

2020–2023 Transportation Improvement Program (TIP)

Boulder County Subregional Share Project Application Form

APPLICATION OVERVIEW

The **Subregional Share Call for Projects** will **open on January 2, 2019**, with applications **due no later than 3 p.m. on February 27, 2018** to <u>your subregional forum</u>.

- To be eligible to submit, at least one person from your agency must have attended one of the mandatory TIP training workshops (held August 8 and August 16) or a supplemental training held on September 14.
- Projects requiring CDOT and/or RTD concurrence must provide their official response with the
 application submittal. The CDOT/RTD concurrence request is due to CDOT/RTD no later than January
 7, with CDOT/RTD providing a response no later than February 8. The form can be found here.
- Any applications submitted by regional or similar agencies (TMA's), or municipalities crossing multiple subregions, must be submitted through the subregional forum based on where the majority of the project is located.
- Data to help the sponsor fill out the application, especially Part 3, can be found here.
- If any sponsor wishes to request additional data or calculations from DRCOG staff, please submit your request to tcottrell@drcog.org no later than February 6, 2019.
- The application must be affirmed by either the applicant's City or County Manager or Chief Elected
 Official (Mayor or County Commission Chair) for local governments, or agency director or equivalent
 for other applicants.
- Further details on project eligibility, evaluation criteria, and the selection process are defined in the
 Policy on Transportation Improvement Program (TIP) Preparation: Procedures for Preparing the 2020-2023 TIP, which can be found online here.

APPLICATION FORM OUTLINE

The 2020-2023 TIP Subregional Share application contains three parts: base project information (Part 1), evaluation questions (Part 2), and data calculation estimates (Part 3). DRCOG staff will review each forum's submitted applications for eligibility. Each forum will be responsible for making a comprehensive evaluation of all eligible applications and rank ordering their submittals to determine their recommended projects and waiting lists. Forum recommendations will be forwarded to DRCOG staff for a final recommendation to the TAC, RTC, and DRCOG Board.

Part 1 | Base Information

Applicants will enter **foundational** information for their *project/program/study* (hereafter referred to as *project*) in Part 1, including a Problem Statement, project description, and concurrence documentation from CDOT and/or RTD, if applicable. Part 1 will not be scored.

Part 2 | Evaluation Criteria, Questions, and Scoring

This part includes four sections (A-D) for the **applicant to provide qualitative and quantitative responses** to use for scoring projects. The outcomes from Part 3 should guide the applicant's responses in Part 2.

Scoring Methodology: Each section will be scored using a scale of *High-Medium-Low*, relative to other applications received. The four sections in Part 2 are weighted and scored as follows:

| High | The project will significantly address a clearly demonstrated major subregional problem and benefit people and businesses from multiple subregions. |
|---|---|
| Medium The project will either moderately address a major problem or significantly address a modera subregional problem. | |
| Low The project will address a minor subregional problem. | |

| High | The project will significantly improve the safety and/or security, significantly increase the reliability of the transportation network, and benefit a large number and variety of users (including vulnerable populations*). |
|--------|--|
| Medium | The project will moderately improve the safety and/or security, moderately increase the reliability of the transportation network, and benefit a moderate number and variety of users (including vulnerable populations*). |
| Low | The project will minimally improve the safety and/or security, minimally increase the reliability of the transportation network, and benefit a limited number and variety of users (including vulnerable populations*). |

^{*}Vulnerable populations include: Individuals with disabilities, persons over age 65, and low-income, minority, or linguistically-challenged persons.

Section C. Consistency & Contributions to Transportation-focused Metro Vision Objectives 20%

Metro Vision guides DRCOG's work and establishes shared expectations with our region's many and various planning partners. The plan outlines broad outcomes, objectives, and initiatives established by the DRCOG Board to make life better for the region's residents. The degree to which the outcomes, objectives, and initiatives identified in Metro Vision apply in individual communities will vary. Metro Vision has historically informed other DRCOG planning processes, such as the TIP.

| | High | The project will significantly address Metro Vision transportation-related objectives and is determined to be in the top third of applications based on the magnitude of benefits. | |
|--|------|--|--|
| Medium The project will moderately address Metro Vision transportation-related objectives and is determined to be in the middle third of applications based on the magnitude of benefits. | | | |
| low | | The project will slightly or not at all address Metro Vision transportation-related objectives and is determined to be in the bottom third of applications based on the magnitude of benefits. | |

Scores are assigned based on the percent of outside funding sources (non-Subregional Share).

| % of Outside | High | 60% and above |
|---------------------------------------|--------|---------------|
| Funding (non-Subregional Share) | Medium | 30-59% |
| | Low | 29% and below |

Part 3 | Project Data – Calculations and Estimates

Based on the applicant's project elements, sponsors will complete the appropriate sections to estimate usage or benefit values. Part 3 is not scored, and the quantitative responses should be used to back-up the applicant's qualitative narrative.

| Pa | Part 1 Base Informa | | | | |
|----|--|--|---|---|--|
| 1. | Project Title | | | | the Reconfiguration of SH 42: Including dal and Intersection improvements |
| 2. | Project Start/End points or Geographic Area Provide a map with submittal, as appropriate | | | 2 from Empire Road/Lock Streechment 1) | et to SH 7/Arapahoe Road (Map, |
| 3. | | OSOr (entity that applete and be find find find find find find find find | L IIIV | of Louisville | |
| 4. | - | tact Person, Ti ber, and Emai | IVIES | an Davis, Deputy City Manager | r, 303-335-4539, mdavis@louisvilleco.gov |
| 5. | 5. Does this project touch CDOT Righ access RTD property, or request R | | | | X Yes No If yes, provide applicable concurrence documentation with submittal (Concurrence approval, Attachment 2) |
| 6. | project for addi | | ditional lanes. It is also identifi d transit system expansion. SH 42 Gateway Plan SH 7 PEL 75 th St. to SH 287 https://assets.bouldercounty.or Report-Appendix-A-Corridor-Co | g/wp-content/uploads/2018/04/SH7-PEL-Final- | |
| | | | Other(s): | document/s and referenced page | number if possible, or provide documentation |
| 7. | Identify the | project's key (| with submittal | | |
| | Rapid Transit Capacity (2040 FCRTP) X Transit Other: Transit Priority Lanes X Bicycle Facility X Pedestrian Facility X Safety Improvements X Roadway Capacity or Managed Lanes (2040 FCRTP) X Roadway Operational | | | | |

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

SH 42 is considered a principal arterial in the 2040 FCRTP. The corridor spans from Louisville to Lafayette, and has high vehicle volume with current cars per day (ADT) of 22,600 and DRCOG projections for 2040 ADT of 28,000. According to DRCOG data, population and employment densities along the route are anticipated to continue to grow from 2010 to 2040. This corridor has been identified in the DRCOG MVRTP as one of the key congested corridors in 2016. Economic and population growth in the area has contributed to increased traffic volumes, as well as increased demand for multimodal facilities to accommodate walking, bicycling and transit. Developments that accommodate vulnerable populations, including two senior living facilities and affordable housing for families and individuals with disabilities has also been developed along the corridor.

In terms of functionality, SH 42 has only two lanes, and with more than 20,000 ADT turning vehicles often cause delays. The highway operates at a LOS F according to the Highway Capacity Manual. Travel times along SH 42 between South Boulder Road and the Northwest Parkway were measured and demonstrated considerable delays. (Attachment 3) The major intersections along SH 42 experience high crash rates, with 59 crashes, 14 resulting in injury, occurring at the intersection of SH 7 and SH 42 between 2010 – 2014 (Source: SH 7 PEL 75th St. to SH 287), and 63 crash occurrences at SH 42 and South Boulder Road between 2013 - 2015. A pedestrian fatality occurred in 2017 at SH 42 and Hecla Drive.

The local communities of Louisville and Lafayette have identified the need to improve the overall design and use of the corridor in order to improve safety and reliability, provide consistent, continuous multimodal facilities for walking and biking, improve transit access, and reduce traffic congestion.

The proposed plan will provide design for improvements that address transportation, growth and land development challenges outlined in the DRCOG Metro Vision plan, including: increasing mobility options for individuals without a car or with mobility challenges, reducing traffic congestion, reducing traffic crashes and improving overall safety, and addressing access issues related to population and economic growth and development along this corridor.

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

The project scope is to complete a conceptual design plan for the SH 42 corridor that would include the following elements:

- Review of current corridor plans and reconfigure vehicle and multimodal use within the existing corridor. The City of Louisville completed a SH 42 Gateway Corridor Plan in 2013 (The Gateway Plan), and a Transportation Master Plan for the city is currently underway. Many of the recommendations have been implemented from the Gateway Plan, including the installation of traffic signals and medians in some areas. However, current input and analysis gathered as a part of the City's 2019 Transportation Master Plan, a 2018 traffic volume measurement, and updated forecasts suggest that the SH 42 Gateway Corridor Plan may not have provided optimal solutions to address several competing goals throughout the corridor. The study was completed before the regional RTD transit study Northwest Area Mobility Study (NAMS) and while the Gateway Plan contemplated transit, it does not include the final NAMS recommendations for enhanced transit along SH 42. In addition, several of the access recommendations on SH 42 were included based upon a secondary road network that will not be installed, and further analysis with updated utilization data has demonstrated that some of the access recommendations will cause more significant travel delays on SH 42 than originally identified. Further, the Gateway Plan proposed 3 lane configuration of SH 42 through Louisville does not meet future capacity needs or maximize the use of the corridor for transit and multimodal use in a safe manner.
- Improve multimodal connectivity throughout the entire corridor. There is currently no contiguous bike lane, sidewalk, path or walkway that extends SH 42 between Empire Road in Louisville to Arapahoe Road in Lafayette. Sidewalks exist along various sections of the road, and shoulder width varies throughout. With increased density and commercial development in the area, more residents of both communities are seeking alternate modes to reach amenities such as parks, trails, grocery stores, shopping and other services. Many commuters use the corridor, and with the implementation of BRT on SH 7 from Boulder to Brighton and eventual connection to enhanced transit on SH 42, even more employees coming into Louisville and Lafayette will utilize the SH 42 corridor. This plan will provide a conceptual design for a concrete, separated bicycle/pedestrian path along SH 42

for this entire stretch, and consider necessary pedestrian crossings associated with the bike/ped path at all intersections.

- Intersection improvements at key locations, including SH 42 and South Boulder Road, Baseline Road and SH 7/Arapahoe Road. The City of Louisville Transportation Master Plan has made recommendations for intersection improvements at SH 42 and South Boulder Road, which need to be prioritized/agreed upon by the community and conceptually designed. Recent improvements and reconfiguration of the Baseline and SH 42 intersection has been completed, but no facilities for bicycle/pedestrian improvements have been included. Once a bike/ped trail alignment is identified, some improvements will be necessary at this crossing to accommodate alternate modes. The intersection of SH 7 and SH 42 is a high priority due to the ongoing planning of the SH 7 BRT project. Intersection improvements are needed in this area, and will need to be consistent with the recommendations of the SH 7 BRT PEL.
- Consideration/accommodation of future side access points. The City of Louisville is mostly built-out in these areas, but there will be some additional development along SH 42 in the coming years, including the Coal Creek Station Development southwest of the South Boulder Road and SH 42 intersection that could require changes to access onto SH 42. The City of Lafayette has planned developments between Pascal Drive (the boundary between the two communities) and Baseline Road that will necessitate additional access onto SH 42, as well as one signal that is planned at Indian Peaks Trail and SH 42. The City of Louisville has planned signals at Short Street and Hecla Drive. Hecla Drive has not been approved by CDOT, but is necessary to serve the growth and special populations in that area. The infrastructure for these signals and accesses are either currently in design or will be designed as a part of future development, but they must be considered in the overall conceptual design of the SH 42 corridor.
- Consideration/accommodation of future enhanced transit within the SH 42 corridor. The 2014 NAMS study included a proposal for enhanced transit along the SH 42 corridor. The potential transit line would provide a north-south connection from Lafayette and Louisville to the US 36 US 36 Flatiron Flyer BRT. The study recognized that with limited right of way and narrow shoulder widths, exclusive lane opportunities for BRT would not be feasible along SH 42. However, with no transit currently available along SH 42, this plan will allow the communities to design infrastructure that could support future transit, including the enhanced transit conceptualized through NAMS.

10. What is the status of the proposed project?

The two jurisdictions are at various stages of planning for projects along the corridor. The City of Louisville has high-level conceptual design for some aspects of the portion of SH 42 between Empire Road and Paschal Drive, and has completed design for the intersection improvements at Short Street and Hecla Street. Louisville has been meeting with Boulder County Open Space and has a conceptual alignment identified for the bike/ped path along SH 42 between Empire Road and South Boulder Road, but no designs at this time. In addition, the City's Transportation Master Plan (scheduled to be completed this summer) will include conceptual design for a 5 lane configuration of SH 42 between Empire and Paschal. (Attachment 4) The City of Lafayette has done little to no planning for the portion of SH 42 from Paschal Drive to SH 7. Some geometric and signal improvements have been made at SH 42 and Baseline Road, and the SH 7 PEL has provided an analysis of existing traffic conditions, safety analysis, transit infrastructure and cursory resource and environmental analysis in the SH 7/SH 42/96th St intersection. This plan will bring both entities up to the same level of planning with regard to future plans for SH 42.

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

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

A. Project Financial Information and Funding Request

| 1. | Total Project Cost | - | \$500,000 |
|----|--|-----------------------------|---|
| 2. | Total amount of DRCOG Subregional Share Funding Request (no greater than \$20 million and not to exceed 50% of the total project cost) | \$350,000 | 70% 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 of Louisville | \$75,000 | 15% |
| | City of Lafayette | \$75,000 | 15% |
| | | | |
| То | tal amount of funding provided by other funding partners (private, local, state, Subregion, or federal) | \$150,000 | 30% |

| Funding | Breakdown | lvear h | v vear)* |
|---------|------------|---------|----------|
| runung | DIEakuowii | (year b | y 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.

| | yeur of expenditure dollars disting an inflution factor of 5% per year from 2018. | | | | | |
|---|---|---------|---------|---------|-----------|--|
| | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Total | |
| Federal Funds (Subregional) | \$350,000 | \$0 | \$0 | \$ | \$350,000 | |
| State Funds | \$0 | \$0 | \$0 | \$ | \$ | |
| Local Funds | \$150,000 | \$ | \$0 | \$ | \$150,000 | |
| Total Funding | \$500,000 | \$ | \$0 | \$ | \$500,000 | |
| 4. Phase to be Initiated Choose from Design, ENV, ROW, CON, Study, Service, Equip. Purchase, Other | Design | | | | | |

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 <u>qualitative and quantitative</u> (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?

SH 42 is an important regional arterial identified in the DRCOG Metro Vision plan. The corridor directly serves the communities of Louisville and Lafayette, as well as Superior, Broomfield and many parts of unincorporated Boulder County. In addition, many people in the metro region employed in Southeast Boulder County utilize the corridor to access work.

The City of Louisville expects to see a 28% increase in employment growth by 2040 (over 2015 employment levels), with most of the growth occurring in the northern and downtown portions of the City (Attachment 5). The City's current commuting patterns indicate that 93% of the people who work in Louisville commute from other places, with 45% in-commuting from the US 36 corridor. The highest density of Louisville employees live in Superior, Broomfield, Thornton and Westminster. SH 42 is the primary corridor for people coming into Louisville to work every day. Likewise, Lafayette sees 45% of its workforce commuting in by way of US 36. With more corridors offering access into Lafayette from US 36, including 287, not all but some of these commuters would be utilizing SH 42. Louisville has a high share of living wage jobs as compared with the Boulder County or the Denver Metro regional average, so the area provides well-paying jobs which attract a diverse workforce from the broader region.

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

Yes, this project travels through the Cities of Louisville and Lafayette, as well as Open Space lands jointly owned by the Cities and Boulder County. It will directly benefit the Cities of Louisville and Lafayette, and provide benefit to the broader region by planning improvements to the SH 42 corridor. The plan will design facility improvements that will reduce traffic delays, improved safety, particularly for vulnerable populations, and increased bicycle and pedestrian use. The terminal point of the study and the SH 42 corridor to the north is SH 7, which is a critical east-west corridor serving Boulder and Adams County, and is currently under consideration for future BRT implementation. When the BRT is completed, the connection of the SH 42 corridor and future transit on this corridor will be important for riders connecting to Lafayette and Louisville.

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

Yes. On the south/east end, SH 42 connects to SH 287, serving as a primary corridor linking the City and County of Broomfield to Louisville and Lafayette. In addition, traffic studies illustrating commuting patterns to Louisville's Technology Center (CTC) have demonstrated a significant amount of in-commuting from US 36 east of the Broomfield interchange, with vehicles exiting US 36 at the Northwest Parkway/Interlocken loop, travelling north to 96th Street onto SH 42 in Louisville. Traffic speeds decrease and wait times increase once vehicles reach SH 42 at 96th Street. This project will create a plan to address the needs in this corridor, which will impact transportation users into and beyond the Boulder County and Broomfield County subregions.

As described above, the SH 42 connection to SH 7 will be important in connecting to the west and east.

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 problems by creating a conceptual design plan for future projects along SH 42. The plan will address the increased demand for multimodal pedestrian and bicycle transportation options by identifying an alignment and design for a cohesive, comprehensive multimodal facility along the SH 42 corridor. The plan will seek to reduce safety concerns at major intersections and all along the SH 42 corridor by separating multimodal uses, improving intersection geometrics and improving the road configurations. The plan will address the current and future congestion and travel time delays by creating a plan to reconfigure the use of the corridor and right of way, including the accommodation of transit. And, the plan will address future/anticipated access demands by Louisville and Lafayette along the corridor.

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?

There has been significant economic growth in this corridor. SH 42 was previously a rural highway, with little development and economic activity throughout. While the Cities have preserved much of this rural character by purchasing open spaces along the corridor (jointly between Boulder County, City of Louisville and City of Lafayette), several areas along the corridor have been developed or are in various stages of planning for development. The core section of the SH 42 in Louisville includes several existing and anticipated access points that support economic prosperity of the area that is directly adjacent to Louisville's downtown area (directly to the west of SH 42, including the Downtown East Louisville redevelopment or "DELO" area). There is a sports complex just east of downtown (east of SH 42) which serves as an economic draw for visitors to the community. Just north of South Boulder Road, significant residential and commercial development has occurred and it has become increasingly important for this portion of the community to have multimodal connections to economic activity, including the Louisville downtown and the SH 42 North areas. For Lafayette, there are several commercial and residential developments planned along SH 42 north of Paschal Drive (which serves as the border of Louisville and Lafayette), and the corridor will see more economic opportunity within the next five years. This plan will design transportation infrastructure that supports a sustainable transportation network surrounding SH 42, allowing for regional traffic to effectively move through the corridor and accommodate the access needs of the communities living within the corridor.

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

This project will provide connectivity for bicycles and pedestrians where no contiguous connectivity exists. In addition, there is currently no transit service along SH 42 (except a small leg of the 228, but with no stops on SH 42). The NAMS study included a proposal for enhanced transit along SH 42, and one of the goals of this plan will be to design roadway improvements that would accommodate future transit service.

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

The project is a direct partnership between the Cities of Louisville, Lafayette and CDOT. The Cities will each contribute funding for the study, and intend to work together to identify conceptual designs that provide consistency for various travel modes throughout the entire corridor. Our communities have a long history of successful collaboration and partnership, as evidenced by our joint open space purchases in this corridor and our regional trail successes.

Letters of support in Attachment 6

B. DRCOG Board-approved Metro Vision TIP Focus Areas

WEIGHT

30%

Provide <u>qualitative and quantitative</u> (derived from Part 3 of the application) responses to the following questions on how the proposed project addresses the three DRCOG Board-approved Focus Areas (in bold).

1. Describe how the project will improve mobility infrastructure and services for vulnerable populations (including improved transportation access to health services).

Over the past ten years, the SH 42 corridor in Louisville has grown significantly. There are approximately 1,100 new dwelling units in this part of Louisville, including the Boulder County Housing Authority Kestrel development, the Foundry (approved but not yet constructed), Coal Creek Station (approved but not yet constructed), Steel Ranch, Steel Ranch South, Lanterns, Balfour, and North End. This increased development has changed the conditions and character of the corridor from rural to more urban/suburban. This development has resulted in increased vehicle traffic generated from within the region, as well as increased pedestrian traffic throughout the area.

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.

Within a mile of this corridor (center of the corridor) there are nearly 4,000 persons over age 65, 2,260 minority persons, 384 linguistically challenged persons, 2,718 people with disabilities and 4,958 children between the age of 6-17. There are 2,163 low-income households and 529 households without a car. This represents a high proportion of residents in Louisville and Lafayette that are considered vulnerable and potentially mobility challenged. This corridor is an important transportation connector in their lives.

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.

The Balfour Senior Living Louisville Campus is located east of SH 42 on Hecla Drive, across the street from the Kestrel community. This Balfour campus is comprised of more than 400 residents averaging 85 years of age. The majority of residents reside less than .3 mile from the intersection of SH 42 and Hecla Dr. and are of an age that mandates managing canes, walkers, wheelchairs, or motorized scooters for their walking mobility.

For many of the residents in both of these areas, the nearest healthcare amenities are located 1.6 miles due east on South Boulder Road at the new Clinica Family Health Services (the FQHC clinic serving southeast Boulder County). However, while there is bus service along South Boulder Road, the mobility access to get from Kestrel to the bus stop on SBR requires travel along SH 42, and pedestrian facilities are not easily accessible or don't exist along the entire corridor.

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

Multimodal travel on SH 42 is currently dangerous and uninviting due to lack of infrastructure, especially during the AM and PM peak hours, when commuter traffic is heavy coming into Louisville and Lafayette. With no current continuous bicycle and pedestrian facility, and heavy traffic along the highway, this travel corridor for modes other than a vehicle is not a viable option. Estimated bicycle use on SH 42 in Louisville is currently approximately 10 cyclists per day. Based on comperable multi-use trail utilization in other parts of the City (Coal Creek regional trail segments and Boulder to Longmont trail segments), we would expect an estimated 250 daily users on the trail. This would reduce the vehicle usage, particularly for short trips (less than 3 miles) which make up 31% of all trips within, to or from Louisville. Further, no transit exists within the corridor. The proposed plan would increase the reliability by establishing multimodal transportation options where they currently are not in existance or possible.

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

| on o | The plan will provide for at-grade separated bike and pedestrian facilities that will provide safety for multimodal uses on this heavily traveled corridor. This approach will provide a safety improvement for vehicles and pedestrians/cyclists alike. In addition, the plan will address the current configuration for vehicles along the entire corridor, the safe installation of access improvements, and safety improvements at intersections. | | | | | | |
|------|---|--|---------------|------|--|--|--|
| C. | Consistency & Objectives | Contributions to Transportation-focused Metro Vision | WEIGHT | 20% | | | |
| | how the proposed | <u>e and quantitative</u> responses (derived from Part 3 of the application) to the project contributes to Transportation-focused Objectives (in bold) in the address expanded Metro Vision Objective by clicking on links. | | | | | |
| | MV objective 2 | Contain urban development in locations designated for urban growth and | d services. | | | | |
| 1. | infrastructure alrea are in place? In Louisville portion developments rem | Ip focus and facilitate future growth in locations where urban-level ady exists or areas where plans for infrastructure and service expansion as of the corridor are nearing build-out, however there are a few planned aining. In Lafayette, there is also some additional development planned g the corridor. This plan will consider this development and planned | □X Yes | □ No | | | |
| | access points, and | also influence infrastructure and service expansions to serve this growth. | | | | | |
| | MV objective 3 | Increase housing and employment in urban centers. | | | | | |
| 2. | | Ip establish a network of clear and direct multimodal connections within centers, or other key destinations? | X Yes | ☐ No | | | |
| | One of the goals of this project is to create a clear and continuous multimodal connection within the SH 42 corridor. There are urban centers throughout this corridor in both Louisville and Lafayette, including residential, commercial, retail and office as well as many amenities such as the Louisville Sports Complex and Indian Peaks Golf Course. With 28,000 ADT, the busy nature of the corridor makes it difficult for pedestrians and bicycles to travel safety and comfortably. The multimodal connections developed through this plan will provide alternate modes of travel for people living in the corridor. | | | | | | |
| | MV objective 4 | Improve or expand the region's multimodal transportation system, service connections. | ces, and | | | | |
| 3. | Will this project he goods, or services? | lp increase mobility choices within and beyond the region for people, | ☐ X Yes No | | | | |
| | This project will increase the capacity of this multimodal regional roadway, SH 42. It will provide additional mobility choices within the SH 42 corridor by creating conceptual design plans for biking, walking and for transit. | | | | | | |
| | 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? | | | | | | |
| red | The plan will identify multimodal improvements that will support a shift in uses to alternate modes. The estimated reduction in GHG emissions is 162 lbs. Since this state highway runs directly through the Cities of Louisville and Lafayette, this will result in reductions in particulate matter, improving local air quality. | | | | | | |

| | MV objective 7b | Connect people to natura | I resource or recrea | ational areas. | | | | |
|--------------------------|---|--|--|---|-------------------------------------|--|--|--|
| 5. | • • | lp complete missing links ir timodal connections that ir | ~ | nd greenways network or to our region's open space | X Yes No | | | |
| wit con pur Har | There are many regional trails and open spaces within the SH 42 corridor. The Highline trail connects trail systems within Louisville and Lafayette and, an underpass is planned for construction just north of Hecla Drive to support this connection. The Cities have made significant investments in open space and trails along SH 42 — many of them joint purchases that enhance the greenways and preserve open spaces and agricultural heritage along the corridor. The Harney-Lastoka property, located on SH 42 in Louisville includes trails, an organic garden stand, and ball fields. The multimodal connections along SH 42 will provide increased accessibility to all of these assets. | | | | | | | |
| | MV objective 10 | Increase access to amenit | ies that support he | althy, active choices. | | | | |
| 6. | Will this project ex | pand opportunities for resi | dents to lead health | ny and active lifestyles? | X Yes No | | | |
| and lan | bicycling instead o | f driving. Currently there is | not a shoulder stre | ere will be expanded opportu tching this span of SH 42, nor nodal improvements that will | is there a bike | | | |
| | MV objective 13 | Improve access to opport | unity. | | | | | |
| 7. | | lp reduce critical health, ed ble transportation connecti | | | X Yes No | | | |
| the Lafa | ability for vulnerab syette downtown a | le populations to access job reas, and other job centers | os, education, and h lie along the corrid | oport pedestrian mobility, this lealth services. Connections to or. Expanding transit along the r region for these opportunition | c Louisville and e corridor will | | | |
| | MV objective 14 | Improve the region's com | petitive position. | | | | | |
| 8. | Will this project he and vitality? | lp support and contribute t | o the growth of the | region's economic health | X Yes No | | | |
| ens | SH 42 is a key corridor to the Cities of Louisville and Lafayette, as well as the broader region. This plan will help ensure the region remains competitive by improving the multimodal transportation facilities that businesses depend on for local, regional and global customers. The plan represents a coordinated local and regional effort to planning. | | | | | | | |
| D. | Project Levera | ging | | • | WEIGHT 10% | | | |
| 9. | • | utside funding sources ated Regional Share project have? | | 80%+ outside funding so 60-79% 59% and below | Medium | | | |

Part 3

Project Data Worksheet – Calculations and Estimates

(Complete all subsections applicable to the project)

| _ | | • - | | |
|----|----------------|------|--|---|
| Α. | ~ ~ | sit | | ^ |
| _ | - | • 11 | | _ |
| | | | | |

- 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 | de of difference: | |

| 10. If | t different | values | other than | the sugges | ted are | used, p | lease exp | ilain r | iere: |
|---------------|-------------|--------|------------|------------|---------|---------|-----------|---------|-------|
| | | | | | | | | | |

B. Bicycle Use

1. Current weekday bicyclists 10

2. Population and Employment

| Year | Population within 1 mile | Employment within 1 mile | Total Pop and Employ within 1 mile |
|------|--------------------------|--------------------------|------------------------------------|
| 2020 | 21969 | 9917 | 31886 |
| 2040 | 23623 | 10663 | 34286 |

| Picycle Use Calculations | Year | 2040 |
|--------------------------|------------|------------------|
| Bicycle Use Calculations | of Opening | Weekday Estimate |

| 3. | Enter estimated additional weekday one-way bicycle trips on the facility after project is completed. | 120 | 240 |
|----|--|---------------------|-------|
| 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) | 120 | 240 |
| 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) | 40 | 72 |
| 7. | = Number of SOV trips reduced per day (#5 - #6) | 80 | 168 |
| 8. | Enter the value of {#7 x 2 miles} . (= the VMT reduced per day) (Values other than 2 miles must be justified by sponsor) | 160 | 336 |
| 9. | = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.) | 152 | 319.2 |
| 10 | If values would be distinctly greater for weekends, describe the magnit | tude of difference: | |

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

 $\textbf{11.} \ \ \textbf{If different values other than the suggested are used, please explain here:}$

Since there is currently no bike lane or trail, so we have not included diversion from another bicycle route.

C. Pedestrian Use

1. Current weekday pedestrians (include users of all non-pedaled devices)

25

2. Population and Employment

| Year | Population within 1 mile | Employment within 1 mile | Total Pop and Employ within 1 mile |
|------|--------------------------|--------------------------|------------------------------------|
| 2020 | 21969 | 9917 | 31886 |
| 2040 | 23623 | 10663 | 34286 |

| Pedestrian Use Calculations | Year of Opening | 2040 Weekday Estimate |
|--|--------------------|--------------------------|
| Enter estimated additional weekday pedestrian one-way trips on the facility after project is completed | 120 | 240 |
| 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) | 60 | 120 |
| 5. = Number of new trips from project (#3 – #4) | 60 | 120 |
| 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) | 20 | 40 |
| 7. = Number of SOV trips reduced per day (#5 - #6) | 40 | 80 |
| 12. Enter the value of {#7 x .4 miles}. (= the VMT reduced per day) (Values other than .4 miles must be justified by sponsor) | 16 | 32 |
| 8. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.) | 15.2 | 30.4 |

- **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

Use Current Census Data

| Vulnerable Populations | Population within 1 mile |
|--|--------------------------|
| 1. Persons over age 65 | 3966 |
| 2. Minority persons | 2260 |
| 3. Low-Income households | 2163 |
| 4. Linguistically-challenged persons | 384 |
| 5. Individuals with disabilities | 2718 |
| 6. Households without a motor vehicle | 529 |
| 7. Children ages 6-17 | 4958 |
| 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 | 22,600 |
|--|--------|
| 2. 2040 ADT estimate | 28,000 |
| 3. Current weekday vehicle hours of delay (VHD) (before project) | 1883 |

| Travel Delay Calculations | Year of Opening |
|---|--------------------|
| 4. Enter calculated future weekday VHD (after project) | 0 |
| 5. Enter value of {#3 - #4} = Reduced VHD | 0 |
| 6. Enter value of {#5 X 1.4} = Reduced person hours of delay (Value higher than 1.4 due to high transit ridership must be justified by sponsor) | 0 |
| 7. After project peak hour congested average travel time reduction per vehicle (includes persons, transit passengers, freight, and service equipment carried by vehicles). If applicable, denote unique travel time reduction for certain types of vehicles | 0 |

- **8.** If values would be distinctly different for weekend days or special events, describe the magnitude of difference.
- **9.** If different values other than the suggested are used, please explain here:

F. Traffic Crash Reduction 1. Provide the current number of crashes involving motor vehicles, bicyclists, and pedestrians (most recent 5-year period of data) Fatal crashes 0 **Serious Injury** crashes 0 Sponsor must use industry Other Injury crashes 0 accepted crash reduction factors (CRF) or accident modification **Property Damage Only crashes** 0 factor (AMF) practices (e.g., 2. Estimated reduction in crashes applicable to the project scope NCHRP Project 17-25, NCHRP (per the five-year period used above) Report 617, or DiExSys Fatal crashes reduced 0 methodology). Serious Injury crashes reduced 0 Other Injury crashes reduced 0 0 **Property Damage Only crashes reduced G. Facility Condition** Sponsor must use a current industry-accepted pavement condition method or system and calculate the average condition across all sections of pavement being replaced or modified.

| Applicants will rate as: Excellent, Good, Fair, or Poor | | | | |
|---|----------|--|--|--|
| Roadway Pavement | | | | |
| Current roadway pavement condition | Low/Poor | | | |
| 2. Describe current pavement issues and how the project will address them. | | | | |
| 3. Average Daily User Volume | 22,800 | | | |
| Bicycle/Pedestrian/Other Facility | | | | |
| 4. Current bicycle/pedestrian/other facility condition | Poor | | | |
| 5. Describe current condition issues and how the project will address them. | | | | |

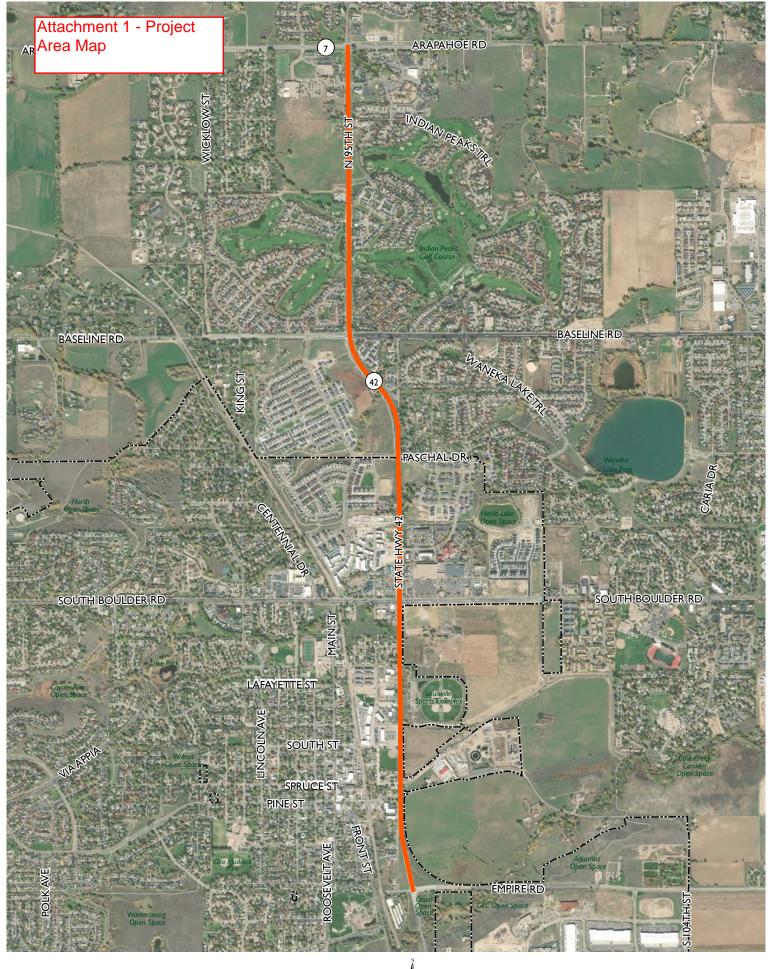
Currently, bicycle and pedestrian facilities are poor or non-existent through the corridor. There are some sidewalks along various section of the corridor, but no continuous, consistent facility for these modes to connect the Cities of Louisville and Lafayette.

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: | |





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

February 7, 2019

Megan Davis City of Louisville 749 Main Street Louisville, CO 80027 Conceptual Design Plan for Reconfiguration of SH 42

Dear Ms. Davis,

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

This letter is to inform you that the Colorado Department of Transportation (CDOT) Region 4 staff concurs with the following City of Louisville application for the DRCOG Sub-Regional FY20-23 TIP Call. This applies only to the Conceptual Design Plan for Reconfiguration of SH 42 project, in the event it is selected by DRCOG as a sub-regional project around Summer 2019. If this project is awarded DRCOG funds at a later date, the Local Agency (LA) will need to re-affirm CDOT's concurrence at that time.

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

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

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

Sincerely,

Johnny Olson, P.E.

Region 4 Transportation Director

JWO:KAS:mbc

cc: Todd Cottrell, DRCOG

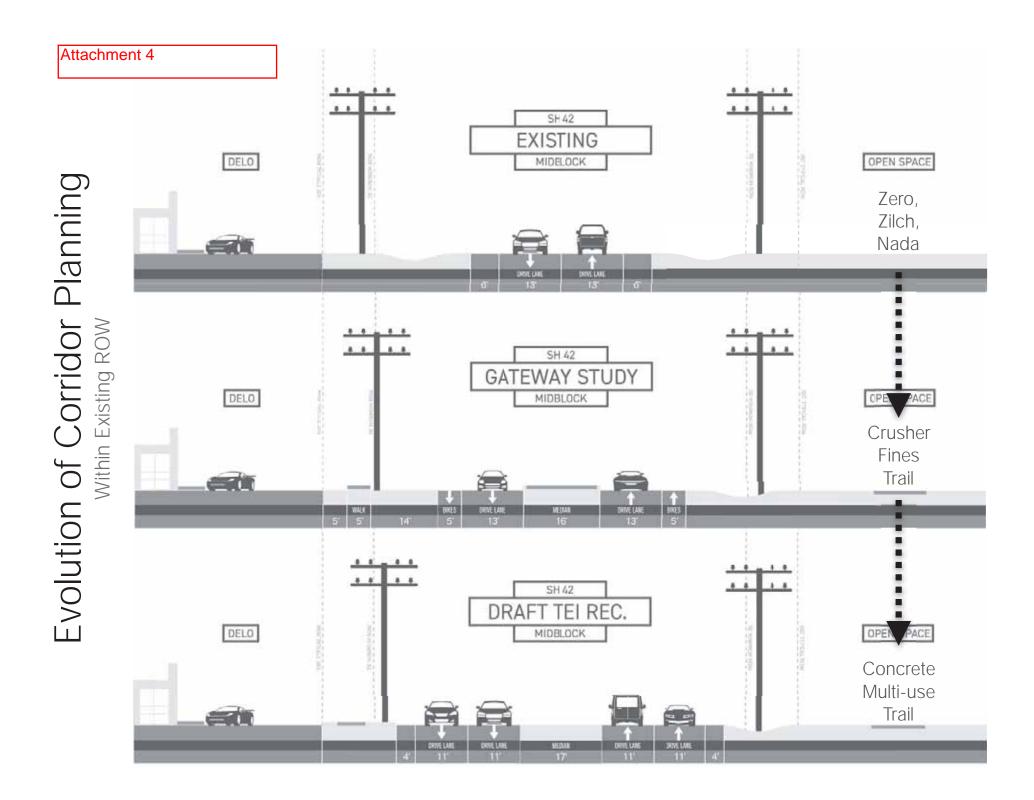
Long Nguyen
Katrina Kloberdanz
Kateyn Triggs
Karen Schneiders



Forecasted Highway 42 Travel Times

Lock to Paschal Travel Times

| | 2013 Gateway Existing | 2018 TMP/Apex Existing | 2035 Gateway 3 Lane | 2035 Gateway 5 Lane | 2040 Apex 3 Lane |
|--------------------------------------|-----------------------------|------------------------------|---------------------------|---------------------------|--------------------------|
| AM Peak North | 2.9 min | 3.0 min | 1.50x 4.4 min | 1.50x 4.2 min | 2.00x 5.8 min |
| AM Peak South | 3.3 min | 2.0 min | 1.50x 4.6 min | 1.25x 4.02 min | 1.50x 4.8 min |
| PM Peak North | 3.3 min | 3.2 min | 1.75x 5.7 min | 1.50x 4.76 min | 4.10x 13.5 min |
| PM Peak South | 3.2 min | 5.1 min | 1.50x 4.9 min | 1.25x 3.97 min | 1.75 x 5.5 min |
| Average Daily Traffic (Cars per Day) | 19,200 2013 | 22,600 Today | 21,800 DRCOG | 21,800 DRCOG | 1.50x 28,000 DRCOG |



Employment Projection

- Employment growth projected within and around Louisville
- Growth is primarily in commercial/industrial areas on the periphery

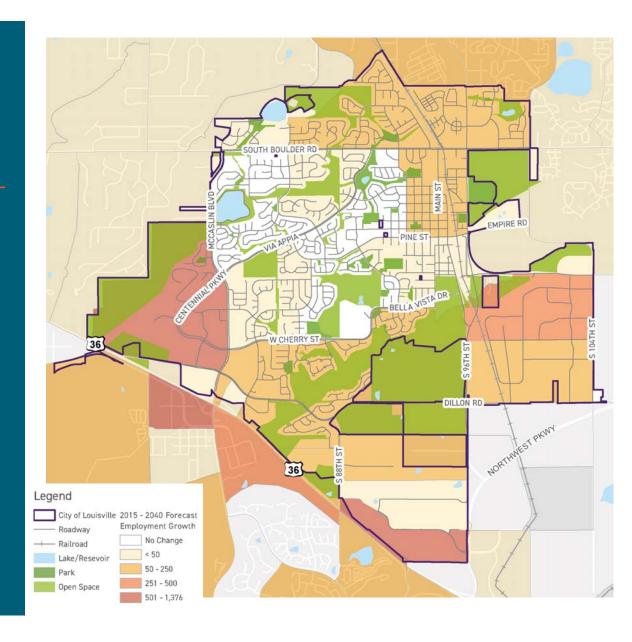
Employment

2015

15,036

2040 Forecast

19,136





February 21, 2019

Dear DRCOG and Boulder County Subregional TIP Forum,

The City of Lafayette is writing to share our support for the City of Louisville Subregional TIP application for the SH 42 Conceptual Design Plan. This proposal supports a regional, collaborative approach to transportation planning, and a multi-jurisdictional effort to address the transportation and multimodal needs in this corridor. The proposed plan, which has been supported by CDOT, will provide the Cities of Louisville and Lafayette with a comprehensive, cohesive approach to meeting the current and future transportation needs on SH 42.

The plan would accomplish numerous City goals for SH 42, including capacity planning, multimodal connections, intersection improvements and safety improvements. The City of Lafayette has not yet completed intersection improvement plans SH 42 and SH 7 consistent with the SH 7 BRT PEL. In addition, the City wishes to identify and plan for multi-modal connections along SH 42 that will link Lafayette and Louisville. With significant recent and planned future development along this corridor, both communities have an increased need for multimodal facilities that allow residents to reach services and amenities. Also Lafayette has performed very little planning in this area since the large residential development that occurred in the early 90's.

In addition, the plan will look at the current lane configuration and determine the best use of the existing right of way, as well as how access needs might be met in the future. The City will contribute local match for this project in the amount of \$75,000 in 2020.

The City urges DRCOG and the Boulder County Subregional TIP forum to support this project for TIP funding.

Sincerely,

Douglas M. Short, P.E. Public Works Director

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