Part 1 Base Information

1. Project Title	**South Boulder Road At-Grade Safety and Intersection Improvements**
2. Project *Start/End* points or Geographic Area *Provide a map with submittal, as appropriate*	This project is located at South Boulder Road, between Eisenhower St. and SH 42, in Louisville, Boulder County, CO. See site location map Attachment 1.
3. Project Sponsor *(entity that will construct/ complete and be financially responsible for the project)*	City of Louisville, CO.
4. Project Contact Person, Title, Phone Number, and Email	Megan Davis, Deputy City Manager, 303-335-4539, mdavis@louisvilleco.gov
5. Does this project touch CDOT Right-of-Way, involve a CDOT roadway, access RTD property, or request RTD involvement to operate service?	☐ Yes X☐ 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)	
X☐ Local plan:	City of Louisville South Boulder Road Small Area Plan http://www.louisvilleco.gov/home/showdocument?id=9702 City of Louisville Transportation Master Plan (to be finalized July, 2019) http://www.louisvilleco.gov/Home/ShowDocument?id=22224 South Boulder Road Existing Conditions and Crossing Alternatives Analysis http://www.louisvilleco.gov/Home/ShowDocument?id=21044
☐ 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: Transit Priority Lanes
- X☐ Bicycle Facility
- X☐ Pedestrian Facility
- X☐ Safety Improvements
- ☐ Roadway Capacity or Managed Lanes (2040 FCRTP)
- X☐ Roadway Operational

Grade Separation

- ☐ Roadway
- ☐ Railway
- X☐ Bicycle
- X☐ Pedestrian

- ☐ Roadway Pavement Reconstruction/Rehab
- ☐ Bridge Replace/Reconstruct/Rehab
- ☐ Study
- ☐ Design
- ☐ Other:

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

The project will complete design and construction on at-grade crossing improvements proposed at five intersections along South Boulder Road. The objective of the recommended improvements is to provide safety and mobility enhancements that can be implemented in the short-term to benefit all users of South Boulder Road. Safety highlights for people walking or bicycling include reduced crossings distances, minimized conflicts with turning

vehicles through signal modifications, and a Pedestrian Hybrid Beacon at Eisenhower Drive. The proposed improvements would also benefit people driving on the corridor through countermeasures to address identified safety issues per the five year crash history and traffic operations analyzed as a part of this planning effort. Proposed countermeasures for these areas of concern include protected left turn movements, the extension of left-turn storage lanes, and a right-turn on red restriction at Via Appia. A map of the project locations can be found in Attachment 1.

The project seeks to address several Metro Vision related issues, including the desire to create a safe and resilient built environment surrounding the portions of the City that exist on both sides of South Boulder Road. New development has occurred on the north east end of Louisville, north of South Boulder Road, and important amenities are located on the south side of South Boulder Road, such as parks, the Public Library, Recreation and Senior Center, jobs and shopping, and more.

The project also supports a healthy and inclusive community by meeting the needs of increasingly vulnerable populations within the area directly north and south of South Boulder Road. This project will address several transportation challenges, including better multimodal connections between the north/south parts of the City that connect to mobility options for vulnerable populations and multimodal options for all users. The two bus routes that service Louisville travel along this section of South Boulder Road, connecting people to jobs, school, amenities and current and future regional transit routes including the Flatiron Flyer BRT. The improvements will provide safer crossings allowing for people to more easily and safely access transit and regional trails.

The project will also address traffic congestion and crashes on South Boulder Road by providing safety improvements for regional travelers, and will help reduce short-trip vehicle miles travelled in the City of Louisville by improving walk and bikability between the north and south sides of town.

South Boulder Road is identified as a principle arterial in the 2040 regional roadway system. The area around South Boulder Road and Main Street is located less than .10 mile from the intersection of South Boulder Road and SH 42. This area is one of four main activity centers in Louisville, with 23% of the City's retail along this corridor it serves as a job center and provides access to important services such as grocery stores. Louisville is nearing build out, but within the past 10 years the area directly north of South Boulder Road and east of SH 42 has seen some of the highest population growth (5 – 10%) throughout the City. There are approximately 1,100 new dwelling units in this area, including the Boulder County Housing Authority Kestrel development, the Foundry (approved but not yet constructed), Coal Creek Station (approved but not constructed) Steel Ranch, Steel Ranch South, Lanterns, Balfour, and North End. This development has resulted in increased vehicle traffic generated from within the region, as well as increased pedestrian traffic throughout the area. The City has installed multimodal transportation infrastructure to ensure connectivity, address the needs of vulnerable populations (such as extending transit service, installing new sidewalks and crossings, etc.), however the connections across South Boulder Road remains a challenge. The proposed improvements on South Boulder road would improve the multimodal access for these residents to reach schools (elementary schools and the middle school), and Downtown Louisville, where the Public Library, municipal offices, recreation services (public swimming pool), restaurants, shops and other amenities are located.

Starting at South Boulder Road and Main Street and continuing west along SBR across SH 42, the Average Daily Traffic Volumes (ADT) reaches over 30,000 ADT. South Boulder Road and Main Street experiences the highest ADT level along South Boulder Road within the City of Louisville, and is also the primary location where pedestrians cross South Boulder Road. Because South Boulder Road is a regional transportation corridor, many commuters use it to travel to job centers in and between the Cities of Lafayette, Louisville and Boulder. During peak times, this section of the corridor becomes very congested with traffic, which coincides with peak travel times for children walking to and from school. Safety improvements along the corridor, along with the countermeasures for vehicle travel will improve traffic flow and safety for vehicles as well.

There are three schools within approximately ½ mile of South Boulder Road in the planning area, and the Louisville Middle School and Louisville Elementary School both are the neighborhood schools for those residents living directly north of South Boulder Road and Main Street. Main Street is the primary crossing for children traveling from north of South Boulder Road to access the schools on the south side of the corridor. Garfield, Via Appia and Eisenhower are also heavily utilized crossing points. Louisville Elementary school enrollment is 584 students and Louisville Middle

School enrollment is 633 students. Coal Creek Elementary School is also within .25 mile of South Boulder Road, and is located just west of the planning area.

Improving vehicle and pedestrian safety is a Metro Vision identified problem and one of the key goals for this project. Between 2015 – 2018 a total of 105 crashes occurred in the one-mile study area (Eisenhower Drive to SH 42) on South Boulder Road. 33% of the crashes resulted in injury, and a total of two pedestrian and four bicycle crashes occurred in the study area during the same period.

The proposed at-grade improvements would benefit people walking and bicycling, as well as people that drive through the corridor. The signal and operational changes, and the geometric crossing improvements at each intersection would enhance the safety, comfort, and accessibility of all users along South Boulder Road. This project provides regional benefits and would help meet several of the DRCOG regional objectives, including expanding the regions multimodal transportation system and improving safety.

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

The City has completed a significant amount of planning for this project. In 2016 the City completed a local area plan, the South Boulder Road small area plan, that identified the need for improved bicycle and pedestrian crossings as a high priority for residents to complete trail connections, provide more multimodal connections from the north/south section of the City, and facilitate safe routes to school and commuter connections. In 2018, the city received a GOCO planning grant to conduct feasibility analysis and initial design on potential crossing sites located on South Boulder Road. More detail on this grant can be found in Attachment 2. In 2018 City Council gave staff direction to move forward with design on the South Boulder Road and Main Street underpass, and to identify at-grade improvements that could be installed to improve vehicle and pedestrian safety and experience. This TIP funding proposal addresses the at-grade crossing improvements identified through the study.

This project will complete design and construction of signal changes and geometric crossing improvements located at four intersections along South Boulder Road in Louisville, including Via Appia, Garfield Ave., Centennial Dr. and Main Street. The City has completed 30% design on the project, identifying proposed alignment, utilities, and potential technical challenges associated with the project. The project will include completion of design and construction of the proposed changes. The specific elements of the project would include:

SIGNAL AND OPERATIONAL IMPROVEMENTS

• **Protected Left-Turn:** Reduces the potential for conflict between turning vehicles and people walking, bicycling, or driving.

• **Leading Pedestrian Interval (LPI):** Provides people crossing, especially vulnerable users, the opportunity to safely enter the intersection and begin crossing before vehicles may turn. LPIs have been shown to reduce pedestrian-vehicle crashes by as much as 60 percent.

• **No Right-turn LED Sign:** Provides additional warning for turning vehicles to stop and watch for people crossing.

• **No Right-turn on Red:** A Restriction all times for northbound right-turns at Via Appia addresses a crash history (seven crashes in three years) caused by that movement. The MUTCD identifies three right-turn crashes in one year as an impetus for this restriction, of which 2016 and 2018 would exceed and meet this threshold respectively.

• **Pedestrian Hybrid Beacon:** Provides people walking and bicycling the ability to stop traffic and safely cross South Boulder Road at Eisenhower Drive, which is approximately 100 feet wide at this location and has a posted speed limit of 40 mph.

INFRASTRUCTURE IMPROVEMENTS

• **Curb Extension:** Shortens the crossing distance by approximately 20 feet at each location and slows the speed of right-turning vehicles due to the tightened curb radii.

• **Pedestrian Island Refuge:** Extending the medians across the existing crosswalks provides people crossing with a more comfortable experience and slows the speed of left-turning vehicles.

• **Crosswalk Markings and Stop Bars:** Provide clear delineation of the pedestrian zone, and defines the space to maintain a safe distance and level of comfort between people crossing and vehicles.

• **Left-turn Storage Lane Extensions:** The signal changes may require extending the left-turn storage lanes at Main Street, Centennial Drive, and Via Appia to ensure that vehicle queueing does not extend into the through travel lanes during peak hours.

A detailed cost estimate for all aspects of the project can be seen in Attachment 3, along with a schematic drawing of the proposed projects.

10. What is the status of the proposed project?

The project was identified initially through the South Boulder Road Small Area Plan, which was completed in 2016. In 2017 the City wanted to conduct further analysis to identify the preferred location of an underpass on South Boulder Road, based on the need, technical feasibility and cost. The City applied and received a GOCO Planning Grant for $75,000 to study the connectivity options for pedestrians and bicyclists across South Boulder Road, including an underpass and/or at-grade improvements, and to provide 30% design on the top at-grade and grade-separated alternatives. Through this study, detailed analysis was completed for three locations for grade-separated crossings along South Boulder Road. At-grade improvements were explored through this analysis, and several improvements to signal timing, crosswalks, medians and geometric improvements at signals were recommended. This project includes further design and construction of the at-grade elements, which will improve safety and multimodal connectivity throughout the entire corridor.

TIP funding will support the final design and construction of the at-grade improvements.

11. Would a smaller federal funding amount than requested be acceptable, while maintaining the original intent of the project?	X☐ Yes ☐ No

If yes, define smaller meaningful limits, size, service level, phases, or scopes, along with the cost for each.

If the City were awarded a smaller amount of funding, we would consider phasing the project by intersection to complete some but not all of the intersections. Which intersection is completed in what phase would depend upon the amount of funding available, and the prioritization based on the final South Boulder Road connectivity study.

A. Project Financial Information and Funding Request

1. Total Project Cost		**$1,433,276**
2. Total amount of DRCOG Regional Share Funding Request *(no greater than **$20 million** and not to exceed **50% of the total project cost**)*	**$1,003,293**	**70% of total project cost**
3. Outside Funding Partners ***(other than DRCOG Regional Share funds)*** List each funding partner and contribution amount.	**$$ Contribution Amount**	**% of Contribution to Overall Total Project Cost**
City of Louisville	$429,983	30%
Total amount of funding provided by other funding partners *(private, local, state, Subregion, or federal)*	**$429,983**	

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 2018.*

	FY 2020	FY 2021	FY 2022	FY 2023	Total

Federal Funds (Subregional)	$0	$1,003,293	$0	$0	**$1,003,293**
Local Funds	$225,000	$204,983	$0	$0	**$429,983**
Total Funding	$225,000	$1,208,276	$0	$0	**$1,433,276**
4. Phase to be Initiated *Choose from Design, ENV, ROW, CON, Study, Service, Equip. Purchase, Other*	Design/ENV/ROW	CON			

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. Regional significance of proposed project

WEIGHT **40%**

*Provide **qualitative and quantitative** (derived from Part 3 of the application) responses to the following questions on the regional significance of the proposed project.*

1. Why is this project regionally important?

South Boulder Road is a main arterial and regional connecter for south Boulder to Louisville and on to Lafayette. The road is heavily travelled with average daily traffic counts between approximately 17,000 and 30,000 vehicles, depending on the intersection and time of day. The speeds on South Boulder Road within the area average between 30 – 39 miles per hour, with the 85% speeds between 35 – 44 MPH. Census data shows that the City of Boulder has 4,900, Lafayette has 690 and Louisville has 1,000 daily commuters traveling along the east/west corridors between the Cities of Boulder, Louisville and Lafayette, including South Boulder Road. Pedestrian and bicycle crossing at the intersections along this corridor in Louisville have varied levels of safety facilities. In order to assess the corridor functionality related to north/south connectivity, the City recently conducted a connectivity study. This study explored north/south connectivity improvements that would result in no or minimal impacts on east/west vehicle utilization.

The regional impact of this project is a reduction in crashes along South Boulder Road, and improved safety for vehicles and pedestrians/bicycles alike.

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

Yes, while the proposed improvements provide a direct benefit to the City of Louisville, the Cities of Boulder and Lafayette will also see significant benefits. South Boulder Road is utilized as a commuter corridor for people travelling into/out of Boulder and Lafayette. The SH 7 PEL Study indicated that improvements on the east end of Lafayette at 119th St would result in additional traffic directed to South Boulder Road. This will increase the congestion along this corridor, directly impacting those intersections that are currently experiencing congestion and multimodal use. The intersection safety improvements will address safety for individuals travelling along the corridor to and from work, as well as local walkers and bikers in the City of Louisville. In addition, the crossing improvements for pedestrians and bicycles will increase access to regional trail connections for both Louisville and Lafayette, given that trail linkages between the cities can be made along South Boulder Road.

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

No

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

This project will address several transportation challenges, including:

- Improving multimodal connections between the north/south parts of the City to connect bicyclists, pedestrians, and to improve vehicular traffic flow and safety.
- Improving mobility options for vulnerable populations, by creating safer and more accessibility to transit, bicycle and pedestrian facilities. Along the east end of South Boulder Road, there are numerous dense housing neighborhoods, including new developments on the northeast end of South Boulder Road. In addition, along South Boulder Road between Via Appia and Main Street there are numerous multi-family housing units, as well as the City's only mobile home park just east of Via Appia. Together, these residential communities result in one of Louisville's highest density areas of vulnerable populations, including persons

over 65 year of age, minority persons, low-income households, linguistically-challenged persons, individuals with disabilities, households without a motor vehicle and children ages 6 – 17. The Boulder County Housing Authority (BCHA) Kestrel development at SH 42 and Hecla Drive includes a unique population of people with mobility challenges: Of the 341 total residents 128 (37%) are seniors 55 and older, and 60 (18%) have a disability (that qualifies them for federal housing for disabled individuals). Another 86 residents under 18 also live in the development. Many of the residents don't have cars and rely on public transit and/or walking to access employment, food and other basic needs, activities and amenities. A recent car count indicated that there are fewer than 200 vehicles owned within the community.

- Addressing traffic congestion and crashes on South Boulder Road by providing safety improvements for regional travelers through at-grade improvements for pedestrians and cars.
- Reducing short-trip vehicle miles travelled in the City of Louisville by providing safer bicycle and pedestrian connections for people to travel across South Boulder Road to access amenities on either side, attend special events, get to school, seek City services, and more. Currently 31% of all trips to, from or within Louisville are less than 3 miles; this project will improve multimodal connections so that more people will walk or bike to these destinations.

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?

Once the crossing and roadway improvements are complete, residents and visitors will have better options for travelling from the north end of town to the downtown area, the McCaslin area, the Recreation and Senior Center and other amenities throughout the City. Louisville's historic downtown includes several locally owned, independent businesses that depend on the local community and tourism to thrive. The improved access to the downtown area will bring more residents and visitors downtown.

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

Connectivity for bicycles and pedestrians will be improved. People walking and biking will experience greater safety when crossing South Boulder Road, and will be able to have more options for crossings at various points along the corridor. There are also two DASH route stops on South Boulder Road in the area with the improvements, as well as two stops on Via Appia within ¼ mile of the crossing at South Boulder Road. The project will improve the crossings that allow for first and last mile access to these stops. The City's bikeshed (Attachment 6) illustrates the proximity of this section of the corridor to important amenities, and how these improvements will provide better connections for bicycle travel.

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

The effort for connectivity improvements along South Boulder Road has been supported by numerous public and private partners. The City of Louisville has worked with the City of Lafayette on regional trail connections, which includes trails that would be better connected through this project. In addition, BVSD and Boulder County Housing Authority have been partners in planning for this project, as well as supporting the GOCO grant.

Letters of support are in Attachment 5.

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).**

There is a high proportion of vulnerable populations in this area, with several multi-family apartment and condo residences as well as the mobile home park within one mile. The census data shows a large number of vulnerable

residents living within one mile of the midpoint on the corridor: Approximately 3,462 individuals over the age of 65, 1,840 minority persons, 332 linguistically challenged persons, 2,307 persons with disabilities and 4,295 children aged 6 – 17. In addition, there are nearly 2,000 low-income households, 476 without a motor vehicle within 1 mile.

This project supports infrastructure improvements to medians, curbs (curb extensions), sidewalks, pedestrian beacons, and other facilities that would significantly improve mobility infrastructure for people with disabilities, elderly persons and children. The proposed infrastructure will allow for more time to cross, median refuges for people who take more time in crossing the road, and curb and sidewalk improvements for ADA accessibility. In addition, as previously outlined, there are numerous vulnerable populations that live within ½ mile of the corridor and depend on transit service along South Boulder Road. This project will provide safer crossings for people to reach transit stops, as well as destinations on the north and south sides of this corridor.

The DASH bus does travel along this corridor, and goes to the People's Clinic, which is the Federally Qualified Health Center (FQHC) located off South boulder Road in Lafayette. This will provide improved access to transit stops along the corridor.

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

The facility improvements will protect pedestrians and vehicles alike, reducing accidents and therefore ensuring reliability of the multimodal network. The improvements will encourage more people to walk and bike, thereby reducing the number of vehicles on the road, particularly for the short-trips that are taken often in Louisville. The City's walkshed map (Attachment 7) shows that this portion of South Boulder Road is within a highly dense walkshed – meaning that many amenities are within 05 or 6 –10 minutes of walking distance. Walking becomes a more reliable option with the proposed improvements.

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

The project will improve the safety of pedestrians and bicyclists, and reduce the potential for vehicle and pedestrian accidents. Many children living directly north of this underpass attend the schools directly south and this will provide a reliable transportation connection to BVSD public schools. The proposed safety improvements will help ensure continuous traffic flow with less frequent interruptions from accidents.

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

Louisville is nearing build-out, but these improvements will support pedestrian connections for two proposed developments that are anticipated in the next few years. The Foundry development and additional residential development at Kestrel will result in increased growth in the northeast portion of the City of Louisville. The project will provide improved multimodal mobility along the South Boulder Road corridor, allowing for better access to the

services and amenities that exist on the south side of the corridor, as well as important points of connection for any future development or 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

The entire purpose of this project is to provide safer multimodal connections between the residential-dense portions of town on both the north and south side of South Boulder Road and the urban centers. The key destinations that will become more accessible to a greater number of residents include the historic downtown Louisville, the Public Library, Memory Square Pool (public swimming pool), elementary and middle schools, job centers, the Recreation and Senior Center, parks and open spaces and regional trails.

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 the region for people, goods, or services? ☐X Yes ☐ No

This project will improve the multimodal transportation system along South Boulder Road, which is an important corridor for vehicles, transit, and bicycles/pedestrians. In addition, the project will help support connectivity and first and last mile connections to transit. The improvements will also benefit the movement of people throughout the region on South Boulder Road, by reducing the risk of accidents and improving safety.

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? ☐X Yes ☐ No

The City expects that more people will bike and walk to closer destinations with improved facilities throughout the corridor. The City's walkshed map shows that this portion of South Boulder Road is within a highly dense walkshed – meaning that many amenities are within 05 or 6 –10 minutes of walking distance. With the estimated increase in walking, emissions could be reduced by 5.3 lbs per day from walking alone. Biking will also be more desirable with the intersection safety improvements, and would result in an estimated increased emissions reduction of 19 lbs per day. With 31% of all trips within and into/out of Louisville are short trips, providing more multimodal connectivity will promote walking and biking and reduce these short trips.

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

Many parks, open spaces, trails and recreation amenities surround South Boulder Road near the intersection improvements, and the Via Appia Way and Eisenhower Drive improvements directly impact trail connectivity. Cottonwood Park, Lawrence Enrietto Park, Memory Square Park and public swimming pool, Miners Field, Louisville Community Park, to name a few, are all located within one mile of the South Boulder Road improvements. Large Open Space parcels, including the Harney Lastoka Open Space, Warembourg Open Space and Coyote Run Open Space are all within .5 – 1 mile of the area where the improvements will be installed.

The crossings will also improve upon important connection for regional trail access. The Coal Creek Trail, a regional trail connecting all the Southeast Boulder County communities is located just 1 mile from the intersection of South Boulder Road and Main Street. The trail is a 14-mile regional trail linking the Cities of Louisville, Lafayette, Broomfield,

and the Towns of Erie and Superior. This trail then connects with other Boulder County and City of Boulder Open Spaces, serving as a gateway to plethora outdoor recreation opportunities for the entire region.

The Highline Trail, which connects from Lafayette into Louisville on the east side of SH 42, crosses South Boulder Road at Via Appia Way, and connects directly into Cottonwood and Lake Park. A map with parks, open space and trail connections is Attachment 5.

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? ☐ X Yes ☐ No

The newly remodeled Louisville Recreation and Senior Center (which currently receives 271,478 total visits per year) and the Louisville Sports Complex, which hosts baseball/softball games, practices and tournaments, as well as ultimate Frisbee and flag football (receives an estimated 25,000 users and visitors during the outdoors sports season), are in direct proximity to the area of the crossings. In addition, the pools and regional trail connections more easily accessible with the new underpass will support healthy, active living.

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? ☐ X Yes ☐ No

The project will provide safety improvements that will benefit those utilizing multimodal mobility options along the South Boulder Road corridor, including RTD transit, walking and bicycling.

MV objective 14	**Improve the region's competitive position**.

8. Will this project help support and contribute to the growth of the region's economic health and vitality? ☐ X Yes ☐ No

D. Project Leveraging

WEIGHT 10%

9. What percent of outside funding sources (non-DRCOG-allocated Regional Share funding) does this project have?		80%+ outside funding sources .....High 60-79% .....Medium 59% 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	
2. Population and Employment	

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

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*		
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)*		
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)*		
6. = Number of SOV one-way trips reduced per day (#3 – #4 – #5)		
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)*		
8. = Number of pounds GHG emissions reduced (#7 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:		

B. Bicycle Use

1. Current weekday bicyclists	100
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	18,613	5,604	**24,217**
2040	19,189	5,777	**24,966**

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.	30	50
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)*	15	25
5. = Initial number of new bicycle trips from project (#3 – #4)	15	25
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)*	5	7.5
7. = Number of SOV trips reduced per day (#5 - #6)	10	17.5
8. Enter the value of **{#7 x 2 miles}**. (= the VMT reduced per day) *(Values other than 2 miles must be justified by sponsor)*	**20**	**35**
9. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	19	33.25
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)	50
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	18,613	5,604	**24,217**
2040	19,189	5,777	**24,966**

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	40	60
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)*	20	30
5. = Number of new trips from project (#3 – #4)	20	30
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)*	6	10
7. = Number of SOV trips reduced per day (#5 - #6)	14	20
12. Enter the value of **{#7 x .4 miles}**. (**= the VMT reduced per day**) *(Values other than .4 miles must be justified by sponsor)*	5.6	8
8. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	5.32	7.6

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	3462
	2. Minority persons	1840
	3. Low-Income households	1989
	4. Linguistically-challenged persons	332
	5. Individuals with disabilities	2307
	6. Households without a motor vehicle	476
	7. Children ages 6-17	4295
	8. Health service facilities served by project	1

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	3	
Other Injury crashes	32	
Property Damage Only crashes	70	
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	0.28	
Other Injury crashes reduced	2.97	
Property Damage Only crashes reduced	6.49	

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	
2. Describe current pavement issues and how the project will address them.	
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.	
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	

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:	