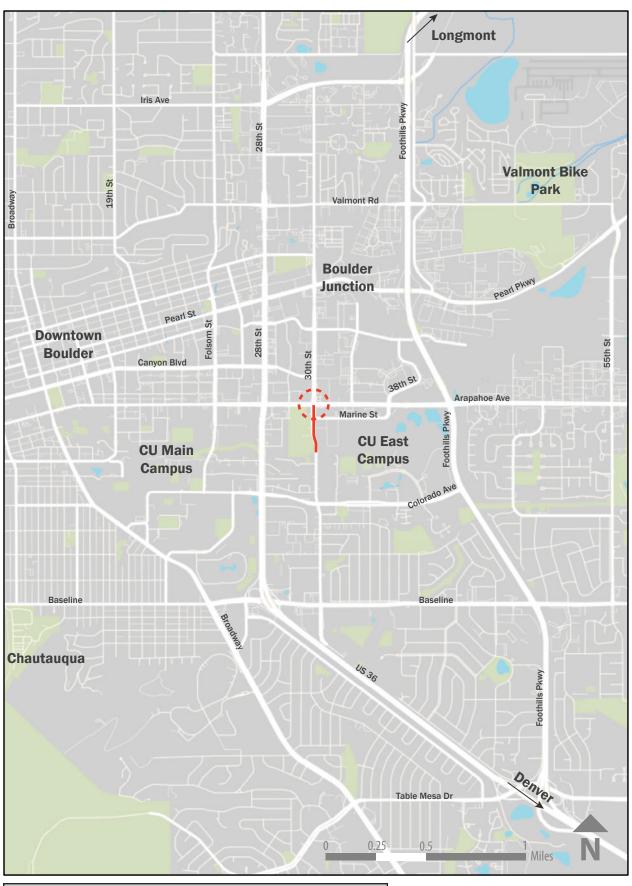
**8.** If values would be distinctly different for weekend days or special events, describe the magnitude of difference.

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

#### F. Traffic Crash Reduction 1. Provide the current number of crashes involving motor vehicles, bicyclists, and pedestrians (most recent **5-year** period of data) Fatal crashes 0 **Serious Injury** crashes 8 Sponsor must use industry 47 **Other Injury** crashes accepted crash reduction factors (CRF) or accident modification **Property Damage Only crashes** 144 factor (AMF) practices (e.g., 2. Estimated reduction in crashes applicable to the project scope NCHRP Project 17-25, NCHRP (per the five-year period used above) Report 617, or DiExSys Fatal crashes reduced 0 methodology). Serious Injury crashes reduced 0 Other Injury crashes reduced 0 0 **Property Damage Only crashes reduced 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. 0 3. Average Daily User Volume 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. 0 6. Average Daily User Volume 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
I.	Other Beneficial Variables (identified and calculated by the sponsor)	
1.		
2.		
3.		
J.	Disbenefits or Negative Impacts (identified and calculated by the sponsor)	
1.	Increase in VMT? If yes, describe scale of expected increase	☐ Yes ⊠ No
2.	Negative impact on vulnerable populations	
3.	Other:	

### **30th St Improvements**





Regional Director's Office 10601 W. 10th Street Greeley, CO 80634-9000

February 7, 2019

Gerrit Slatter City of Boulder 1101 Arapahoe Avenue - 3F Boulder, CO 80302 30<sup>th</sup> Street Multi-modal Improvements

Dear Mr. Slatter,

RE: CDOT Region 4 Support Request for DRCOG TIP Sub-Regional Call FY20-23

This letter is to inform you that the Colorado Department of Transportation (CDOT) Region 4 staff concurs with the following City of Boulder application for the DRCOG Sub-Regional FY20-23 TIP Call. This applies only to the 30<sup>th</sup> Street Multi-modal Improvements project, in the event it is selected by DRCOG as a sub-regional project around Summer 2019. If this project is awarded DRCOG funds at a later date, the Local Agency (LA) will need to re-affirm CDOT's concurrence at that time.

This concurrence is conditionally granted, based on the scope as described. CDOT does, however, retain final decision-making authority for all improvements and changes within CDOT's right of way. As the project progresses, the LA will need to work closely with CDOT Region staff to ensure CDOT's continued concurrence.

This project must comply with all CDOT and/or FHWA requirements, including those associated with clearance for right of way, utilities and environmental. All costs associated with clearances, including right of way acquisition, utilities relocation and environmental mitigation measures, such as wetland creation, must be included in the project costs. CDOT staff will assist in determining which clearances are required for your project. The CDOT Local Agency Manual includes project requirements to assist with contracting, design and construction, accessed at: http://www.coloradodot.info/business/designsupport/bulletins\_manuals.

Should you have any questions regarding this concurrence, or if your agency would like to schedule time to meet with a member of the CDOT Specialty Unit, please contact Karen Schneiders at (970) 350-2172.

Sincerely.

Johnny Olson, P.E.

**Region 4 Transportation Director** 

JWO:KAS:mbc

cc: Todd Cottrell, DRCOG

Long Nguyen

Katrina Kloberdanz

Kateyn Triggs

Karen Schneiders



From: Quinn, Chris < Chris.Quinn@RTD-Denver.com>

Sent: Friday, February 8, 2019 4:19 PM

To: Slatter, Gerrit <SlatterG@bouldercolorado.gov>

Cc: Stiffler, Natalie <StifflerN@bouldercolorado.gov>; Van Meter, Bill <Bill.VanMeter@RTD-

Denver.com>; Sirois, William < William.Sirois@RTD-Denver.com>

Subject: RE: City of Boulder Request for CDOT Support - DRCOG TIP support

#### Gerrit,

This email is to provide RTD's concurrence with the City of Boulder's TIP application requests. If funding is awarded for the Table Mesa or Downtown Boulder Transit Center projects, we will want to work closely with the City on the design details of these projects.

Please contact me if you would like to discuss further.

Thanks Chris

Chris Quinn
Project Manager
Regional Transportation District
Suite 700
1560 Broadway
Denver, CO 80202
(303) 299-2439
chris.guinn@rtd-denver.com

From: Slatter, Gerrit < <a href="mailto:SlatterG@bouldercolorado.gov">SlatterG@bouldercolorado.gov</a>>

Sent: Monday, January 07, 2019 3:24 PM

**To:** Quinn, Chris < <a href="mailto:Chris.Quinn@RTD-Denver.com">Cc: Stiffler, Natalie < <a href="mailto:StifflerN@bouldercolorado.gov">StifflerN@bouldercolorado.gov</a>>

Subject: City of Boulder Request for CDOT Support - DRCOG TIP support

Chris,

Please see attached the request for support documents for the City of Boulder for the DRCOG TIP process. Please let me know if you have any questions.

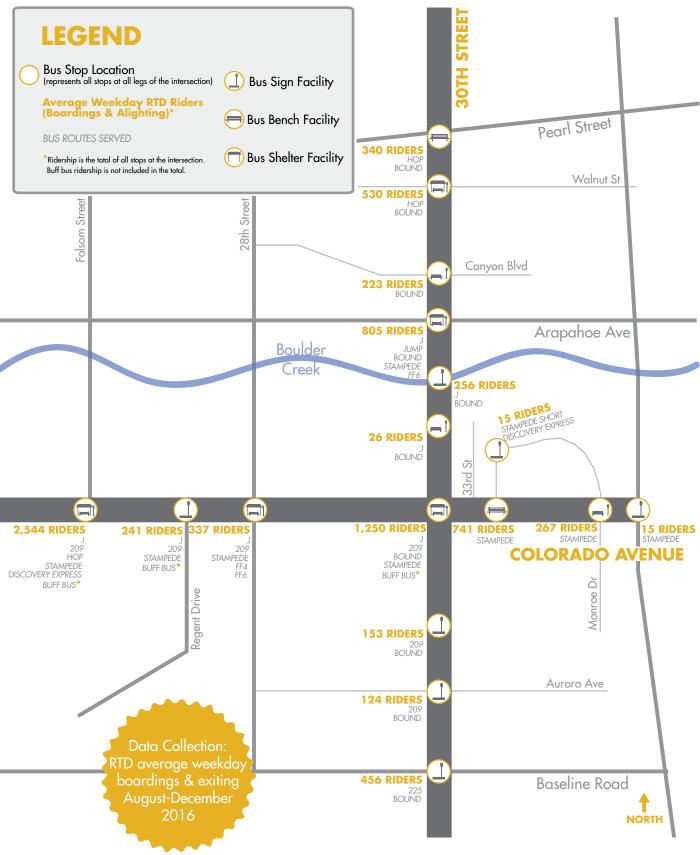
Thanks,

Gerrit Slatter, PE, PTOE
Principal Engineer – Transportation Capital Projects



Ph: (303) 441-1978 <u>slatterg@BoulderColorado.gov</u> Public Works Department 1101 Arapahoe Ave, 3rd Floor Boulder, CO 80306

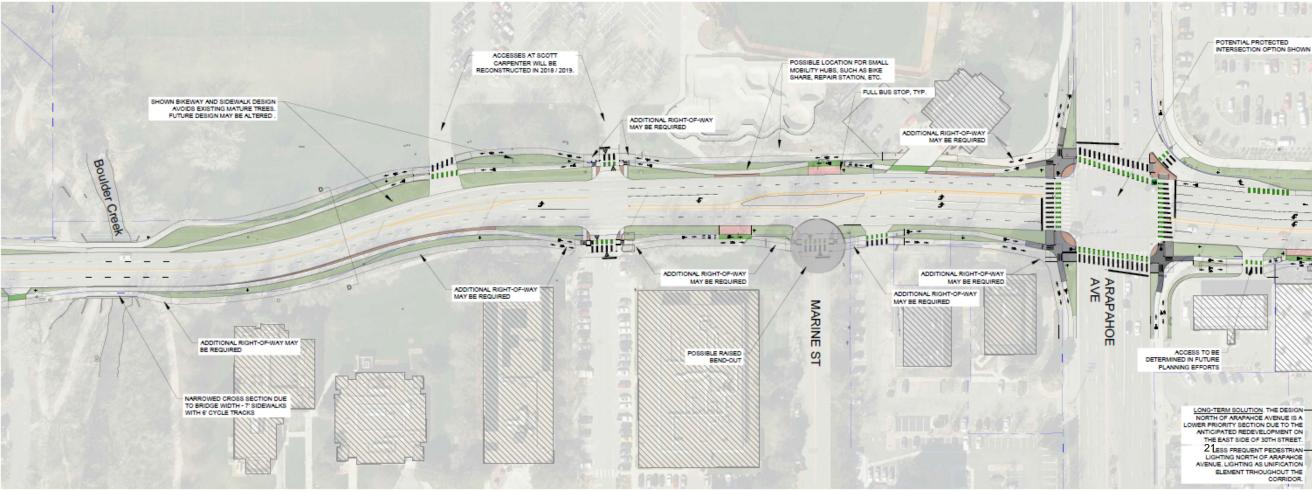
Figure 13: Fall 2016 RTD bus ridership by stop



Folsom and Iris Top Collision Locations (6 Collisions) Motor Vehicle Collisions Involving a Bicycle or Pedestrian 2012 - 2014 30th and Valmont (6 Collisions) (6 Collisions) **Broadway and Spruce** yon and Folsom (6 Collisions) (9 Collisions) **Broadway and Canyon** 30th and Arapahoe Arapahoe and Folsom (11 Collisions) (6 Collisions) Colorado and Regent 30th and Colorado (10 Collisions) (13 Collisions) 28th Frontage Rd and Colorado (8 Collisions) 29th and Baseline (6 Collisions) Broadway and Baseline 30th and Baseline 27th and Baseline (11 Collisions) (8 Collisions) Legend Top collision location (2012-2014) Top collision location (2008-2011) Broadway and Table Mesa (6 Collisions) Location (# collisions, 2012-2014)

Figure 7: Top collision mapping from 2016 Safe Streets Boulder report

Source: City of Boulder Safe Streets Report 2016



#### **CITY OF BOULDER**

#### 30th Street - Arapahoe to Boulder Creek Multi-Modal Improvements (West Side ONLY)

#### **Approximate TIP Project Budget Estimate**

	Remaining Budgeted Costs	Encumbered Costs	Invoice Amount	Item Balance	<u>Comments</u>
		CONSTRUC	CTION PH	IASE COSTS	
Roadway/Path Cost Estimate (RCE)	\$ 870,294.00	\$0.00		\$870,294.00 \$870,294.00	Per quantity takeoffs (Otak, Dec, 2018)
Mobilization	\$0.00	\$0.00		\$0.00 \$0.00	
Signal Replacement	\$100,000.00	\$0.00		\$100,000.00 \$100,000.00	Assumes \$400k per intersection - just 1 corner?
Traffic Control	\$0.00	\$0.00		\$0.00 \$0.00	
Landscaping/Irrigation Improvements	\$65,000.00	\$0.00		\$65,000.00 \$65,000.00	
Private Landscaping Restorations	\$0.00	\$0.00		\$0.00 \$0.00	
Roadway/Path Lighting Upgrades	\$44,000.00	\$0.00		\$44,000.00 \$44,000.00	Assumes 5% of RCE above
Functional Art	\$17,000.00	\$0.00		\$17,000.00 \$17,000.00	
City Utility Relocations	\$44,000.00	\$0.00		\$44,000.00 \$44,000.00	
Flood Mitigation Costs	\$9,000.00	\$0.00		\$9,000.00 \$9,000.00	
Wetland Mitigation Costs	\$9,000.00	\$0.00		\$9,000.00 \$9,000.00	
Miscellaneous	\$22,000.00	\$0.00		\$22,000.00 \$22,000.00	Assumes 2.5% of RCE above
Construction Cost Estimate (CCE)	: \$1,180,294.00	\$0.00			
Inflation (3.0%/year) Inflation (3.0%/year) Inflation (3.0%/year) Inflation (3.0%/year) Total Construction Estimate	\$36,000.00 \$38,000.00 \$39,000.00			65.2%	Year 1 Year 2 Year 3 Year 4 of total project budget

#### **Approximate Total TIP Project Budget Estimate**

TOTAL - EAST SIDE: \$2,197,000.00
TOTAL - WEST SIDE: \$2,064,000.00
GRAND TOTAL BUDGET: \$4,261,000.00

		DESIG	N PHASE COSTS	
Civil & Structural Design	\$118,000.00	\$0.00	\$118,000.00 \$118,000.00	Assumes 10% of CCE above
Landscape Architecture/Urban Design	\$24,000.00	\$0.00	\$24,000.00 \$24,000.00	Assumes 2% of CCE above
Geotechnical Engineering	\$12,000.00	\$0.00	\$12,000.00 \$12,000.00	Assumes 1% of CCE above
Electrical/Lighting Engineering	\$12,000.00	\$0.00	\$12,000.00 \$12,000.00	Assumes 1% of CCE above
Traffic Engineering	\$12,000.00	\$0.00	\$12,000.00 \$12,000.00	Assumes 1% of CCE above
Design Phase Potholing	\$12,000.00	\$0.00	\$12,000.00 \$12,000.00	Assumes 1% of CCE above
Design Surveying	\$30,000.00	\$0.00	\$30,000.00 \$30,000.00	Assumes 2.5% of CCE above
ROW Plans	\$18,000.00	\$0.00	\$18,000.00 \$18,000.00	Assumes 1.5% of CCE above
ROW/Easement Costs	\$ -	\$0.00	\$0.00 \$0.00	Assumes none - all City owned on west side of 30th
ROW Acquisition Consultant	\$0.00	\$0.00	\$0.00 \$0.00	Assumes none
Appraisal Costs	\$0.00	\$0.00	\$0.00 \$0.00	Assumes none
City Salaries (Design Phase)	\$30,000.00	\$0.00	\$30,000.00 \$30,000.00	Assumes 2.5% of CCE above
Wetland Evaluation/Design Costs	\$6,000.00	\$0.00	\$6,000.00 \$6,000.00	Assumes 0.5% of CCE above
Flood Evaluation/Design Costs	\$6,000.00	\$0.00	\$6,000.00 \$6,000.00	Assumes 0.5% of CCE above
Miscellaneous	\$12,000.00	\$0.00	\$12,000.00 \$12,000.00	Assumes 1% of CCE above
Subtotal:	\$292,000.00	\$0.00		
Inflation (3.0%/year): Inflation (3.0%/year): Inflation (3.0%/year):	\$9,000.00 \$9,000.00 \$9,000.00			Year 1 Year 2 Year 3
Total Design Phase Estimate:	\$319,000.00		15.7%	of total project budget

CONSTRUCTION ADMINISTRATION COSTS						
Construction Management	\$59,000.00	\$0.00			Assumes 5% of CCE above	
				\$59,000.00		
				\$59,000.00		
Material Testing	\$12,000.00	\$0.00			Assumes 1% of CCE above	
				\$12,000.00		
				\$12,000.00		
Design Services During Construction	\$12,000.00	\$0.00			Assumes 1% of CCE above	
				\$12,000.00		
				\$12,000.00		
City Salaries (Const. Phase)	\$59,000.00	\$0.00			Assumes 5% of CCE above	
				\$59,000.00		
				\$59,000.00		
CDOT Charges	\$12,000.00	\$0.00			Assumes 1% of CCE above	
				\$12,000.00		
				\$12,000.00		
Forestry Charges	\$12,000.00	\$0.00			Assumes 1% of CCE above	
				\$12,000.00		
				\$12,000.00		
Printing/Advertising	\$2,500.00	\$0.00			Nominal	
				\$2,500.00 \$2,500.00		
				\$2,500.00		
Miscellaneous	\$12,000.00	\$0.00			Assumes 1% of CCE above	
				\$12,000.00 \$12,000.00		
				\$12,000.00		
Subtotal:	\$180,500.00	\$0.00				
Inflation (3.0%/year):	\$5,400.00				Year 1	
Inflation (3.0%/year):	\$6,000.00				Year 2	
Inflation (3.0%/year):	\$6,000.00				Year 3	
Inflation (3.0%/year): Total Const. Admin. Estimate:	\$6,000.00 \$203,900.00				Year 4 of total project budget	
				10.070	or total project budget	
SUBTOTAL - ALL PHASES ABOVE:	\$1,852,000			0.40/	of Andrel wastered brookers	
10% Contingency: GRAND TOTAL BUDGET ESTIMATE:	<u>\$185,200</u> \$2,037,000			9.1%	of total project budget	
CITAL PODGET ESTIMATE.	Ψ2,001,000					

#### **CITY OF BOULDER**

#### 30th Street - Arapahoe to Boulder Creek Multi-Modal Improvements (East Side ONLY)

#### Approximate TIP Project Budget Estimate

Remaining Budgeted Costs	Encumbered Costs	Invoice Amount	Item Balance	<u>Comments</u>			
CONSTRUCTION PHASE COSTS							
\$ 868,132.50	\$0.00		\$868,132.50 \$868,132.50	Per quantity takeoffs (Otak, Dec, 2018)			
\$0.00	\$0.00		\$0.00 \$0.00	Included above			
\$100,000.00	\$0.00		\$100,000.00 \$100,000.00	Assumes \$400k per intersection - just 1 corner?			
\$0.00	\$0.00		\$0.00 \$0.00	Included above			
\$65,000.00	\$0.00		\$65,000.00 \$65,000.00	Assumes 7.5% of RCE above			
\$0.00	\$0.00		\$0.00 \$0.00	Included above			
\$43,000.00	\$0.00		\$43,000.00 \$43,000.00	Assumes 5% of RCE above			
\$17,000.00	\$0.00		\$17,000.00 \$17,000.00	Assumes 2% of RCE above			
\$43,000.00	\$0.00		\$43,000.00 \$43,000.00	Assumes 5% of RCE above			
\$9,000.00	\$0.00		\$9,000.00 \$9,000.00	Assumes 1% of RCE above			
\$9,000.00	\$0.00		\$9,000.00 \$9,000.00	Assumes 1% of RCE above			
\$22,000.00	\$0.00		\$22,000.00 \$22,000.00	Assumes 2.5% of RCE above			
\$1,176,132.50	\$0.00						
\$36,000.00 \$37,000.00 \$39,000.00			60.7%	Year 1 Year 2 Year 3 Year 4 of total project budget			
	\$ 868,132.50 \$ 868,132.50 \$ 0.00 \$ 100,000.00 \$ 100,000.00 \$ 30.00 \$ 43,000.00 \$ 43,000.00 \$ 9,000.00 \$ 17,000.00 \$ 17,000.00 \$ 17,000.00 \$ 17,000.00 \$ 17,000.00 \$ 17,000.00 \$ 17,000.00 \$ 17,000.00 \$ 17,000.00 \$ 17,000.00	\$868,132.50 \$0.00 \$0.00 \$0.00 \$100,000.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$17,000.00 \$0.00 \$17,000.00 \$0.00 \$9,000.00 \$0.00 \$1,176,132.50 \$0.00 \$35,300.00 \$37,000.00 \$37,000.00 \$37,000.00 \$39,000.00	Costs         Construction PF           \$ 868,132.50         \$0.00           \$0.00         \$0.00           \$100,000.00         \$0.00           \$65,000.00         \$0.00           \$0.00         \$0.00           \$43,000.00         \$0.00           \$9,000.00         \$0.00           \$17,000.00         \$0.00           \$365,000.00         \$0.00	Costs         Amount           CONSTRUCTION PHASE COSTS           \$ 868,132.50         \$0.00           \$0.00         \$0.00           \$0.00         \$0.00           \$100,000.00         \$0.00           \$0.00         \$0.00           \$0.00         \$0.00           \$65,000.00         \$0.00           \$0.00         \$0.00           \$0.00         \$0.00           \$43,000.00         \$0.00           \$43,000.00         \$17,000.00           \$17,000.00         \$0.00           \$9,000.00         \$9,000.00           \$9,000.00         \$9,000.00           \$17,000.00         \$17,000.00           \$17,000.00         \$22,000.00           \$35,300.00         \$35,300.00           \$37,000.00         \$31,176,132.50           \$30,000.00         \$30,000.00			

		DESIG	N PHASE COSTS	
Civil & Structural Design	\$118,000.00	\$0.00	\$118,000.00 \$118,000.00	Assumes 10% of CCE above
Landscape Architecture/Urban Design	\$24,000.00	\$0.00	\$24,000.00 \$24,000.00	Assumes 2% of CCE above
Geotechnical Engineering	\$12,000.00	\$0.00	\$12,000.00 \$12,000.00	Assumes 1% of CCE above
Electrical/Lighting Engineering	\$12,000.00	\$0.00	\$12,000.00 \$12,000.00	Assumes 1% of CCE above
Traffic Engineering	\$12,000.00	\$0.00	\$12,000.00 \$12,000.00	Assumes 1% of CCE above
Design Phase Potholing	\$12,000.00	\$0.00	\$12,000.00 \$12,000.00	Assumes 1% of CCE above
Design Surveying	\$29,000.00	\$0.00	\$29,000.00 \$29,000.00	Assumes 2.5% of CCE above
ROW Plans	\$18,000.00	\$0.00	\$18,000.00 \$18,000.00	Assumes 1.5% of CCE above
ROW/Easement Costs \$	100,000.00	\$0.00	\$100,000.00 \$100,000.00	Nominal - near Arapahoe intersection
ROW Acquisition Consultant	\$12,000.00	\$0.00	\$12,000.00 \$12,000.00	Assumes 1% of CCE above
Appraisal Costs	\$16,000.00	\$0.00	\$16,000.00 \$16,000.00	Assumes 2 at \$8k
City Salaries (Design Phase)	\$29,000.00	\$0.00	\$29,000.00 \$29,000.00	Assumes 2.5% of CCE above
Wetland Evaluation/Design Costs	\$6,000.00	\$0.00	\$6,000.00 \$6,000.00	Assumes 0.5% of CCE above
Flood Evaluation/Design Costs	\$6,000.00	\$0.00	\$6,000.00 \$6,000.00	Assumes 0.5% of CCE above
Miscellaneous	\$12,000.00	\$0.00	\$12,000.00 \$12,000.00	Assumes 1% of CCE above
Subtotal:	\$418,000.00	\$0.00		
Inflation (3.0%/year): Inflation (3.0%/year): Inflation (3.0%/year): Total Design Phase Estimate:	\$13,000.00 \$13,000.00 \$13,000.00 <b>\$457,000.00</b>		20.9%	Year 1 Year 2 Year 3 of total project budget

CONSTRUCTION ADMINISTRATION COSTS						
Construction Management	\$59,000.00	\$0.00	Assumes 5% of CCE above \$59,000.00 \$59,000.00			
Material Testing	\$12,000.00	\$0.00	Assumes 1% of CCE above \$12,000.00 \$12,000.00			
Design Services During Construction	\$12,000.00	\$0.00	Assumes 1% of CCE above \$12,000.00 \$12,000.00			
City Salaries (Const. Phase)	\$59,000.00	\$0.00	Assumes 5% of CCE above \$59,000.00 \$59,000.00			
CDOT Charges	\$12,000.00	\$0.00	Assumes 1% of CCE above \$12,000.00 \$12,000.00			
Forestry Charges	\$12,000.00	\$0.00	Assumes 1% of CCE above \$12,000.00 \$12,000.00			
Printing/Advertising	\$2,500.00	\$0.00	Nominal \$2,500.00 \$2,500.00			
Miscellaneous	\$12,000.00	\$0.00	Assumes 1% of CCE above \$12,000.00 \$12,000.00			
Subtotal:	\$180,500.00	\$0.00				
Inflation (3.0%/year): Inflation (3.0%/year): Inflation (3.0%/year): Inflation (3.0%/year): Total Const. Admin. Estimate:	\$5,400.00 \$6,000.00 \$6,000.00 \$6,000.00 \$203,900.00		Year 1 Year 2 Year 3 Year 4 9.3% of total project budget			
SUBTOTAL - ALL PHASES ABOVE: 10% Contingency: GRAND TOTAL BUDGET ESTIMATE:	\$1,984,000 <u>\$198,400</u> \$2,182,000		9.1% of total project budget			



February 22, 2019

Kathleen Bracke, Public Works Interim CO-Director City of Boulder Department of Transportation
Gerrit Slatter, Principal Projects Manager City of Boulder Transportation Department 1739 Broadway
Boulder, CO 80302

Dear Ms. Bracke and Mr. Slatter:

On behalf of the University of Colorado Boulder, I am writing to express support for the Transportation Improvements Program application by the City of Boulder to design and construct the **30th Street (SH7/Arapahoe Ave-Boulder Creek) Corridor Improvements**. The continued development of our East Campus has significantly increased bicycle and pedestrian travel to and from the Main and East campuses. Improving the streetscape, walks and vehicular crossings on 30th Street from Arapahoe supports the university's goals for safe multimodal transportation. The University of Colorado is demonstrating its commitment to this project by committing to fund \$200,000 as part of the local match for this project.

The University of Colorado looks forward to this partnership opportunity with the City of Boulder and the Federal Highway Adminstration on this key transportation connection.

Please feel free to contact me if you have any further questions.

Sincerely,

David Kang

Vice Chancellor for Infrastructure and Sustainability

Project	Population 2020*	Jobs 2020*	Population 2040*	Jobs 2040*
Interim Downtown Boulder Station Improvements	37,463	40,860	38,410	44,763
30th St Improvements (Arapahoe Ave/SH7 - Boulder Creek)	40,432	45,355	42,627	55,859
Hop Transit Service Extension	40,195	59,777	45,241	76,375
Table Mesa Park-n-Ride Access	23,661	5,592	23,659	5,768
SH7/Arapahoe Avenue Multi-Use Path and Transit Stop Improvements	37,916	54,656	39,777	69,926
SH7/Arapahoe Avenue Bridge Replacement at Boulder Creek	30,262	48,684	31,545	61,220

<sup>\*</sup> Data based on DRCOG projections model. Reported data is for all TAZ within 1 mile of project boundary. TAZ that are partially and wholly inside the 1 mile distance are included in the sum.

						Table Mesa park-n-Ride Multi-
			SH7/Arapahoe Avenue Bridge		Downtown Boulder	Use Path and Access
	30th Street Improvements	<b>HOP Transit Service Expansion</b>	Replacement at Boulder Creek	SH7/Arapahoe Avenue	Station Improvements	Improvements
Total Population	46568	40398	38157	43855	41776	30900
Households	17846	15830	14282	17055	15697	12123
Person over age 65 within 1 mile	3423	3616	2817	4008	3047	3880
Minority persons within 1 mile	10591	9495	9565	11015	7344	5428
Household Poverty	5024	3173	3866	4277	4356	1601
Linguistically-challenged persons within 1 mile	835	1014	755	925	650	359
Individuals with disabilities within 1 mile	4011	2997	3415	3690	3117	3117
Households without a motor vehicle within 1 mile	2351	1710	2015	2243	1578	723
Children ages 6-17 within 1 mile	2641	3433	2531	3101	2535	3217
CDPHE Health Facilities	12	21	18	19	16	8
*Figures based on DRCOG provided census data						

#### **City of Boulder - 2019 TIP Application Data Sources**

Project	30th St Improvements (Arapahoe Ave/SH7 to Boulder Creek)			
Bicycle Use	City of Boulder - Turning Movement Count Program			
	30th St Corridor Study - Bicycle Data			
	City of Boulder - Travel Diaries			
	City of Boulder - Transportation Master Plan			
Pedestrian Use	City of Boulder - Turning Movement Count Program			
	30th St Corridor Study - Pedestrian Data			
	City of Boulder - Travel Diaries			
	City of Boulder - Transportation Master Plan			
Traffic Crash	City of Boulder Police Department - Transportation Crash Database			
Reduction				

Project	SH7/Arapahoe Ave Improvements (38th St to Cherryvale Rd)			
Bicycle Use	City of Boulder - Turning Movement Count Program			
	City of Boulder - Travel Diaries			
	City of Boulder - Transportation Master Plan			
Pedestrian Use	City of Boulder - Turning Movement Count Program			
	City of Boulder - Travel Diaries			
	City of Boulder - Transportation Master Plan			
Traffic Crash	City of Boulder Police Department - Transportation Crash Database			
Reduction	CMF ID 9250 - Install Shared Path			

Project	SH7/Arapahoe Ave Boulder Creek Bridge Replacement			
Bicycle Use	City of Boulder - Turning Movement Count Program			
	City of Boulder - 38th/Arapahoe Av Multi-Use Path Permanent Counter			
	City of Boulder - Travel Diaries			
	City of Boulder - Transportation Master Plan			
Pedestrian Use	City of Boulder - Turning Movement Count Program			
	City of Boulder - 38th/Arapahoe Av Multi-Use Path Permanent Counter			
	City of Boulder - Travel Diaries			
	City of Boulder - Transportation Master Plan			
Traffic Crash	City of Boulder Police Department - Transportation Crash Database			
Reduction	CMF ID 9250 - Install Shared Path			

Project	Table Mesa Park-n-Ride Access Improvements
Bicycle Use	City of Boulder - Turning Movement Count Program
	City of Boulder - Travel Diaries
	City of Boulder - Transportation Master Plan
Pedestrian Use	City of Boulder - Turning Movement Count Program
	City of Boulder - Travel Diaries
	City of Boulder - Transportation Master Plan
Traffic Crash	City of Boulder Police Department - Transportation Crash Database
Reduction	