Part 1 Base Information

1. Project Title	**Active Transportation Wayfinding Pilot**
2. Project *Start/End* points or Geographic Area *Provide a map with submittal, as appropriate*	City & County of Broomfield
3. Project Sponsor *(entity that will construct/ complete and be financially responsible for the project)*	City & County of Broomfield
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 6) https://www.broomfield.org/DocumentCenter/View/14606/Transportation-Plan-071216?bidId= Broomfield Pedestrian & Bicycle Assessment (DRAFT) Implementation Chapter https://drive.google.com/file/d/1ESrFtC3frBlafkiPJC7rTCdZ8TYNbeAY/view
☐ Other(s):	

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

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

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

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

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

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

The project will primarily address the following Metro Vision (MV) subregional issues:

1. A Connected Multimodal Region: (MV Objective 4) The subregional transportation system is well-connected and serves all modes of travel.

2. A Safe & Resilent Natural & Built Environment - (MV Objective 7b) Connect people to natural resources and recreational areas

3. Healthy, Inclusive & Livable Communities - (MV Objective 10) The built and natural environment supports healthy and active choices

9. Define the **scope** and **specific elements** of the project.
This project furthers recommendations of the Broomfield Ped-Bike Assessment (draft) to provide connectivity of the Low-Stress Network with wayfinding

Develop an Active Transportation Routes Wayfinding Package:

- Develop a package of signage & markings for wayfinding that can be replicated throughout Broomfield and assess the cost of implementing the package community-wide & consider maintenance impacts
- Design Details - branding, colors, messaging, typical placement, ADA, etc.
- Construction Details - fabrication & construction for specific Pilot routing including location taking into consideration human-scaled details
- Solicit input as needed with internal and external stakeholders

Pilot:

- Refine the Broomfield Low-Stress Network, building on the low-stress network identified in the Ped-Bike Assessment
- Identify priority route(s) based on the Low-Stress Network and recommendations in the Ped-Bike Assessment to implement a Pilot of the wayfinding package (routes may connect neighborhoods, regional/subregional & local trail systems to schools, parks/open space, civic centers, employment, commercial centers, and/or BRT stations)
- Develop implementable Construction Documents and details for fabrication and installation for Pilot Priority Low-Stress Route(s)
- The pilot may also identify high-level capital improvements necessary to improve the low-stress network along the Pilot Priority Route (access ramps, path improvements, crossings, lighting, etc.) that take into consideration of the human-scaled details that enhance comfort, usability, and connectivity. The Pilot may also make recommendations for opportunities to improve complementary information such as maps and/or mobile applications and marketing to support the Wayfinding Pilot.

10. What is the status of the proposed project?
Broomfield currently has trailhead signage along our major trail corridors; there is minimal signage to navigate the trail system, let alone to key destinations including neighborhoods, employment/commercial areas, parks/open spaces, and Bus Rapid Transit Mobility Hubs. It is a desire of the Open Space and Trails Adivosry COmmittee to continue to advance wayfinding signage throughout the Broomfield subregion. Wayfinding was identified in the draft Ped-Bicycle Assessment as a crucial next step in advancing utilization of Broomfield vast active transportation network. Comments collected in the process also refercend the need for wayfinding in Broomfield.

There are 88 miles of multi-use concrete trails, 26 miles of soft surface trails, 95 miles of wide detached sidewalks along roadways, 72 miles of bike lanes and hundreds of miles of neighborhood streets. There are over 3,200 trail junctions in Broomfield let alone the thousands of junctions along Broomfield roadways, including neighborhood

streets. These numbers will continue to increase as Broomfield grows its active transportation network and new communities and destinations are built in undeveloped areas.

In addition, wayfinding was recently completed along the US 36 Bikeway corridor with communities along the corridor that provide consistent messaging and branding along the regional bikeway. Local Broomfield wayfinding package will compliment this recently completed project and will help pedestrians/cyclists navigate to and from the regional US 36 Bikeway, Bus Rapid Transit stations to key destinations and routes in Broomfield.

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.

The scope could be reduced. Likely less of the network would have construction documents ready to implement

A. Project Financial Information and Funding Request

1. Total Project Cost		**$350,000**
2. Total amount of DRCOG Subregional Share Funding Request	**$280,000**	**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**
City & County of Broomfield	$70,000	20%
	$	0%
	$	0%
	$	0%
	$	0%
	$	0%
Total amount of funding provided by other funding partners *(private, local, state, Regional, or federal)*	**$70,000**	

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	$120,000	$160,000	$	$	**$280,000**
State Funds	$	$	$	$	**$0**
Local Funds	$30,000	$40000	$	$	**$70,000**
Total Funding	$150,000	$200,000	$0	$0	**$350,000**
4. Phase to be Initiated *Choose from Design, ENV,*	Choose an item	Choose an item	Choose an item	Choose an item	

ROW, CON, Study, Service, Equip. Purchase, 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?

Broomfield's identity is multifaceted. Its location and transit system, including two Bus Rapid Transit Stations along US 36, have provided convenient access to and connection with the larger metro area. Its relatively small size and emphasis on service and neighborhoods support small-town friendliness and safety. The availability of open space, parks, trails, and recreation promotes health, social and environmental engagement. Broomfield has robust, growing and emerging Urban Center with employment, commercial and a variety of housing types. Wayfinding brings all these amenities together at a human scale.

Currently, Broomfield's vast network of trails and streets lack information that assists active transportation users in navigating their neighborhoods and to key community destinations. Implementing wayfinding to connect our trails, low volume streets, and neighborhoods to our civic areas, employment/commercial areas, open spaces, parks, regional trails, and transit facilities bring together several components that are a part of Broomfield's identity as a great place to live, work and play.

There are more than 88 miles of multi-use concrete trails, 26 miles of soft surface trails, 95 miles of wide detached sidewalks along roadways, 72 miles of bike lanes and hundreds of miles of neighborhood streets. There are over 3,200 trail junctions in Broomfield let alone the thousands of junctions along Broomfield roadways, including neighborhood streets. These numbers will continue to increase as Broomfield grows its active transportation network and new communities and destinations are built in currently undeveloped areas.

The recently developed Broomfield Pedestrian and Bicycle Assessment identified building a low-stress network attractive to all ages and abilities. A key recommendation was to improve wayfinding to connect our community with trails, low volume/low-speed neighborhoods streets to key community destinations.

The overall impact of the project on the greater Broomfield community is that a Wayfinding Plan Package of details will be developed that can be replicated throughout the community and implemented over time through key corridors, as well as, give guidance for necessary wayfinding with new development projects. The Project will prepare fabrication & construction ready documents to Pilot the Wayfinding Package along identified Priority Low-Stress Route(s) to test and refine package details. Providing wayfinding that clearly identifies routes that are low-stress attracts a broader range of Broomfield residents and employees to walk, jog and bicycle throughout the community for recreation and utilitarian trips, in particular, those that may currently identify themselves as wanting to walk or bicycle but have concerns about safety along their route to their desired destination.

The project is supported by the Broomfield Comprehensive Plan and Transportation Plan:
Policy TS B6 - Encourage bicycling by creating a network that takes advantage of the trail system, streets with low traffic volumes and low speeds, wayfinding signage and existing connections to provide options for less confident riders.

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

The project will not cross municipal boundaries but will benefit people walking and cycling through the Broomfield community to access places of employment, recreation, and commerce as well as access to/from the DRCOG Regional Active Transportation Network such as the US 36 Bikeway, Broomfield Trail and Southeast

Community Loop Trail.

3. Does the proposed project cross and/or benefit another **subregion(s)**? If yes, which ones and how?
The project will not cross subregional boundaries but will benefit people walking and cycling through the Broomfield community to access places of employment, recreation, parks, open spaces, employment/commerce, Bus Rapid Transit/Mobility Hubs.

The project will provide a blueprint to improve access to/from the DRCOG Regional Active Transportation Network such as the US 36 Bikeway, Broomfield Trail, Dry Creek Trail, Lake Link Trail, Rock Creek Trail, Northwest Parkway Trail, and Southeast Community Loop Trail as well as numerous local trails and connections throughout the Broomfield subregion

Wayfinding will compliment signs completed by neighboring subregions along US 36 Bikeway to strive to achieve a regional network for active transportation users.

4. How will the proposed project address the specific transportation problem described in the **Problem Statement** *(as submitted in Part 1, #8)*?
The project will primarily address the following Metro Vision (MV) subregional issues:

A Connected Multimodal SubRegion
MV Objective 4: The subregional transportation system is well-connected and serves all modes of travel.

Improving the existing on and off streets bicycle and pedestrian facilities with wayfinding, particularly along the Low-Stress Network, will increase access to mobility choices through the Broomfield Subregion. The project will improve the first & final mile interconnections of the multimodal transportation system and increased access enhances the capacity of the multimodal subregional roadway system. Wayfinding is an explicit voluntary option identified in Metro Vision for local organizations to invest in a well-connected multimodal region.

A Safe & Resilient Natural & Built Environment
MV Objective 7b Connect people to natural resources and recreational areas

Wayfinding improves multimodal connections that increase access to Broomfield's parks and open spaces by bicycle and by foot and other non-motorized modes. Enhancing the existing network with information that helps residents and visitors navigate the community using low-stress connections increase accessibility of Broomfield's natural resources and recreational areas. Improving access to recreation areas is an explicit Metro Vision voluntary option available to local organizations to invest in connectivity.

Healthy, Inclusive & Livable Communities -
MV Objective 10 The built and natural environment supports healthy and active choices
Metro Vision notes that deliberate focus on the built environment's influence on physical activity, mobility choices and the natural environment support the opportunity to lead healthy active lives. If our subregion's active transportation system is planned and designed to enable safe, convenient and comfortable access for all ages and abilities, more of our residents will have the option to access opportunities to lead healthy and active lifestyles.

Wayfinding helps identify the best routes to destinations, helps people overcome a barrier of not knowing how to get to their intended destination along trails, paths and low-volume streets they may be unfamiliar with. Most people are familiar with driving routes using collectors and arterials. Promoting more accessible and attractive routing on low-stress neighborhood streets and trails is an entirely new way to navigate your neighborhood and community. Providing wayfinding helps make walking and cycling and physical activity more accessible as a part

of an everyday routine and may even help build a culture of promoting active lifestyles.

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?
A sustainable and resilient economy includes the region's assets of physical infrastructure and transportation, quality of life and amenities, an education system accessible to all that supplies a skilled workforce, the ability to attract and retain talented workers, a high-quality built environment.

Wayfinding is one component of the built environment that improves access to a range of transportation, employment, commerce and housing, educational and recreational opportunities. These investments allow people and businesses to prosper by proving mobility choice access. Investing in active transportation is one community quality of life indicator that attracts residents and businesses making Broomfield and communities in our region 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?
Wayfinding will also increase access to Broomfield's Urban Centers in Interlocken and Arista/Broomfield Urban Transit Village and the US 36 Bus Rapid Transit Stations in Arista (Broomfield Station) and Interlocken 9Flatiron Station).

The sign package can be replicated in the North with new developments along SH 7 and the emerging Urban Center at SH 7/ I-25. Both SH 7 and I-25 are candidate corridors for BRT, and currently, efforts are underway to plan for future BRT along SH 7. Wayfinding is a key first and final mile investment that assists employees, visitors and residents alike in accessing the multimodal network of Bus Rapid Transit investments.

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

There are not any direct partnerships to implement this wayfinding project in Broomfield, though as a part of the US 36 First and Final Mile Study conducted by Commuting Solutions to connect the US 36 corridor community partners agreed to move forward with implementing wayfinding in their communities to increase access to the US 36 multimodal corridor.

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 Broomfield active transportation system, especially vulnerable populations that cannot or are not able to drive. These populations include children and teenagers that do not drive, persons that are unable to drive due to disability (but still can walk or use a bicycle or other mobility devices), low-income families that do not have access to a vehicle or one-car households.

Active transportation provides access for a wide range of ages, incomes, and abilities. Full implementation of wayfinding will further increase access, especially to vulnerable populations, by identifying and marking lower stress routes to access key destinations including health service destinations and the BRT stations that provide access to the regional multimodal network.

2. Describe how the project will **increase reliability of existing multimodal transportation network.**
Wayfinding increases the reliability of the existing multimodal network. Currently, navigating the Broomfield Trail and neighborhood street network can be challenging without navigation or maps. There are over 3,200 trail junctions in Broomfield and thousands of street intersections.

Most residents are not familiar with the trail system and local neighborhood street networks. The majority of trails and trail junctions are not signed. Navigating the transportation network as a pedestrian or cyclist is an entirely different experience than that of a driver in an automobile, where all streets are signed, and typical routing leads to major arterials, where most people are not comfortable walking or bicycling. Trails may meander, and curvilinear neighborhood streets make it challenging to find a destination, connecting trail or underpass intuitively. Without wayfinding, users can get lost, frustrated and may give up entirely on active modes for recreation or utilitarian trips if they routinely experience a delay to look at a map or lose time backtracking.

Signage and marking will help all users more reliably access the low-stress network to get to destinations with ease. Users can count on following signs and markings to get to their destination without detours or delay confidently. Upon completion of wayfinding network based on plans from this project, users can come to rely on the system to provide wayfinding on their active transportation recreation and utilitarian trips and have confidence they can navigate to new destinations with minimal delay. Reliability increases the likelihood that one will make repeat decision to use active transportation modes and incorporate physical activity into daily routines.

3. Describe how the project will **improve transportation safety and security.**
Wayfinding guides people through a physical environment, in this case, a network of regional and location trails, short connections, neighborhood streets, collector roads, and even minor and major arterials. Wayfinding enhances the users understanding and experience of navigating a complex system and help people develop "mental maps" of the geography and simplify routes to be as direct as possible.

Wayfinding will help users of the network find safe grade separated crossings that may not be otherwise intuitive to find from the street network.

Wayfinding offers a sense of safety and security for active transportation users by providing confidence that users will not get lost on their way to a destination, or find themselves in place they perceive to be unsafe.

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*

It is challenging to assess the impact fo wayfinding on growth patterns. The wayfinding package could be replicated in new communities in Broomfield that not yet have been built.

	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*

Project will help clearly establish the primary active transportation routes in the Broomfield subregion and to/within the urban centers and to intermodal destinations that are more attractive and comfortable to access.

The wayfinding package could be replicated in new undeveloped communities in Broomfield that not yet have been built, ensuring that clear connections are made in the active transportaiton neworks to desintations in these developing areas in our emerging Urban Cetner along SH 7 at i-25.

	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*
By establishing primary multimodal routes in the community increases mobility choices by providing visual cues to access the low-stress network, which is attractive to a broader range of ages and abilities. In particular to the segment of the population that would walk or cycle more but have concerns that prevent them from making a choice. Primarily, these concerns center around safety. When presented with an option that includes trails, quiet neighborhood streets and grade separations more people may decide to walk or bicycle for recreation, to access parks, open spaces, commercial areas or even to places of work and the Bus Rapid Transit stations.

A repeated theme of comments received during the public input phase of the Broomfield Ped/Bike Assessment was around better access to key community destinations and that high volume and speed roads were not inviting for people walking and cycling. Wayfinding can enhance the existing network by marking lower stress routes to key destinations.

There were 17 specific comments to wayfinding, a selection included:

"When doing the Broomfield 100, I found trail markings to be extremely poor!"

"Add route markers for Lake Link Trail between Sheridan and Lowell. There is no clear path to follow this trail from Broadlands Dr to Lowell Blvd."

"To get from here to the SE Comm loop off of Perry to the south is not difficult but not marked - need map or signs."

"One can get to Dry Creek trail from this underpass but needs a map."

	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*
Yes. Increasing accessibility and attractiveness of walking and bicycling to more people reduces future potential air quality impacts. Improving access to walking and bicycling for short utilitarian trips or increasing 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.

There are no total counts in Broomfield to estimate current usage of an active transportation system, but Strava data indicates that there are thousands of Strava users that ride their bicycles through the Broomfield subregion. Strava users represent only a fraction of actual cyclists. Walking, jogging and running is an even more accessible activity.

The Pedestrian and Bicycle Assessment surveyed 270 residents. The survey indicated:
75% of respondents walk at least weekly or daily, 65% walk between 20 - 60 minutes.
36% bicycle daily or at least a few times a week, 27% bicycle once a month. 72% cycle between 2-20 miles. Only 11% were under one mile.

Responses from the survey indicate a robust active lifestyle community. Cyclists that reported they often ride longer miles may be riding for health and recreation purposes show strong potential for the ability cycle short trips for more utilitarian purposes (grocery) or for social trips (visiting a friend or neighbor) that would otherwise be taken by car. A strong showing for longer time-based walking trips shows potential for more walking trips that could be made to nearby destinations, such as a walk to a coffee shop, to the park, school or a recreation center.

The US 36 Bikeway counter in Broomfield counted 1,143 cycling trips on the Bikeway on Bike to Work Day in 2018. The calendar year of 2017 reported 72,800 cycling trips on the Bikeway, increasing each year. Total 2018 counts are currently being reconciled.

Increasing the accessibility of the regional active transportation network with wayfinding could lead to a change in a shift in behavior that lends itself to the opportunity and freedom to choose to take few more trips by active transportation modes, rather than driving, especially for short trips.

Source: https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle

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*

Yes. One of the objectives of the Project is to increase access to Broomfield's parks, recreation areas, open spaces, and natural resources. The Pilot Priority Route(s) to be determined with the project will clearly identify routes that connect to these community amenities.

Full implementation of the Wayfinding Package will be used to increase access to Broomfield's open space assets, parks and greenways as resources become available to complete wayfinding through the greater community.

	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*

Yes. The multimodal improvements that result from the Project will increase opportunities to access the low-stress network for Broomfield subregion residents, employees and visitors 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 and freedom of choice 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. These are just a few of the far-reaching benefits of physical activity.

Increasing access to the active transportation network through wayfinding will result in more frequent physical activity by more current and future users fo the Broomfield network.

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. Walking and bicycling are the most affordable modes of transportation, especially for short trips within Broomfield subregion. Reducing miles driven for short trips, and the option to reduce household vehicular ownership increases opportunities to reduce health, income and opportunity disparities.

In addition, walk and cycle trips can be taken any time of day and are not limited like access to transit, providing an affordable option for destinations within walking and cycling distance. Not having a time restriction on transportation options, especially transit trips) increases social mobility and opportunities.

Increasing the accessibility of the low-stress network also increase opportunities for children to walk or bicycle to/from school, reducing their reliance on daily vehicular transportation from adults and parents that may take time off from work or must work part-time to transport their children to school. In some cases, limiting household ability to work to provide transportation to ensure the education of children could reduce a family's potential for upward mobility.

	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*

Yes. walkability and bicycle friendliness is a key indicator of a community's quality of life. Investing in improvements that further increase access for more people of all ages and abiliites supports a thriving subregion.

Wayfinding is a key amenity that increases the livability of the subregion and beyond.

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

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	0	0	**0**
2040	0	0	**0**

Bicycle Use Calculations	Year of Opening	2040 Weekday Estimate
3. Enter estimated additional weekday one-way bicycle trips on the facility after project is completed.	0	0
4. Enter number of the bicycle trips (in #3 above) that will be diverting from a different bicycling route. (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	8,000
	2. Minority persons	900
	3. Low-Income households	2,800
	4. Linguistically-challenged persons	2,400
	5. Individuals with disabilities	5,300
	6. Households without a motor vehicle	830
	7. Children ages 6-17	11,500
	8. Health service facilities served by project	29

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:	