Part 1 Base Information

1. Project Title	**US 36 Bike N Ride Shelters, Amenities, Operations & Marketing**
2. Project *Start/End* points or Geographic Area *Provide a map with submittal, as appropriate*	US 36 & Broomfield Station US 36 & Flatiron Station
3. Project Sponsor *(entity that will construct/ complete and be financially responsible for the project)*	City & County of Broomfield (project applicant)
4. Project Contact Person, Title, Phone Number, and Email	Sarah Grant, Transportation Manager City & County of Broomfield 303-438-6385 SGrant@broomfield.org
5. Does this project touch CDOT Right-of-Way, involve a CDOT roadway, access RTD property, or request RTD involvement to operate service?	☒ Yes ☐ No *If yes, provide applicable concurrence documentation with submittal*

6. What planning document(s) identifies this project?

☐ DRCOG 2040 Fiscally Constrained Regional Transportation Plan (2040 FCRTP)

☒ Local plan:	Broomfield Transportation Plan (page 7) https://www.broomfield.org/DocumentCenter/View/14606/Transportation-Plan-071216?bidId=
☒ Other(s):	US 36 First & Final Mile Study (2013) Page 39 https://commutingsolutions.org/regional-planning/us-36-first-and-final-mile-study/ Northwest Corridor Pedetrian and Bicycle Accessibility Study (2014) page 20 https://drcog.org/sites/default/files/resources/NW%20Corridor%20Summary%20Report__Complete_Reduced.pdf

Provide link to document/s and referenced page number if possible, or provide documentation with submittal

7. Identify the project's **key elements**.

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

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

- ☐ Roadway Pavement Reconstruction/Rehab
- ☐ Bridge Replace/Reconstruct/Rehab
- ☐ Study
- ☒ Design
- ☐ Transportation Technology Components

☒ Other: Construction, Operations & Marketing

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

MV 4: The regional transportation system is well-connected and serves all modes of travel

MV5: The transportation system is safe, reliable and well-maintained

MV 10: The built and natural environment supports healthy and active choices

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

Design & construct the remaining 3 Bike N Ride shelters at US 36 & Broomfield Station (1) and US 36 & Flatiron Station (2) to support first and final cycling trips by providing more secure mid to long term bicycle parking for commuters.

Funding may also support, as funding permits, other bicycle parking, and necessary amenities to support cycling commuters. These amenities could include: additional or replacement bicycle racks, lockers, "fix-it" stations, air pumps, e-bike charging areas and water bottle refill stations, if feasible.

Funding will also support operations and marketing upon completion of construction through FFY23. It is anticipated that Commuting Solutions will operate and market the facility to commuters.

10. What is the status of the proposed project?

The completion of the project fulfills the top priority (#1) recommendation of the US 36 First and Final Mile Plan completed in 2013, before the initiation of the US 36 Flatiron Flyer Bus Rapid Transit (BRT) service which opened in 2016. The plan aimed to understand the most viable amenities and programs to support the new BRT service and how to improve the "first and last" mile to a transit trip.

Following this study, the Northwest Corridor Bicycle and Pedestrian Accessibility Study was completed in 2014, which further refined several key recommendations including the secure bicycle parking. The study identified concept locations, appropriate scale, and size, maintenance and operations considerations. Both these studies were supported with DRCOG funding.

In addition, the Broomfield Pedestrian and Bicycle Assessment also identified secure bicycle parking as an essential amenity to support cycling and commute trips to the US 36 Bus Rapid Transit Stations
Currently, one Bike N Ride Shelter is scheduled for construction in 2019 at the eastbound side of US 36 & Broomfield Station. The remaining three are not currently funded. This project was also supported by DRCOG funding.

Bike N Ride shelters were identified as one of the top priorities of the US 36 First & Final Mile Study. The study recommended a shelter to be installed at each Bus Rapid transit station located near both gates at each station

along the US 36 corridor.

As of today, there are several operational shelters located at the Downtown Boulder Station, Table Mesa, and McCaslin/Superior. A shelter will be constructed at Sheridan Station at the same time as Broomfield in 2019. Upon completion, Broomfield's commitment to construct Bike N Ride shelters at US 36 stations in Broomfield will be complete.

https://commutingsolutions.org/regional-planning/us-36-first-and-final-mile-study/

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 smaller amount could be considered, the number of shelters and ammenities may need to be reduced or Broomfield may seek additional local funding to complete.

A. Project Financial Information and Funding Request

1. Total Project Cost		**$650,000**
2. Total amount of DRCOG Subregional Share Funding Request	**$520,000**	**80% of total project cost**
3. Outside Funding Partners ***(other than DRCOG Subregional Share funds)*** List each funding partner and contribution amount.	**$$ Contribution Amount**	**% of Contribution to Overall Total Project Cost**
	$130,000	20%
	$	0%
	$	0%
	$	0%
	$	0%
	$	0%
Total amount of funding provided by other funding partners *(private, local, state, Regional, or federal)*	**$130,000**	

Funding Breakdown (year by year)*

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

	FY 2020	FY 2021	FY 2022	FY 2023	Total
Federal Funds	$48,000	$384,000	$44,000	$44,000	**$520,000**
State Funds	$	$	$	$	**$0**
Local Funds	$12,000	$96,000	$11,000	$11,000	**$130,000**
Total Funding	$60,000	$480,000	$55,000	$55,000	**$650,000**
4. Phase to be Initiated *Choose from Design, ENV, ROW, CON, Study, Service, Equip. Purchase, Other*	Design	CON	Other	Other	

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? What is the impact on the greater Broomfield community?
The project furthers the goals and policy of the Broomfield Comprehensive Plan and Transportation Plan.

Policy TS C4: Facilitate connections between travel modes and improve first and final mile access to transit
Action Step TS C4.1: Provide covered and secure bike parking at transit stations.

the project was the number one recommendation from the US 36 First and Mile Study, completed in 2013. The project will realize full implementation of the recommendation approximately 4 years after opening of the BRT service in 2016. It is critical that Broomield works implement identified amenities in a timely fashion to support first and final mile access to the station that supports intermodal conectivity to our cooridor communities along US 36 and to the greater region. Fulfillment of project supports the US 36 Mayors and Commissioner commitment to a robust network of multimodal options throughout our region.

The project supports the US 36 Bus Rapid Transit station and provides a key amenity to support the option to bicycle to access the Regional Transit System as a first and final mile option and furthers Broomfield's transportation vision of a well-connected system that supports all modes, all ages, and abilities while promoting economic development and reducing dependence on the single occupant vehicle and minimizing environmental impacts.

2. Does the proposed project cross and/or benefit multiple **municipalities**? If yes, which ones and how?
The project is located at US 36 BRT stations in Broomfield that serve the regional transit system. It is likely that there could be users of the facilities that come from other municipalities in the region, most likely from Boulder, Superior, Louisville, Westminster and/or Denver.

Employees and commuters that work in Broomfield from other municipalities in the Denver Metro will have the option and ability to leave a bicycle overnight in the secure shelter to use as a last mile connection to work.

3. Does the proposed project cross and/or benefit another **subregion(s)**? If yes, which ones and how?
The project is located at US 36 BRT stations in Broomfield that serve the regional transit system. It is likely that there could be users of the facilities that come from other subregions, most likely from Boulder, Adams Jefferson and/or Denver.

Employees and commuters that work in Broomfield from other subregions in the Denver Metro will have the option and ability to leave a bicycle overnight in the secure shelter to use as a last mile connection to work.

4. How will the proposed project address the specific transportation problem described in the **Problem Statement** *(as submitted in Part 1, #8)*?
MV 4: The regional transportation system is well-connected and serves all modes of travel
The bicycle shelters are an essential amenity that supports intermodal transportation.

MV 5: The transportation system is safe, reliable and well-maintained

Safety of personal property is increased, which makes taking intermodal trips more reliable, knowing your personal property will be intact after being locked up overnight or while you are gone during the day. Intermodal cycling trips also allow commuters increased flexibility as their first or final mile trip will not be dependent on local transit service to get them to their destination.

MV 10: The built and natural environment supports healthy and active choices
Providing a secure place to park is a critical amenity that supports bicycle commuting. By increasing available options that promote active transportation as a viable mode of transportation allow commuters the freedom of choice to make physical activity a regular part of daily life by way of their commute.

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 completed project will allow people and businesses to thrive by supporting multimodal and intermodal transportation options.

Investing an amenity that secures personal property to support intermodal transportation options is one of many aspects that cumulatively make the Broomfield subregion and region as a whole a highly desirable place to live work and raise a family.

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

This project increases the reliability bicycle to transit trips, reducing door-to-door single occupant vehicle trips.

The project is a key amenity that supports first and mile final trips to/from transit by bicycle.

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

Since 2012 communities along the US 36 corridor have been working collaboratively with Commuting Solutions (US 36 Transportation Demand Management Organization) to see that specifically first and final mile connections are made to support the US 36 BRT service. These communities include City of Boulder, Boulder County, City of Louisville, Town of Superior, and the City of Westminster.

Commuting Solutions and communities collaborated on the 2013 US 36 First and Final Mile Study and the 2014 Northwest Corridor Pedestrian and Bicycle Accessibility Study. DRCOG funded these studies with a local match from communities. Since the completion of the studies communities have committed to implementing the recommendation.

Upon completion of construction of the project, Broomfield will use funds from this project to initiate operations and marketing. Commuting Solutions (a DRCOG Transportation Demand Management Organization) will be the operator of the facility, interfacing with US 36 commuters and supporting commutes with active transportation options.

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 project will provide benefit to current and potential future users of the bicycle network, especially vulnerable populations that cannot or are not able to drive.

Within one mile of Broomfield Station there are approximately
> 4,880 households
> 9,000 jobs
> 14 health facilities
> 1250 seniors over 65
> 350 low income households
> 180 minorities
> 650 individuals with a disability
> 230 households without a vehicle
> 1,970 children 6-17 years old

Within one mile of Flatiron Station
> 7,300 residents
> 10,500 jobs
> 750 seniors over 65
> 100 minorities
> 620 low-income households
> 320 individuals with a disability
> 178 householdls without a vehicle
> 840 children 6-17 years old

These populations include children and teenagers that do not drive, persons that are unable to drive due to disability (but still may be able to operate a bicycle), low-income families that do not have access to a vehicle or one-car households that must share one vehicle. Bicycle facilities and amenities provides access for a wide range of ages, incomes, and abilities and offeres felixiblity to access the regioanl transit system when local trasnit service limited..

The project supports connections to the regional transportation network from which can potentially access a wide range of health services.

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

Completing secure bicycle shelters located near the boarding gates at each of the US 36 BRT stations in Broomfield increases the reliability of the multimodal network by adding another layer of security for commuters accessing the station by bicycle.

Commuters that live in Broomfield that use the bicycle as a "first-mile" solution can feel confident in leaving their bicycle all day at the station, knowing that their bicycle will still be intact when they return at the end of the day. Commuters that choose to use the bicycle as a "last mile" solution that may be using the US 36 BRT corridor from other municipalities and subregions will feel confident that they can leave their bicycle at the station overnight when personal property is most vulnerable to theft.

In addition, the cumulative impact of having a bicycle shelter available near each boarding gate at the US 36 BRT stations indicates predictability of knowing that there is a secure place to park at bicycle no matter where one chooses to access the US 36 BRT service.

The bicycle is a convenient and affordable, and sometimes faster solution than using other modes. In particular, if the commuter is accessing the station in off-peak time or late at night when local service may not be available. Commuters know they can rely on the BRT service with frequency for most of the day but not necessarily local

service. The bicycle offers flexibility. Increasing access to use a bicycle as a first and/or final mile solution improves the reliability of the existing multimodal network.

3. Describe how the project will **improve transportation safety and security.**
The project increases the safety and security of personal property while commuters are at work or home, reducing the opportunity for theft or vandalism.

The increase in safety and security of bicycles are critical to building a consistent bike to bus trips to the station. IF a commuter has a bike stolen or stripped, even just once, they may decide not to use the BRT service at all. It is essential that our transit facilities and amenities are safe and secure.

The safety of bicycle property is particularly important to vulnerable populations that are low-income. A stolen bicycle or bicycle that has been stripped of its parts (wheels, seats, panniers, etc.) may not be able to be replaced right away, severely impacting the commuters ability to reliably get to work and place additional strain on household budgets and ability to maintain employment.

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

WEIGHT **20%**

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

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

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

Describe, *including supporting quantitative analysis*

The project will help support bicycle trips to/from the Bus Rapid transit stations and the urban centers, and to some degree, supports a focus of development of transit-supportive development in the urban centers. It is challenging to say what the direct impact the facility will have on future growth.

MV objective 3	**Increase housing and employment in urban centers**.

2. Will this project help establish a network of clear and direct multimodal connections within and between urban centers, or other key destinations? ☒ Yes ☐ No

Describe, *including supporting quantitative analysis*

The project will help support an increase in housing and employment in urban centers to some degree. The amenities increases accessibility of the BRT station from the civic center.

Both stations are located in or in proximity to the Urban Centers:
> Original Broomfield
> Broomfield Urban Transit Village
> Interlocken/Parkway Circle

Bikability is seen as a quality of life indicator that attracts residents and employers. Complete BRT amenities may attract more businesses and denser residential communities to locate close to the BRT and in the subregion's urban centers while promoting the livability of the neighborhood and regional multimodal access options.

The project will increase intermodal bicycle access to the BRT stations in Broomfield:

US 36 Broomfield Station
- 112 - to 112th Ave Front Range Community College
- 120 - to 120th Ave commercial/employment and Brighton
- 225 - US 287 to Lafayette & Boulder
- 228 - Interlocken, Superior & Louisville
- 76 - Wadsworth to SW Plaza
- Flatiron Flyer Bus Rapid Transit to Denver and Boulder
- LD - Longmont/Denver regional service via US 287

> Broomfield & Interlocken/Westmoor FlexRide

Flatiron Station
- Flatiron Flyer Bus Rapid Transit to Denver and Boulder
- AB - Denver Airport
- Interlocken/Westmoor Flex Ride

MV objective 4	**Improve or expand the region's multimodal transportation system, services, and connections**.

3. Will this project help increase mobility choices within and beyond your subregion for people, goods, or services? ☒ Yes ☐ No

Describe, *including supporting quantitative analysis*
This project increases mobility choices within and beyond the subregion for commuters.

The stations are also accessible from the US 36 Bikeway. the bikeway counter located just east of the US 36 Broomfield Station counted 72,800 cycling trips in 2017 and 1,150 on Bike to Work Day in 2018. These numbers show the strong bicycle ridership and potential to increase multimdoal commuter trips to the station. Providing a secure place to park is an essential piece to encouraging bike to transit trips.

In 2017 Broomfield staff conduct a station utiliazation of the bike racks at Broomfield station and found that over the course of 14 sample days there were 109 bicycle parked at the station, on average about 8 per day were locked visibly at the station area.

The locker lease rates were at 40%- 50%. Using lockers can be more challengeing to access as they must get a subscription from RTD and less flexible since only one person can use it. Shleters will provide more flexiblity in use and access while still proving an extra layer of security.

Increasing safety and reliability of bicycle travel as a first and final mile solution to transit increases mobility options for Broomfield resident and commuters that may live outside the subregion.

Access to the greater regional multimodal network is listed above in question 2.

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*
Increasing accessibility and attractiveness bicycling to more people reduces future potential air quality impacts. Increasing access to bicycling for short utilitarian trips or improving access to transit to access the regional transit system (rather than driving to Park N Rides) can contribute significantly to air quality and emissions reductions.

The 2009 National Household Travel Survey identified that Americans drive 10 billion miles a year that are trips one mile or less. The EPA estimates that the average passenger vehicle emits about 4.6 metric tons of carbon dioxide per year (assuming 11,500 miles). If just 5% of those miles or approximately 1.5 miles a day could be converted to a walking or cycling trip 230,000 metric tons per year could be saved per vehicle.

Strava data indicated that more than 270 Strava cyclists had accessed Broomfield station and 115 at Flatiron Station Transit boarding areas from June 2016 to May 2017, it is unclear how many have parked their bicycle at the station. Strava cyclists represent just a fraction of actual cyclists. The improvements could support hundreds of unique commuters, shifting tens of thousands of miles of short trips a year, reducing millions of tons of carbon emissions and other pollutants each year.
Source: https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle
http://metro-static.strava.com/dataView/CO/201606_201705/RIDE/#17/39.90656/-105.08603

	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*
This project does not directly impact access to open spaces or complete missing links in the trail network that increase access to open spaces.

	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*

Completing secure bicycle parking will increase opportunities for Broomfield subregion residents and employees to make active transportation and recreation a more regular part of daily activity. A built environment that supports all ages and abilities active transportation supports the option to live more active and healthy lifestyles.

According to the American Public Health Association cites that active transportation commuting is associated with 11% reduction in cardiovascular risk, active transportation a part of everyday travel is as effective as structured workouts for improving health, and teens that walk and bike to school watch less TV and are less likely to smoke than teens that drive to school.

https://www.apha.org/-/media/files/pdf/topics/transport/apha_active_transportation_fact_sheet_2010.ashx?la=en&hash=E2DD3E9B1BFD861B57C490A5FA0FC18FC201FE15

	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*

Yes. The bicycle is the most affordable, efficient and flexible mode of transportation to access the US 36 BRT and the regional transit network.

Increasing reliability of access and improving safety and security residents and employees of the Broomfield subregion will have opportunities to reduce critical disparities by increasing options to access a wide variety of employment destinations, health services, and places of education.

Income disparities could be reduced by allowing commuters the option to reduce vehicle ownership, increasing household funds that could be spent on health, education, and resources that may increase opportunities.

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*

Investing in the subregion's multimodal and intermodal infrastructure increases livability and quality of life.

Cumulatively, these incremental investments build up the subregions economic competitiveness and attract residents and employees to the subregions urban centers in Original Broomfield, Broomfield Urban Transit Village and Interlocken/Parkway Circle.

Amenities such as secure bicycle parking at transit stations and other ameniteis that support active transport commuting are some of the little things that add up to increase quality of life and make broomfield a great place live, work and play, while increasing accessing the amenities and destiantions of greater Denver Metro.

D. Project Leveraging

WEIGHT 10%

9. What percent of outside funding sources (non-DRCOG-allocated Subregional Share funding) does this project have?	20%	60%+ outside funding sources ..... High 30-59% ..... Medium 29% and below ..... Low

Commuting Solutions

287 Century Circle, Suite 103 Louisville, CO 80027 303.604.4383
commutingsolutions.org

February 22, 2019

Ms. Sarah Grant
Broomfield Sub-Regional Forum
City & County of Broomfield
One DesCombes Drive
Broomfield, CO 80020

Dear Sarah:

Commuting Solutions is pleased to support the City & County of Broomfield's Bike-n-Ride shelter capital construction and operations project inclusion for the DRCOG TIP sub-regional funding.

This project will build upon the many years of collaboration between the US 36 Mayors & Commissioners Coalition, CDOT and RTD to improve first and final mile connectivity to the US 36 Bus Rapid Transit (BRT) service and the US 36 Bikeway. This funding will enable Broomfield to complete the capital construction for the final three bike shelters in Broomfield and support ongoing operations and administration. Bike-n-Ride shelters were the number one corridor-wide recommendation in the US 36 First and Final Mile Study. We are thrilled to partner with the city, RTD and the rest of the US 36 corridor communities to deploy this corridor-wide recommendation, and we look forward to serving a valuable role to administer the program for the general public. We believe this project will enhance transit, bicycle and pedestrian mobility throughout the corridor and lead to increased multimodal travel by providing convenient options to completing the last or first mile of a multimodal trip.

Please contact me at 303.604.4383 if you need further information. Commuting Solutions looks forward to partnering with the City & County of Broomfield on this important project.

Sincerely,

Audrey DeBarros
Executive Director

COLORADO
Department of Transportation
Region 1

February 8, 2019

Sarah Grant
Transportation Manager, City and County of Broomfield
1 Descombes Drive
Broomfield, CO 80020

RE: CDOT Region 1 Support Request for DRCOG TIP Subregional Call FY20-FY23

Dear Ms. Grant,

This letter is to inform you that the Colorado Department of Transportation (CDOT) Region 1 concurs with the following City and County of Broomfield application for the DRCOG Subregional FY20-23 TIP Call. This concurrence applies only for the Broomfield Transit Needs Assessment and Pilot project, in the event this project is selected by the Forum and DRCOG as a Subregional project in April/May 2019. If this Subregional project is awarded DRCOG funds at a later date, the local agency will need to reaffirm 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 local agency will need to work closely with CDOT Region staff to ensure CDOT's continued concurrence.

Regardless of funding source, if a local agency uses Federal and/or State funds in the design of a project, they must complete construction of the project within the contract term stated in the IGA, or reimburse CDOT/FHWA for the expended funds. Any cost overruns that exceed federal and state amounts listed on Exhibit C of the IGA will be the responsibility of the Local Agency.

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 you in determining which clearances are required for your project. The CDOT Local Agency Manual includes project requirements to assist with contracting, design, and construction, which can be 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 CDOT specialty units, please contact JoAnn Mattson at (303) 757-9866.

Sincerely,

Paul Jesaitis
CDOT Region 1 Transportation Director

BROOMFIELD GOOGLE APPS

Sarah Grant <sgrant@broomfield.org>

CDOT & RTD Concurrence - Broomfield Subregional TIP Projects

Quinn, Chris <Chris.Quinn@rtd-denver.com> Fri, Feb 8, 2019 at 4:22 PM
To: Sarah Grant <sgrant@broomfield.org>
Cc: Tom Schomer <tschomer@broomfield.org>, Katie Allen <kallen@broomfield.org>, Fonda Buckles <fbuckles@broomfield.org>, "Sirois, William" <William.Sirois@rtd-denver.com>, "Van Meter, Bill" <Bill.VanMeter@rtd-denver.com>

Sarah,

This email is to provide RTD's concurrence for the City & County of Broomfield's TIP application requests.

For the Bike-n-Ride shelters, we will want to work closely with the City on the project design details.

Please contact me if you would like additional information.

Thanks

Chris Quinn

Project Manager

Regional Transportation District

Suite 700

1560 Broadway

Denver, CO 80202

(303) 299-2439

chris.quinn@rtd-denver.com

From: Sarah Grant <sgrant@broomfield.org>
Sent: Monday, January 07, 2019 4:56 PM
To: Danny Herrmann <danny.herrmann@state.co.us>; Quinn, Chris <Chris.Quinn@RTD-Denver.com>
Cc: Tom Schomer <tschomer@broomfield.org>; Katie Allen <kallen@broomfield.org>; Fonda Buckles <fbuckles@broomfield.org>
Subject: CDOT & RTD Concurrence - Broomfield Subregional TIP Projects

Hello Danny & Chris,

Please find attached below the required forms for CDOT & RTD's consideration of support for Broomfield Subregional projects that may be considered for submittal.

The document title clarifies if CDOT, RTD or both entities are requested to consider the project.

Please let me know if you have any questions or need clarification.

Thank you,

Sarah

Sarah Grant
Transportation Manager
City and County of Broomfield
Community Development • Planning Division
One DesCombes Drive • Broomfield CO 80020

sgrant@broomfield.org

303-438-6385

Part 3 Project Data Worksheet – Calculations and Estimates

(Complete all subsections applicable to the project)

A. Transit Use

1.	Current ridership weekday boardings	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**

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

9. If values would be distinctly greater for weekends, describe the magnitude of difference:

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

B. Bicycle Use

1.	Current weekday bicyclists	0
2.	Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	20,500	19,600	**40,100**
2040		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. (Example: **{#3 X 50%}** *or other percent, if justified)*	0	0
5. = Initial number of new bicycle trips from project (#3 – #4)	0	0
6. Enter number of the new trips produced (from #5 above) that are replacing an SOV trip. (Example: **{#5 X 30%}** *(or other percent, if justified)*	0	**0**
7. = Number of SOV trips reduced per day (#5 - #6)	0	0
8. Enter the value of **{#7 x 2 miles}**. (= the VMT reduced per day) *(Values other than 2 miles must be justified by sponsor)*	0	0
9. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	0	0
10. If values would be distinctly greater for weekends, describe the magnitude of difference:		
11. If different values other than the suggested are used, please explain here:		

C. Pedestrian Use

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

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	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	2,000
	2. Minority persons	280
	3. Low-Income households	970
	4. Linguistically-challenged persons	280
	5. Individuals with disabilities	970
	6. Households without a motor vehicle	400
	7. Children ages 6-17	2,000
	8. Health service facilities served by project	14

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)*		Sponsor must use industry accepted crash reduction factors (CRF) or accident modification factor (AMF) practices *(e.g., NCHRP Project 17-25, NCHRP Report 617, or DiExSys methodology).*
Fatal crashes	0	
Serious Injury crashes	0	
Other Injury crashes	0	
Property Damage Only crashes	0	
2. Estimated reduction in crashes applicable to the project scope *(per the five-year period used above)*		
Fatal crashes reduced	0	
Serious Injury crashes reduced	0	
Other Injury crashes reduced	0	
Property Damage Only crashes reduced	0	

G. Facility Condition

Sponsor must use a current industry-accepted pavement condition method or system and calculate the average condition across all sections of pavement being replaced or modified.
Applicants will rate as: Excellent, Good, Fair, or Poor

Roadway Pavement

1. Current roadway pavement condition	Choose an item
2. Describe current pavement issues and how the project will address them.	
3. Average Daily User Volume	0

Bicycle/Pedestrian/Other Facility

4. Current bicycle/pedestrian/other facility condition	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

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:	