

# Part 1

# Base Information

1. Project Title	<b>CO 119 and 63<sup>rd</sup> Intersection Enhancements</b>		
2. Project <i>Start/End</i> points or Geographic Area <i>Provide a map with submittal, as appropriate</i>	SB CO119: MP 49 to 63 <sup>rd</sup> & CO119 NB CO119: MP 47 to 63 <sup>rd</sup> & CO119		
3. Project Sponsor ( <i>entity that will construct/ complete and be financially responsible for the project</i> )	Boulder County		
4. Project Contact Person, Title, Phone Number, and Email	Scott McCarey, PE, AICP Multimodal Division Manager 720-564-2665 <a href="mailto:smccarey@bouldercounty.org">smccarey@bouldercounty.org</a>		
5. Does this project touch CDOT Right-of-Way, involve a CDOT roadway, access RTD property, or request RTD involvement to operate service?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, provide applicable concurrence documentation with submittal</i>		
6. What planning document(s) identifies this project?	<input checked="" type="checkbox"/> <a href="#">DRCOG 2040 Fiscally Constrained Regional Transportation Plan (2040 FC RTP)</a> <input checked="" type="checkbox"/> Local plan: Boulder County Transportation Master Plan, adopted December 2012. City of Boulder Transportation Master Plan, adopted August 2014. <input checked="" type="checkbox"/> Other(s): Northwest Area Mobility Study, adopted June 24, 2014. SH 119 BRT Study. <i>Provide link to document/s and referenced page number if possible, or provide documentation with submittal</i>		
7. Identify the project's <b>key elements</b> .			
<input checked="" type="checkbox"/> Rapid Transit Capacity (2040 FC RTP) <input checked="" type="checkbox"/> Transit Other: Transit Priority Lanes <input checked="" type="checkbox"/> Bicycle Facility <input checked="" type="checkbox"/> Pedestrian Facility <input checked="" type="checkbox"/> Safety Improvements <input type="checkbox"/> Roadway Capacity or Managed Lanes (2040 FC RTP) <input checked="" type="checkbox"/> Roadway Operational		<b>Grade Separation</b> <input type="checkbox"/> Roadway <input type="checkbox"/> Railway <input type="checkbox"/> Bicycle <input type="checkbox"/> Pedestrian <input type="checkbox"/> Roadway Pavement Reconstruction/Rehab <input type="checkbox"/> Bridge Replace/Reconstruct/Rehab <input type="checkbox"/> Study <input type="checkbox"/> Design <input type="checkbox"/> Other:	
8. <b>Problem Statement</b>	What specific Metro Vision-related regional problem/issue will the transportation project address? CO 119 between Longmont and Boulder is the second most travelled corridor in Boulder County serving residents, employees and visitors from all across the North Front Range. In the peak periods this corridor experiences extensive congestion. Using DRCOG's 2040 land use projections, modeling performed within RTD's SH 119 BRT Study estimated that traffic volumes in the corridor will increase 25% by 2040. Unaddressed this additional travel demand will result in stifling congestion with major negative economic, social and environmental ramifications.		

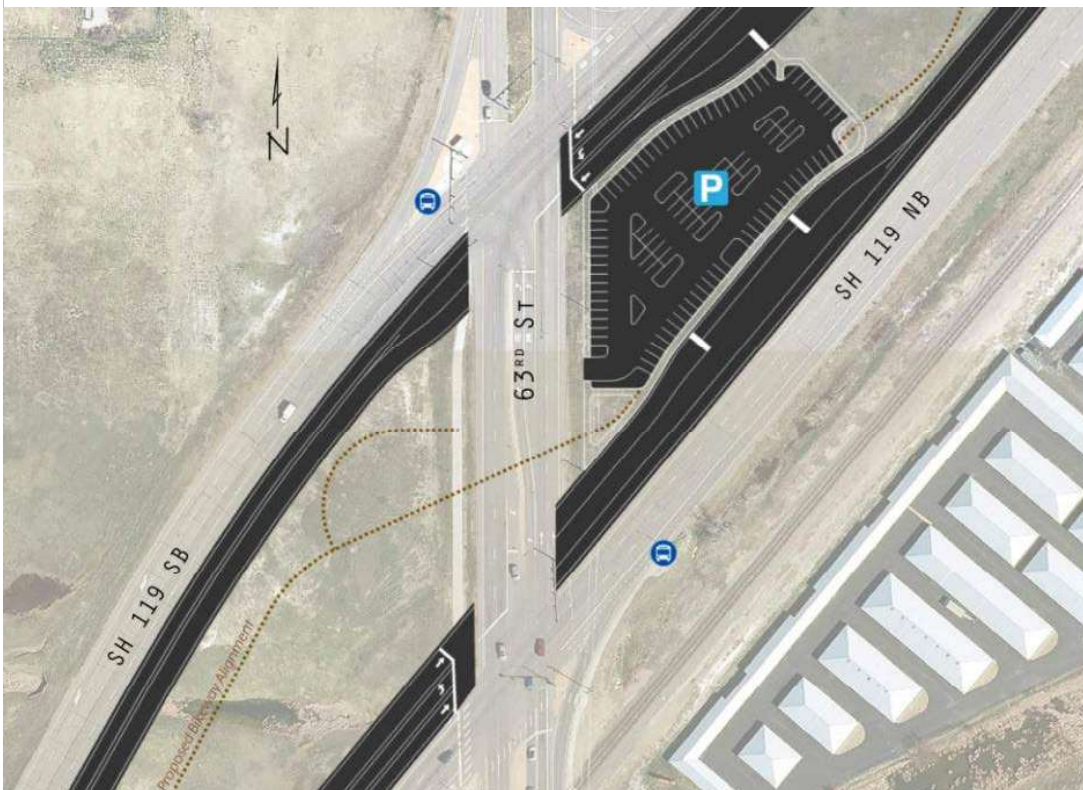
The purpose of this CO 119 and 63<sup>rd</sup> Intersection Enhancements project is to optimize regional mobility between Longmont and Boulder by providing multimodal improvements that result in faster and more reliable transit travel. In accordance with the Northwest Area Mobility Study (RTD, 2014) these multimodal improvements include implementation of BRT capital enhancements between and within Boulder and Longmont.

Capital improvements for this corridor have been extensively studied. This project is featured in the principle planning documents for the City of Longmont, City of Boulder, Boulder County, RTD and DRCOG. The documents, referenced page numbers, and document links are:

- Boulder County Transportation Master Plan, Pages 6, 14-17, <https://assets.bouldercounty.org/wp-content/uploads/2017/03/transportation-master-plan.pdf>
- City of Boulder Transportation Master Plan, Pages 54, 59,67 [https://www-static.bouldercolorado.gov/docs/transportation-master-plan-tmp-2014-1-201408271459.pdf?\\_ga=2.99314078.1226892162.1537462860-566105078.1481666580](https://www-static.bouldercolorado.gov/docs/transportation-master-plan-tmp-2014-1-201408271459.pdf?_ga=2.99314078.1226892162.1537462860-566105078.1481666580)
- Northwest Area Mobility Study, Pages 38-40 <https://www.dropbox.com/s/1uj1mt3z1h80ya4/Final%20Report%20508%5B1%5D.pdf?dl=0>
- DRCOG 2040 Fiscally Constrained Regional Transportation Plan (2040 FC RTP), page 91, [https://drcog.org/sites/default/files/resources/ACTION\\_DRAFT-2040\\_MVRTP-RTC and Board 2018.pdf](https://drcog.org/sites/default/files/resources/ACTION_DRAFT-2040_MVRTP-RTC_and_Board_2018.pdf)
- SH 119 BRT Study, <http://www.rtd-denver.com/hwy119.shtml>

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

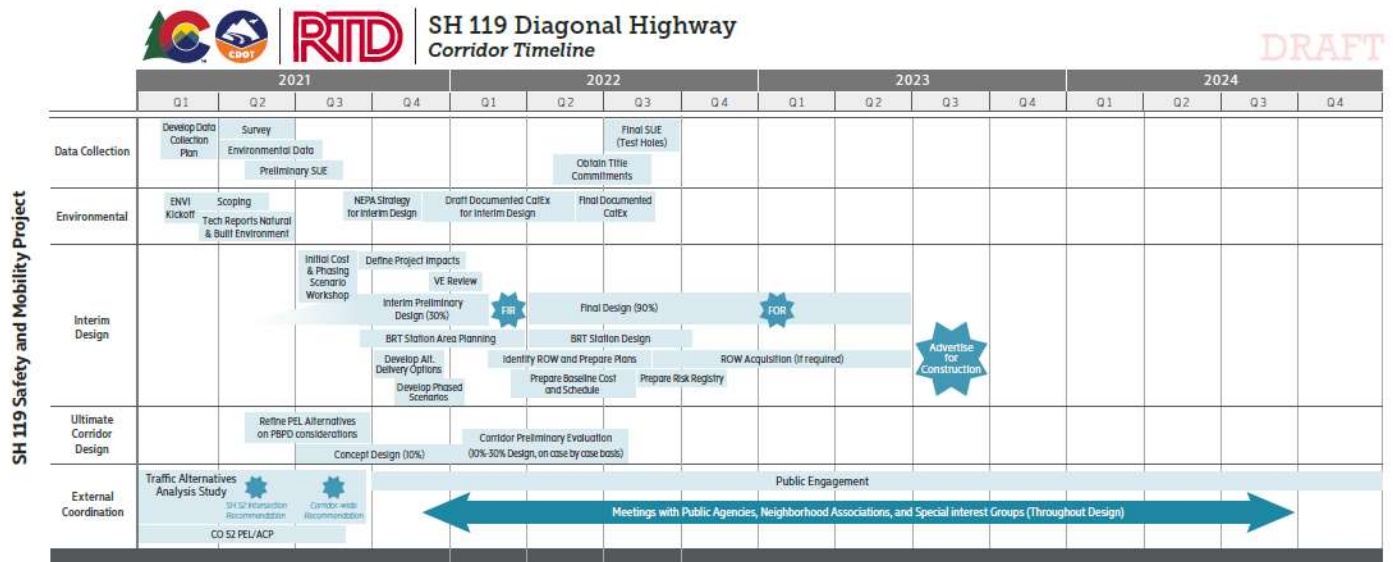
This project will design and construct transit bypass lanes on CO 119 for up to one mile on both the north and southbound approaches of the 63<sup>rd</sup> Street intersection. Transit bypass lanes are essentially extended intersection queue jump lanes providing transit vehicles dedicated lanes to pass these daily queues. These transit bypass lanes could be integrated into the corridor-long managed lanes at a later phase of the project. While the primary benefit is for transit riders, auto travel also benefits from these bypass lanes by moving transit vehicles out of the general purpose lanes. Conceptual designs and cost estimates have been developed in RTD’s SH 119 BRT Study and used in the cost estimates for this project. Below is a graphical representation of the CO 119 and 63<sup>rd</sup> Street transit facilities including elements of this project.



Source: SH 119 Safety and Mobility Study

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

CDOT is currently under contract with Muller Engineering and Apex Design to understand how several cross-section alternatives compare for traffic operations and transit priority. The stakeholders on the corridor have been meeting monthly for over a half a year. This work is slated to be completed in summer of 2021. At that point CDOT with the corridor stakeholders will be making final design decisions for the corridor. For example, CDOT is evaluating the difference in traffic operations between two and three general purpose lanes, as well as number and length of left turns, number and length of right turn lanes. Under all scenarios there will be the transit queue jump components described above. The project will be advertised for construction in Q3 of 2023.



**11. Would a smaller federal 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.*

Partial funding would not lead to the most cost-effective project implementation. If the DRCOG Board were to award a lesser dollar amount to one of the components, other state or local funding would need to be secured to ensure a whole project.

## A. Project Financial Information and Funding Request

<b>1. Total Project Cost</b>		<b>\$10,000,000</b>
<b>2. Total amount of DRCOG Regional Share Funding Request</b> <i>(no greater than \$20 million and not to exceed 50% of the total project cost)</i>	<b>\$5,000,000</b>	<b>50%</b> of total project cost
<b>3. Outside Funding Partners (other than DRCOG Regional Share funds)</b> List each funding partner and contribution amount.	<b>\$\$</b> <b>Contribution Amount</b>	<b>% of Contribution</b> <b>to Overall Total</b> <b>Project Cost</b>
CDOT Region 4	\$5,000,000	50%
<b>Total amount of funding provided by other funding partners</b> <i>(private, local, state, Subregion, or federal)</i>	<b>\$5,000,000</b>	

<b>Funding Breakdown (year by year)*</b>	*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.				
	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>Total</b>
<b>Federal Funds (Regional)</b>	\$1,000,000	\$4,500,000	\$0	\$0	<b>\$5,000,000</b>
<b>Federal Funds (Subregional)</b>	\$0	\$0	\$0	\$0	<b>\$0</b>
<b>State Funds</b>	\$0	\$4,500,000	\$0	\$0	<b>\$5,000,000</b>
<b>Local Funds</b>	\$0	\$0	\$0	\$0	<b>\$0</b>
<b>Total Funding</b>	\$1,000,000	\$9,000,000	\$0	\$0	<b>\$10,000,000</b>
<b>4. Phase to be Initiated</b> <i>Choose from Design, ENV, ROW, CON, Study, Service, Equip. Purchase, Other</i>	Design	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

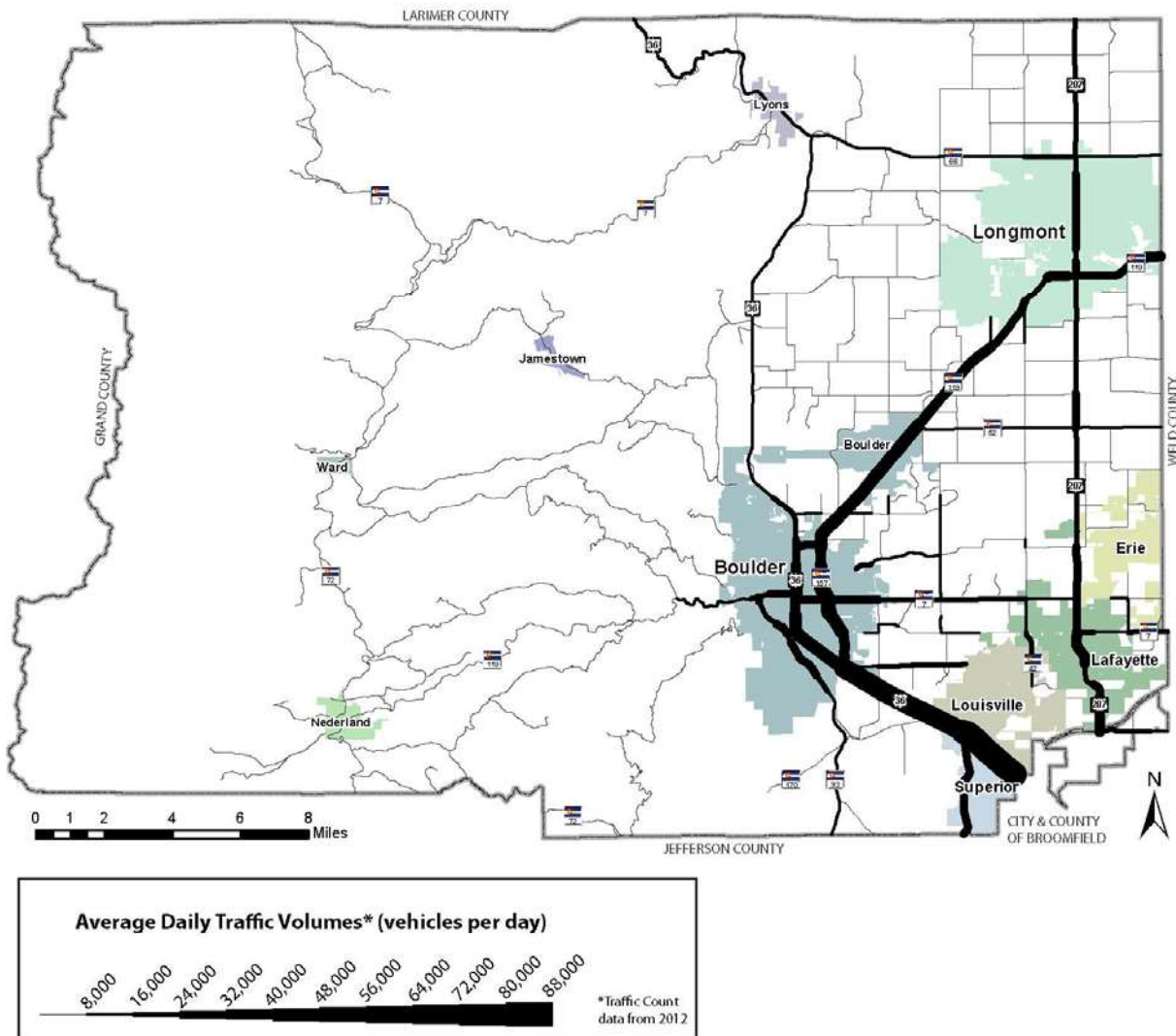
WEIGHT **40%**

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?

CO 119 is a vital regional and inter-regional transportation corridor serving the economic health of both Boulder County and the surrounding metro areas and North Front Range. This corridor is the primary connection between Boulder County's two largest municipalities, Boulder and Longmont, which together make up about 2/3 of the total population of Boulder County. Daily travel volumes demonstrate the importance of the corridor: it has the second highest travel volumes in Boulder County, behind only US36 connecting Boulder to Denver.

**Average Daily Traffic Volumes in Boulder County**

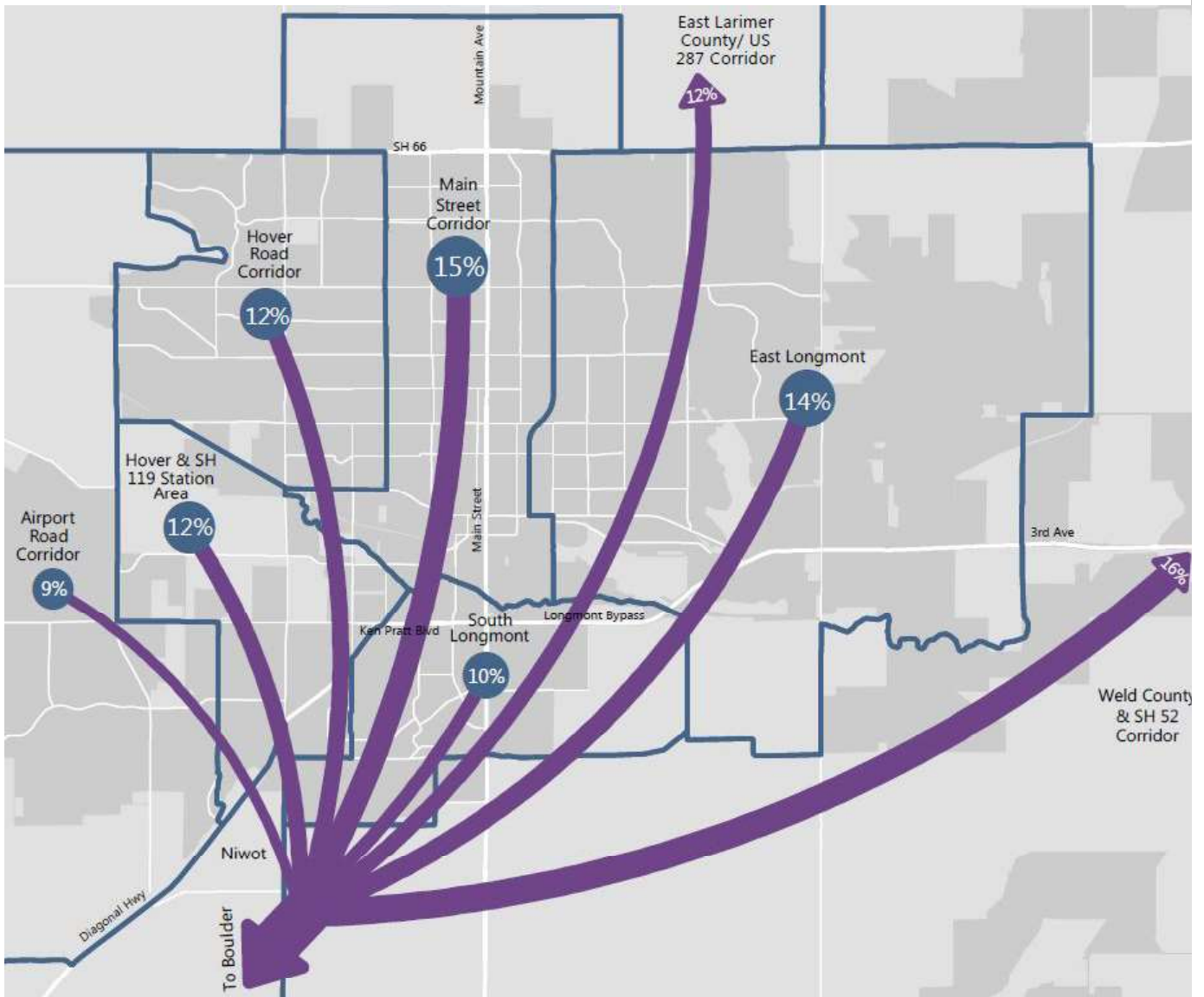


Source: Boulder County Transportation, using CDOT and Boulder County Data

Travel demand is forecasted to rise 15% by 2040 between Boulder and Longmont on the CO 119 corridor, which will result in increased delay and reduced travel time reliability, particularly during peak periods. The annual average daily traffic (AADT) on segments of CO 119 between Boulder and Longmont is currently 45,000 vehicles, and is expected to increase to 56,000 vehicles by 2040 (*CDOT Online Transportation Information System, Station ID 104352, 2016*). The increased travel demand will contribute to congestion and delay for all persons when traveling between and within Boulder and Longmont including those whose trips start or end outside of Boulder County.

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

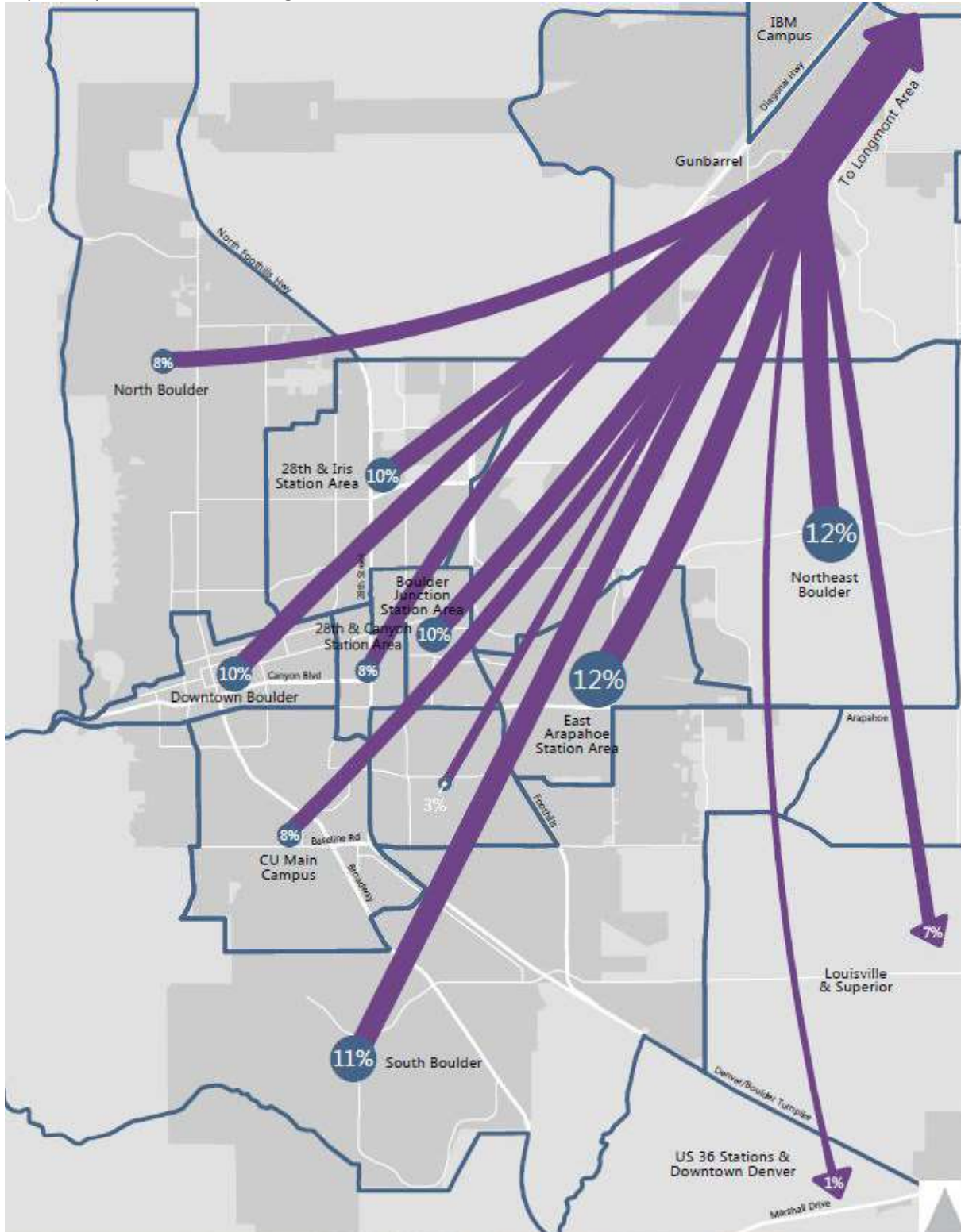
Geographically the project crosses the City of Longmont, Boulder County and the City of Boulder jurisdictions. Functionally, it provides benefit to many other jurisdictions. As part of the SH 119 BRT project, a traffic analysis was conducted using cell phone data to understand where users of CO 119 start their trips. The data shows that almost 30% of trips on the corridor start in Larimer or Weld Counties. Improvements to this corridor will have benefits to tens of thousands of people across the north Front Range, not just in Boulder County.



Source: Fehr and Peers SH119 StreetLight Origin-Destination Analysis

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

The project directly benefits the DRCOG Weld County subregion. Approximate 16% of the trips on CO 119 – or about 7,500 a day – start or end in Weld County. The project will also have benefits to Broomfield and Adams County subregions. The reason is that for some trip patterns between Broomfield and Longmont, it is faster to take US 36 connecting to CO 119 through Boulder than to use US 287 or I-25. The traffic analysis shows that 1% – or about 500 trips a day – start or end along the US 36 corridor toward Denver.



Source: Fehr and Peers SH119 StreetLight Origin-Destination Analysis

As mentioned above, the project will greatly benefit communities in the North Front Range Metropolitan Planning Organization. The FLEX route – operated by City of Fort Collins – connects Fort Collins (and Colorado State University) to Boulder (and University of Colorado) via Coffman Street in Longmont and CO 119. This inter-regional route – which was initially funded by a DRCOG grant and is now continuing with local funding – will see direct and immediate benefits of this project.

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

Implementation of BRT on CO 119 between Boulder and Longmont is not a newly proposed solution to address the increased congestion and poor travel time reliability on the corridor. This project was the highest priority of the multiyear Northwest Area Mobility Study (NAMS) which was completed and adopted by the RTD Board in June 2014. This collaborative planning study included RTD, the Colorado Department of Transportation (CDOT), the Denver Regional Council of Governments (DRCOG), and the Northwest area stakeholders including government representatives and public stakeholders from the City of Longmont, City of Boulder and Boulder County. The study determined that BRT would support and increase transit usage along CO 119, increase mobility, improve reliability, and was feasible for implementation in the near-term (5 to 10 years).

The NAMS recommendations were to implement the entire BRT corridor between and within the City of Boulder and City of Longmont as the top priority project. In addition, in 2018 CDOT added the CO 119 multimodal corridor project to the list of state-wide priority projects. Recognizing that these larger corridor projects require phased implementation over time, this application focuses on just one of the intersections to decrease delay and improve transit travel time reliability. This project will increase the attractiveness of taking transit over a car.

A corollary benefit of this project is that it will improve the performance metrics of the transit routes using these new facilities. As ridership increases the local agencies and transit agencies (RTD and TransFort) can justify adding additional service to the route. Additional service further attracts new riders leading to a virtuous circle of transit use and the benefits of a transit rich community.

**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?**

It is widely recognized that private dollars follow public investment. In its 2013 report, the Institute for Transportation Development Project found that of 21 transit corridors in North America evaluated, 14 leveraged more than \$1 of TOD investment per \$1 of transit investment, and five of these were BRT projects. (Source: Institute for Transportation & Development Policy, <https://www.itdp.org/2013/11/13/more-development-for-your-transit-dollar-an-analysis-of-21-north-american-transit-corridors/?/moredevelopment> ) Investment in these projects will increase developer confidence that CO 119 is a priority corridor for local and state government entities. The completed projects will also help corridor communities negotiate with developers and advocate for the types of developments called for in the Metro Vision Plan, including Transit Oriented Development (TOD) opportunities. Dense, livable, accessible development, and Transit Oriented Designs can be pursued around planned station areas due to increased confidence that these services will be available in the future.

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

This is a multimodal project with the core intent of improving and integrating all travel modes. The project has provisions for the following modes: transit, bike, pedestrians and private vehicles as well as support future transportation trends and technologies such as Transportation Network Companies, mobility as a service/mobility on demand, micro transit, electric vehicles (public, private, and fleet vehicles) as well as future connected/autonomous vehicles.



7. Describe funding and/or project partnerships (*other subregions, regional agencies, municipalities, private, etc.*) established in association with this project. CDOT is offering state funds to be used as for the 50% match of this project. These funds are not being used to match any other grants.

## 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).**

This project will connect two Small Urbanized Areas (Boulder and Longmont) and will contribute to the economic resiliency of the entire region by removing barriers and increasing transportation system capacity for all community members, including the most vulnerable populations – older adults, low-income families, and people with disabilities. Vulnerable populations are much more likely to depend on transit due to the high cost of owning and operating a personal vehicle as well as medical conditions, which prevent them from driving. If funded, this project will support older adults and people with disabilities to live independently and put a low-income household on the path to self-sufficiency.

Transportation is a linchpin service that connects people to all other aspects of their life: healthcare, education, employment, and human services. The 2015 [Boulder County Mobility for All Needs Assessment](#), conducted by BBC Research, found that 19% of Boulder County’s population was age 60 and over and 8.1% had disabilities. Boulder County is aging faster than other areas of Colorado and forecasts suggest that the population age 60 and over will account for approximately 26% of Boulder County’s population by 2040. Improved transit service in the county will ensure our rapidly-aging population can age in place while still maintaining their quality of life and access to essential health and human services.



Despite a reputation for affluence, our community remains in an affordable living crisis. There is a continued influx of higher-income residents, rental costs are raising quickly, and wages have flat-lined for lower- and middle-income workers. Affordable Living (defined as spending no more than 15% of a household’s income on transportation and no more than 30% on housing) has increasingly become a challenge for many county residents. A Boulder County 2016 Report entitled [Building a Community of Hope](#) found that 56% of Boulder area renters are housing cost burdened, meaning that they spend more than 30% of their income on rent and utilities. Affordable, dependable transit between Longmont and Boulder will help provide relief from our county’s high cost of living, freeing up money for other essential household expenses.

This project will promote equity within Boulder County, a county that is becoming increasingly diverse. Latinos are the largest minority population in the county and currently have lower levels of education and are more likely to live in poverty than the population as a whole. (2017-2019 [Community Foundation Boulder County Trends Report](#)) According to the 2015 American Community Survey estimates, 27% Longmont residents identify as Latino, as compared to 21% State of Colorado. Investing in this vital corridor will help connect individuals of all backgrounds with meaningful employment and higher educational opportunities allowing them to increase their ability to realize economic mobility.

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

Anyone who has traveled on SH 119 knows qualitatively how congested it becomes at the intersections. This has just been quantified through an updated VISSIMs analysis developed for CDOT by Apex Designs. Using the most recent traffic data and turning movement counts, VISSIM micro-simulation was developed and found that not only was there significant queuing, the queue lengths were highly variable. This variability decreases the reliability of taking

transit. Every day there is an AM southbound queue over 1,000 feet and a PM northbound queue of just over 1,500 on CO 119 at 63<sup>rd</sup>. And everyday in the peak hours there is an AM southbound delay of 40 second and a PM northbound delay of 28 seconds. This means that after this project is completed buses traveling in the AM and PM periods will save a minute of travel time over private vehicles. In addition to the direct travel time savings, there will be increased consistency in travel time, allowing the transit vehicles to stay on schedule over the entire route.

	Delay (sec.)	Level of Service	Volume-to- Capacity Ratio <sup>(3)</sup>	Model Maxium Queue (ft.)
Southbound Through AM	40	D	1.04	1,014
Northbound Through PM	28	C	0.94	1,509

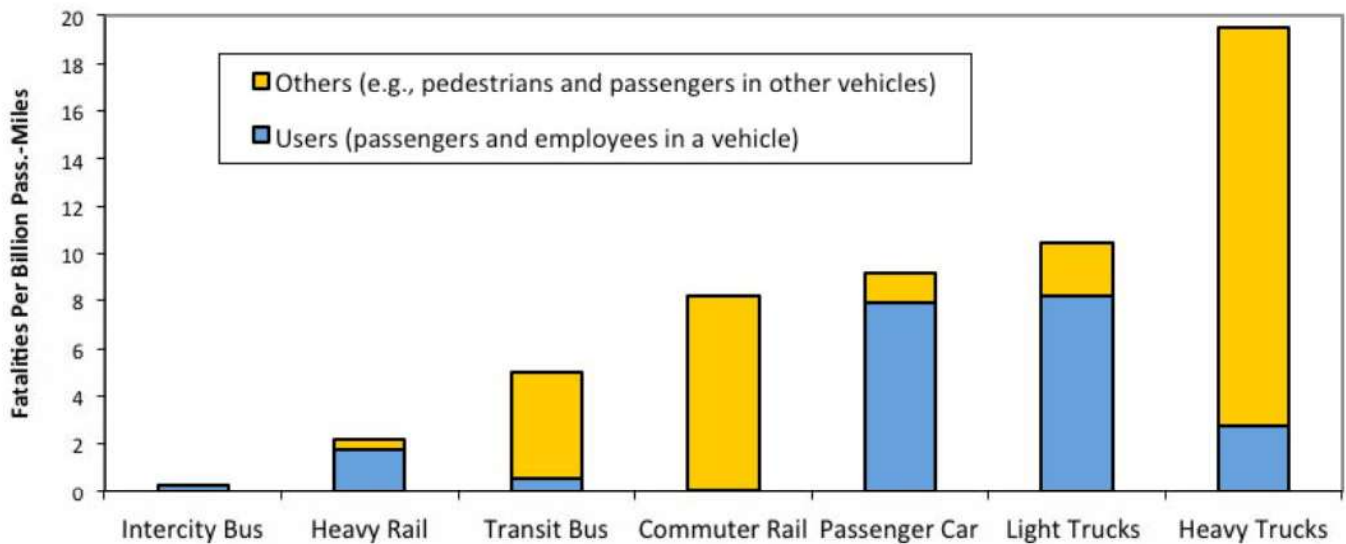
Source: Apex Designs, 2021 CDOT Safety and Mobility Study



SH 119

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

Safety is a paramount to local agencies in Boulder County. This project increases safety in several ways. First, riding on a bus is safer than any other mode of travel (Journal of Public Transportation, 2014). On a per passenger mile travel basis, drivers and passengers of cars have a fatality risk 67 times greater than passengers in a bus. When it comes to vehicle crashes, larger vehicles protect their passengers better during a crash than smaller vehicles; and there are no passenger vehicles on the road larger than an RTD bus! High quality transit service also provides people with travel options to prevent distracted, tired, and impaired driving. The RTD vehicles and drivers must conform to all Federal Transit Administration safety minimums ensuring that drivers are professionally trained, are not under the influence of drugs or alcohol, and are prohibited from listening to music or using a smart phone when operating the vehicle. In summary, this project will increase safety on the transportation network by enticing a larger portion of CO 119 travelers to use a much safer mode.



Source: Litman and Fitzroy, based on FHWA and APTA data

### 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

This project corridor is planned to have the largest transit infrastructure investment in Boulder County for the next two decades. The RTD SH 119 BRT PEL has estimated the cost for the full vision of the corridor is approximately \$250,000,000. Multiple sources of funding are being pursued to achieve the full corridor vision, including a successful DRCOG 2020-2023 Regional TIP application.

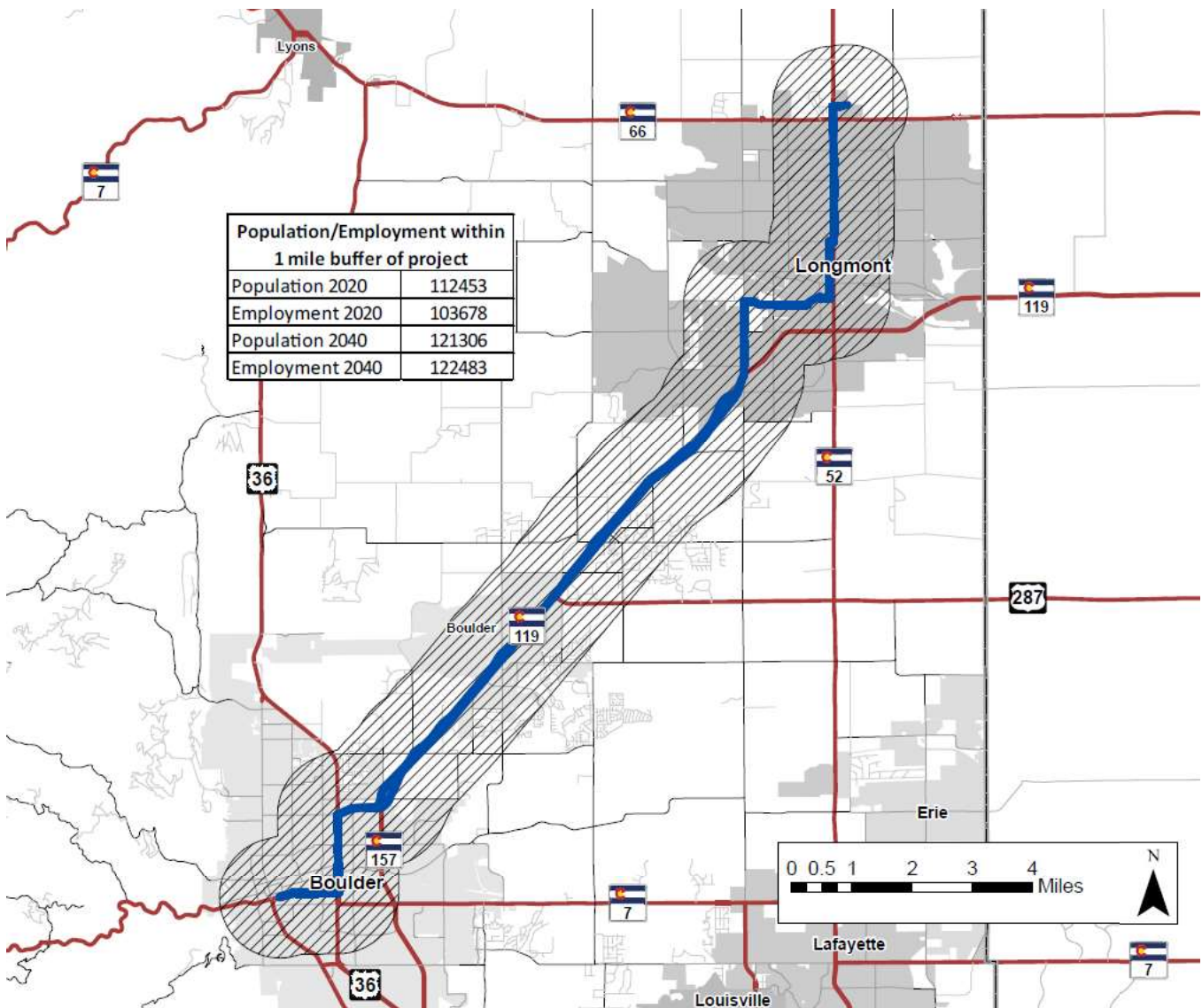
[MV objective 3](#)

**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

This project provides transit connections to the four highest density employment and housing locations in Boulder County: Downtown Longmont, Boulder Junction, University of Colorado and Downtown Boulder. It directly serves the following six Urban Centers: Longmont CBD, Ken Pratt Extension, Twin Peaks Activity Center, Gunbarrel Activity Center, 28<sup>th</sup>/30<sup>th</sup> Streets, Downtown Boulder, and University Hill. Using DRCOG datasets, a 1-mile buffer of the CO 119 corridor in 2020 had a population of 112,453 and employed 103,678 people.



**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?

Yes  No

This project increases mobility choice by providing decreased transit travel times and increased transit travel time reliability. The transit services that will benefit from these proposed projects are local services (205, 323, 324, 326, 327) regional services (BOLT, J, L) and interregional services (FLEX service between Boulder and Fort Collins via Loveland). Specifically, each BRT vehicle making a round trip between Boulder and Longmont is expected to save over a minute of delay when running in the peak periods.

As mentioned above, this project will improve the performance metrics of all of the transit routes using these new facilities. As ridership increases the local agencies and transit agencies (RTD and TransFort) can justify adding additional service to the route. Additional service further attracts new riders leading to a virtuous circle of transit use and the benefits of a transit rich community.

[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

This project improves air quality by converting single occupant vehicle trips into transit trips. Due to the regional nature of the project – and the relative long trip distance between Longmont and Boulder – each trip that is converted from a vehicle to a transit trips saves approximately 16 miles. This is the distance from downtown Longmont to Downtown Boulder was deemed a good median value of all of the trips in the corridor. Note that new transit riders on the FLEX route will be coming from as far away as Loveland and Fort Collins, 45 miles away. These long distances will be offset by new transit riders between Gunbarrel and Boulder, only an 8 mile trip.

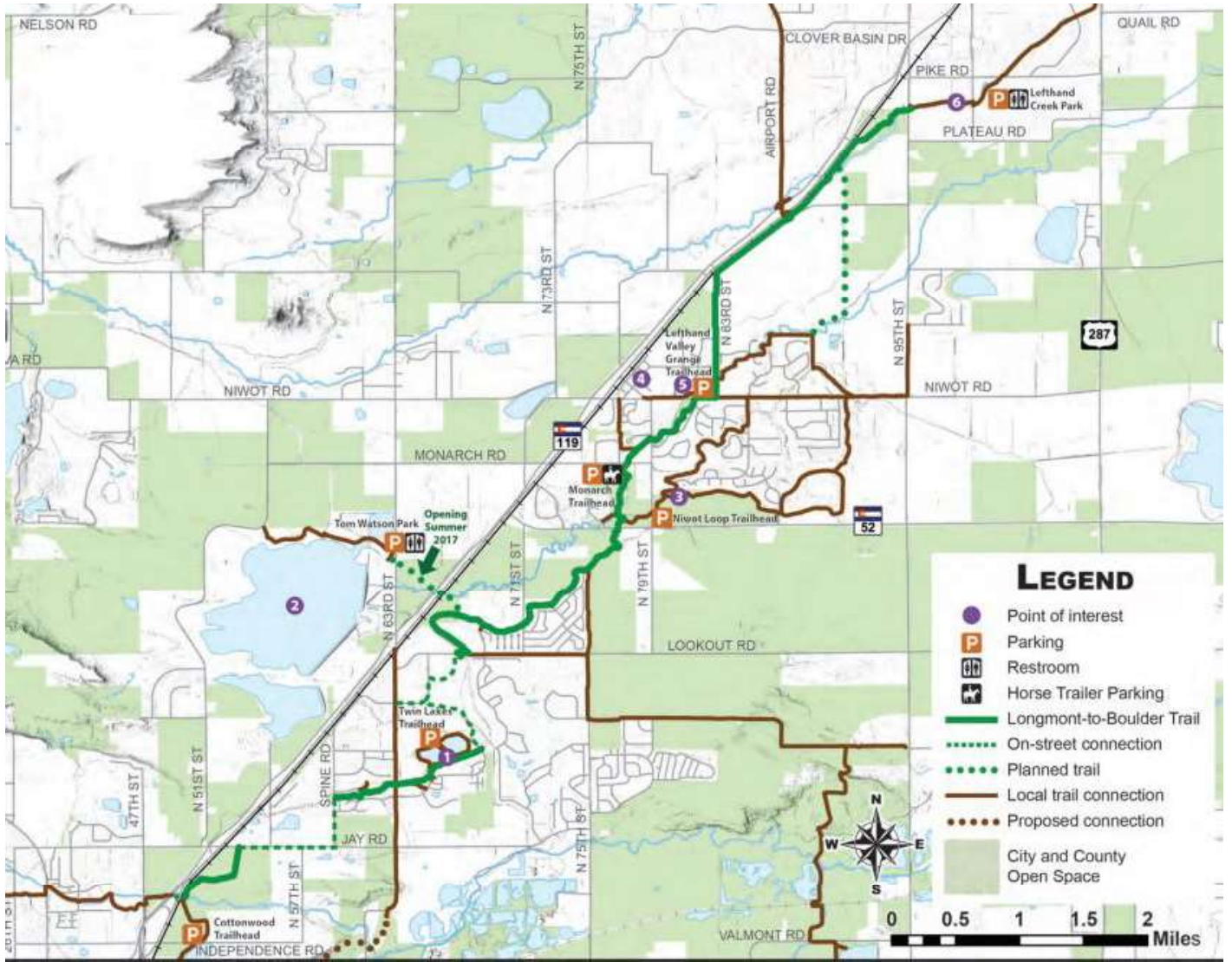
[MV objective 7b](#)

**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

The SH119 BRT project corridor goes through City of Boulder and Boulder County Open Space and actively used agricultural lands. This corridor has views across Open Space and agricultural properties to the mountains on the west part of the county. There are several locations where the proposed transit stops can access one of the regional or local trails. In addition, the roads that travel through the above mentioned agricultural and Open Space lands are low traffic volume roads. Almost all of them have bikable shoulders and many of them are gravel roads with extremely low traffic volumes. Enhanced transit services – with the ability to transport bikes as the current buses have – will provide an opportunity to access these natural resources.



Source: Boulder County Parks and Open Space

[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

This increases healthy lifestyles in two ways. First, research has shown that transit commuters are more likely than car commuters to achieve minimum daily activity thresholds. (Sources: Transit and Health: Mode of Transport, Employer-Sponsored Public Transit Pass Programs, and Physical Activity. *Journal of Public Health Policy* 2009; Walking to Public Transit: Steps to Help Meet Physical Activity Recommendations. *American Journal of Preventative Medicine*. 2005; Evaluating Public Transportation Health Benefits. *Victoria Transportation Policy Institute*. 2012) This is due to the fact that access and from transit – the first and final mile – is often non-motorized trips (walking and biking).

Second, as described above, this particular transit project provides opportunities to access local and regional trails along the corridor. This is particularly true for individuals that don't have access to a private vehicle.

**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

It would be difficult to say that a single transportation project could measurably reduce education and income disparities. That said, transit projects increase equity by providing mobility options for the many residents and employees of our region that cannot drive a personal car. These are people that are too young or too old to drive, are physically disabled, or cannot afford to own and operate their own personal vehicle. Unlike standard road projects, this project disproportionately increases opportunities to these populations.

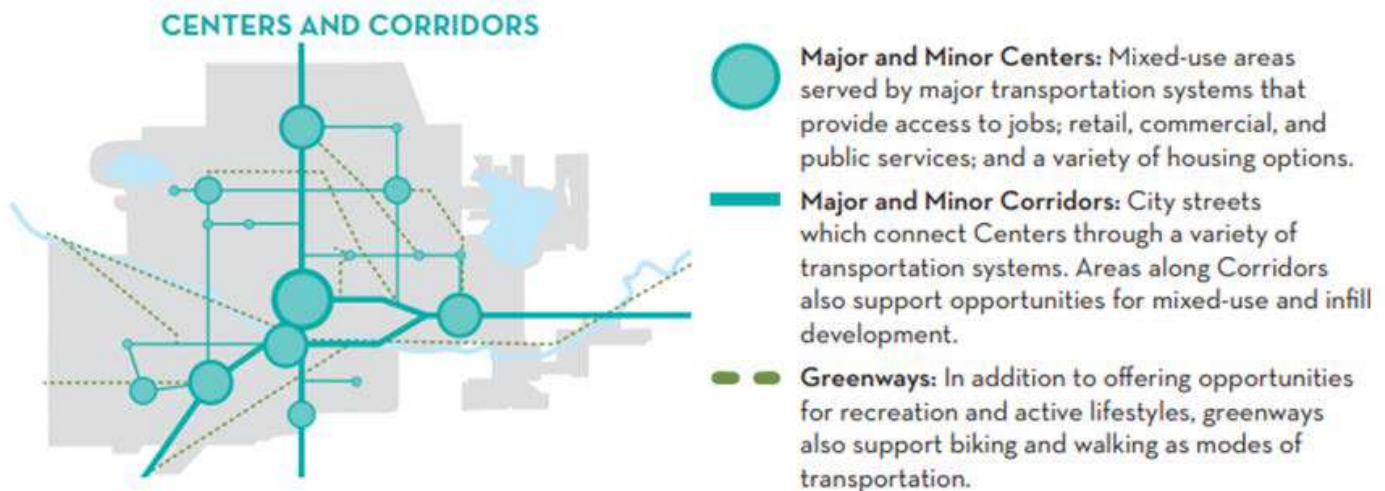
**MV objective 14**

**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?

Yes  No

The CO 119 BRT connects the major growth centers for the City of Longmont and the City of Boulder. From Envision Longmont: “Longmont’s major transportation corridors—Main Street, Hover Street, Highway 119, and Ken Pratt Boulevard are a central focus of the Growth Framework, and provide an opportunity to align the City’s land use and multimodal transportation objectives with myriad quality of life considerations by concentrating future growth and reinvestment in livable centers and corridors. Centers and corridors vary in terms of their scale, overall mix of uses, and the types of transportation options that are available today or are planned for the future”



Source: Envision Longmont

In particular the First and Main area of Longmont is slated for massive increases in residential, commercial and mixed use development. This is being guided by the Downtown Longmont Master Plan of Development, adopted in 2017.

(<https://www.downtownlongmont.com/files/docs/-master-plan-final-4-3-17-single-pages-reduced.pdf>) This plan calls for a 37% increase in housing units and a 44% increase in jobs in the downtown core.

	Current	Buildout Estimate	% Increase
Housing Units	1,771	2,430	37%
Jobs	4,620	6,632	44%

On the Boulder side, the project will connect to the continued development at the Boulder Junction and downtown Boulder areas. The City of Boulder’s Transit Village Action Plan calls for a minimum of 1,400 new residential units and up to 2,400 new residential units in the area.

**Transit Village Area Today**



**Possible Future Development Pattern**



Higher-density land uses supported by a finer-grain street network will create a more urban environment with fewer surface parking lots and a walkable block pattern.

Source: Transit Village Area Plan, 2010.

**D. Project Leveraging**

**WEIGHT 10%**

<p>9. What percent of outside funding sources (non-DRCOG-allocated Regional Share funding) does this project have?</p>	<p>50%</p>	<p>80%+ outside funding sources ..... High          60-79% ..... Medium          59% and below ..... Low</p>
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### Part 3

## Project Data Worksheet – Calculations and Estimates

(Complete all subsections applicable to the project)

### A. Transit Use

1. Current ridership weekday boardings	1,660
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	112,453	103,678	<b>216,131</b>
2040	121,306	122,483	<b>243,789</b>

Transit Use Calculations	Year of Opening	2040 Weekday Estimate
3. Enter estimated additional daily transit boardings after project is completed. <i>(Using 50% growth above year of opening for 2040 value, unless justified)</i> <i>Provide supporting documentation as part of application submittal</i>	2,040	3,060
4. Enter number of the additional transit boardings (from #3 above) that were previously using a different transit route. <i>(Example: {#3 X 25%} or other percent, if justified)</i>	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.) <i>(Example: {#3 X 25%} or other percent, if justified)</i>	50	75
6. = Number of SOV one-way trips reduced per day (#3 – #4 – #5)	<b>1,990</b>	<b>2,985</b>
7. Enter the value of {#6 x 9 miles}. (= the VMT reduced per day) <i>(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)</i>	31,840	47,760
8. = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)	<b>30,248</b>	<b>45,372</b>

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:

Ridership projections were taken from the modeling performed by Parsons and RTD staff in as part of the SH 119 BRT Study. The daily ridership projections from Alternative #1, which is the NAMS preferred alternative route. On opening day this work estimated a daily ridership of 3,700, which is a net increase of 2,040 daily boardings. Note that this is the ridership projection for completion of the entire SH119 PEL. Ridership estimates as a result of just this single project have not been calculated but would be significantly smaller.

For number 4, there is only one transit route connecting Boulder to Longmont. As such, none of the additional boardings would have come from other transit routes.

For number 5, this being a regional transit route with the median distance from Longmont to Boulder of 16 miles, there are effectively no walking or cycling trips that are going to convert to transit because of this project. While there are cyclist that commute this distance, these are not time sensitive commuters and it is unlikely that the travel time savings on the bus of under 10 minutes would induce them to switch modes. There could be some carpoolers that switch to transit and this has been estimated at 2.5% of all of the new transit trips.

## B. Bicycle Use

1. Current weekday bicyclists	165 (SH 119 at 63rd)
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	112,453	103,678	216,131
2040	121,306	122,483	243,789

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.	9	14
4. Enter number of the bicycle trips (in #3 above) that will be diverting from a different bicycling route. (Example: <b>{#3 X 50%}</b> or other percent, if justified)	0	0
5. = Initial number of new bicycle trips from project (#3 – #4)	9	14
6. Enter number of the new trips produced (from #5 above) that are replacing an SOV trip. (Example: <b>{#5 X 30%}</b> (or other percent, if justified)	9	14
7. = Number of SOV trips reduced per day (#5 - #6)	9	14
8. Enter the value of <b>{#7 x 2 miles}</b> . (= the VMT reduced per day) (Values other than 2 miles must be justified by sponsor)	108	168
9. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	103	160
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:  We only had data for the bicycle use on SH 119. This is a long distance, regional bike route with trip distances between 9 and 16 miles. It was assumed an average distance of 12 miles per trip but very few new trips.		

## 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	58,843	56,601	115,444
2040	62,749	69,363	132,112

Pedestrian Use Calculations	Year of Opening	2040 Weekday Estimate
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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: <b>{#3 X 50%}</b> 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: <b>{#5 X 30%}</b> or other percent, if justified)	0	0
7. = Number of SOV trips reduced per day (#5 - #6)	0	0
12. Enter the value of <b>{#7 x .4 miles}</b> . (= the VMT reduced per day) (Values other than .4 miles must be justified by sponsor)	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	5,954
	2. Minority persons	14,447
	3. Low-Income households	4,151
	4. Linguistically-challenged persons	2,000
	5. Individuals with disabilities	2,691
	6. Households without a motor vehicle	2,181
	7. Children ages 6-17	6,413
	8. Health service facilities served by project	45

## 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 <b>{#3 - #4} = Reduced VHD</b>	0
6. Enter value of <b>{#5 X 1.4} = Reduced person hours of delay</b> <i>(Value higher than 1.4 due to high transit ridership must be justified by sponsor)</i>	0
7. <b>After project peak hour congested average travel time reduction</b> per vehicle (includes persons, transit passengers, freight, and service equipment carried by vehicles). <i>If applicable, denote unique travel time reduction for certain types of vehicles</i>	0
8. If values would be distinctly different for weekend days or special events, describe the magnitude of difference.	
9. If different values other than the suggested are used, please explain here:	

F. Traffic Crash Reduction		
1. Provide the current number of crashes involving motor vehicles, bicyclists, and pedestrians <i>(most recent 5-year period of data)</i>		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 <u>applicable to the project scope</u> <i>(per the five-year period used above)</i>		
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	SH 119 @ 63rd: Fair
2. Describe current pavement issues and how the project will address them. The pavement conditions range from fair to poor. Project costs include complete street renovation for the full extent of all three components. For SH 119	
3. Average Daily User Volume	SH 119 @ 63rd: 45,000

<b>Bicycle/Pedestrian/Other Facility</b>	
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
<b>H. Bridge Improvements</b>	
1. Current bridge structural condition from CDOT There are no bridge components of this project	
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	
<b>I. Other Beneficial Variables</b> <i>(identified and calculated by the sponsor)</i>	
1.	
2.	
3.	
<b>J. Disbenefits or Negative Impacts</b> <i>(identified and calculated by the sponsor)</i>	
1. Increase in VMT? <i>If yes, describe scale of expected increase</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. Negative impact on vulnerable populations	
3. Other:	