

APPLICATION OVERVIEW

The **Regional Share Call for Projects** will **open on July 30, 2018**, with applications **due no later than 3 p.m. on September 21, 2018** to Todd Cottrell, DRCOG, at tcottrell@drcog.org.

- To be eligible to submit, at least one person from your agency must have attended one of the two mandatory TIP training workshops (held August 8 and August 16).
- 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 August 1, with CDOT/RTD providing a response no later than August 29.
- Each Subregional Forum can submit up to three applications from eligible project sponsors. Both CDOT and RTD can submit up to two applications.
 - If CDOT reaffirms they would like to continue to receive \$25 million in DRCOG-allocated funding for their Central 70 project, it will count as one of their two possible submittals.
- 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 August 31, 2018.
- The application must be affirmed by either the applicant’s City or County Manager, 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 Regional Share application contains three parts: *base project information* (Part 1), *evaluation questions* (Part 2), and *data calculation estimates* (Part 3). DRCOG staff will review submitted applications for eligibility and provide an initial score to a Project Review Panel. The panel will review and rank eligible applications that request funding. Sponsors with top tier submittals will be invited to make presentations to the Project Review Panel to assist in the 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:

Section A. Regional Significance of Proposed Projects 40%

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

Section B. Metro Vision TIP Focus Areas 30%

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.

Section D. Leveraging of non-Regional Share funds (“overmatch”) 10%

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

% of Outside Funding (non-Regional Share)	High	80% and above
	Medium	60-79%
	Low	59% 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.

Part 1

Base Information

1. Project Title	State Highway (SH) 7 and 119th Street Intersection Improvements	
2. Project <i>Start/End</i> points or Geographic Area <i>Provide a map with submittal, as appropriate</i>	The intersection of E Baseline Road (SH 7) and 119 th Street located northeast of the City of Lafayette. See Attachment A for regional context.	
3. Project Sponsor (<i>entity that will construct/ complete and be financially responsible for the project</i>)	City of Lafayette	
4. Project Contact Person, Title, Phone Number, and Email	Brad Dallam, Deputy Public Works Director, 303-661-1274, bradd@cityoflafayette.com	
5. Does this project touch CDOT Right-of-Way, involve a CDOT roadway, access RTD property, or request RTD involvement to operate service? Concurrence from CDOT is attached as Attachment D . Concurrence from RTD is attached as Attachment E .	<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 type="checkbox"/> DRCOG 2040 Fiscally Constrained Regional Transportation Plan (2040 FC RTP)	
	<input checked="" type="checkbox"/> Local plan:	Boulder County's SH 7 Bus Rapid Transit Study (2017), https://assets.bouldercounty.org/wp-content/uploads/2018/08/sh7-brt-final-report.pdf , pages: 9, 35, 36, and 53
	<input checked="" type="checkbox"/> Other(s):	CDOT's SH 7 PEL Study (2014), https://www.codot.gov/library/studies/study-archives/sh7pel/final-pel-study-report/sh-7-pel-study-february-2014/view , pages: ES-3, 9, 98, 99, 154, and 158 RTD's Northwest Area Mobility Study (2014), https://www.dropbox.com/s/1uj1mt3z1h80ya4/Final%20Report%20508%5B1%5D.pdf?dl=0 , pages: ES-12, ES-13, ES-14, and ES-15
<i>Provide link to document/s and referenced page number if possible, or provide documentation with submittal</i>		
7. Identify the project's key elements .		
<input type="checkbox"/> Rapid Transit Capacity (2040 FC RTP) <input checked="" type="checkbox"/> Transit Other: Queue jump lanes and BRT stations <input checked="" type="checkbox"/> Bicycle Facility <input checked="" type="checkbox"/> Pedestrian Facility <input checked="" type="checkbox"/> Safety Improvements <input checked="" type="checkbox"/> Roadway Capacity or Managed Lanes (2040 FC RTP) <input checked="" type="checkbox"/> Roadway Operational	Grade Separation <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. **Problem Statement** What specific Metro Vision-related regional problem/issue will the transportation project address?

Metro Vision’s aspirational vision focuses on livable urban centers connected by safe, reliable, and well-maintained corridors that serve all modes of travel including motor vehicles, bicycles, pedestrians, and transit. Boulder County and the region lack enough safe, reliable, and well-maintained multimodal corridors between urban centers which creates unsafe conditions, congestion, and delay for users traveling between communities. Improvements to the SH 7 and 119th Street intersection is a project that addresses this need.

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

The intersection of SH 7 (E Baseline Road) and 119th Street is in the southeastern portion of Boulder County, approximately one-mile northeast of downtown Lafayette (see **Attachment A**). The current intersection is a four-legged, signalized intersection with one travel lane in each direction. The westbound and eastbound approaches include left turn lanes. The northbound leg provides a right turn lane. The southbound leg is a single lane approach. Crosswalks are present on all four approaches, but no sidewalks are provided. RTD does not currently offer transit service at this intersection, however, there are plans for future bus rapid transit (BRT) along SH 7.

The project includes capacity expansion, including additional left turn lanes, right turn deceleration lanes, transit queue jump lanes, bike lanes, and sidewalks on the western side of the intersection. Far-side bus rapid transit (BRT) stops are anticipated in the northwest and southeast quadrants of the intersection. Additional right-of-way (ROW) will be required to complete the improvements. The improvements align with the vision from the SH 7 PEL to complete improvements at the intersections first, then complete more major capacity expansion between the intersections/along the corridor.

See **Attachment B** for a conceptual rendering of the final design.

10. What is the status of the proposed project?

This project is construction-ready as Lafayette advanced final design and environmental clearances in 2016, including FIR and FOR reviews by CDOT’s Regions 1 and 4. Lafayette will begin ROW acquisition in 2019 and update then finalize the environmental clearances. Project funding is requested for 2021. A 2019 cost estimate is attached as **Attachment C**.

Boulder County is currently advancing the design of the SH 7 BRT stations including the stations at this intersection. Possible design refinements may be needed to finalize the accommodations of the BRT route and stations at this intersection. The City of Lafayette supports the BRT advancement and any design refinements needed to accommodate BRT will be incorporated into the final design before bidding.

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.

A. Project Financial Information and Funding Request

1. Total Project Cost		\$10,248,200
2. Total amount of DRCOG Regional Share Funding Request <i>(no greater than \$20 million and not to exceed 50% of the total project cost)</i>	\$2,854,670	27.86% of total project cost
3. Outside Funding Partners (other than DRCOG Regional Share funds) List each funding partner and contribution amount.	\$\$ Contribution Amount	% of Contribution to Overall Total Project Cost
City of Lafayette (for Xcel undergrounding)	\$750,000	
City of Lafayette (ROW)	\$643,530	
City of Lafayette (Construction)	\$3,000,000	
Town of Erie* (Construction) <i>(*conceptual commitment subject to resolution between the City of Lafayette and Town of Erie on transportation matters)</i>	\$3,000,000	
Total amount of funding provided by other funding partners <i>(private, local, state, Subregion, or federal)</i>	\$7,393,530	

Funding Breakdown (year by year)*	*The proposed funding plan is not guaranteed if the project is selected for funding. While DRCOG will do everything it can to accommodate the applicants' request, final funding will be assigned at DRCOG's discretion within fiscal constraint. Funding amounts must be provided in year of expenditure dollars using an inflation factor of 3% per year from 2018.				
	FY 2020	FY 2021	FY 2022	FY 2023	Total
Federal Funds (Regional)					
Federal Funds (Subregional)		\$2,854,670			\$2,854,670
State Funds					
Local Funds	\$1,393,530	\$6,000,000			\$7,393,530
Total Funding	\$1,393,530	\$8,854,670			\$10,248,200
4. Phase to be Initiated <i>Choose from Design, ENV, ROW, CON, Study, Service, Equip. Purchase, Other</i>	Utility undergrounding and ROW	CON			

5. By checking this box, the applicant's Chief Elected Official (Mayor or County Commission Chair) or City/County Manager for local governments or Agency Director or equivalent for others, has certified it allows this project request to be submitted for DRCOG-allocated funding and will follow all DRCOG policies and state and federal regulations when completing this project, if funded.



Part 2 Evaluation Criteria, Questions, and Scoring

A. Regional significance of proposed project

WEIGHT **40%**

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

1. Why is this project regionally important?

State Highway 7 is a key corridor connecting the communities of Boulder, Lafayette, Erie, Broomfield, Thornton, and Brighton (see **Attachment A**). The regionally significant intersection of SH 7 and 119th Street experiences severe congestion, particularly westbound in the mornings and eastbound in the evenings. This congestion has been increasing and is anticipated to continue to increase given significant growth in the surrounding communities, such as the emerging urban center at SH 7 and I-25. As housing costs continue to rise, more employees are living farther from employment centers such as Boulder and commute further on regionally significant corridors such as SH 7.

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

Yes, the project directly benefits the City of Lafayette and the Town of Erie. New development is planned in both communities immediately adjacent to the intersection. Boulder County Housing Authority (BCHA) has plans for a new affordable housing neighborhood (Willoughby Corner Project) in Lafayette in the southwest quadrant of the intersection at N 120th Street and Emma Street. Erie's plan for the Parkdale neighborhood (in the northeast quadrant of the SH 7 and 119th Street intersection) includes 600-800 new residential units and 250 acres of park and open spaces.

Additionally, commuters using the corridor travel from many other municipalities including Louisville, Broomfield, Thornton, Northglenn, and Brighton. See **Attachment A**, a regional map showing the adjacent communities.

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

Yes, in addition to Boulder County, the project also benefits Broomfield County, Adams County, and Weld County as SH 7 is a key regional corridor that serves these counties as well as provides a direct connection to Boulder, a major employment hub in the subregion. (See **Attachment A**, a regional map showing the adjacent counties.)

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

The intersection improvements at SH 7 and 119th Street will address the lack of reliable regional connections by making the SH 7 corridor safer, more reliable, and add multimodal facilities, creating a safer and more convenient connection between some of the existing and emerging destinations in the region. The project addresses unsafe conditions and alleviates congestion and delay for users traveling between key communities in the DRCOG region.

From 2012 to 2016, the intersection experienced 17 crashes involving an injury and 19 property damage only (PDO) crashes. The proposed improvements are anticipated to reduce crashes by 65%, resulting in an anticipated 11 fewer injury crashes and 12 fewer PDO crashes over a 5-year period (using CMF 7566).

The intersection currently operates at a LOS E during the AM and PM peak hours. Since the current intersection provides a shared northbound through/left-turn lane and a single lane on the southbound approach, it requires a

split phase signal timing for the northbound/southbound movements, causing delay. The project provides exclusive turn lanes, eliminating the need for the split phasing and significantly reducing the delay on these approaches. During the PM peak hour, all movements at both the northbound and southbound approaches are failing. The intersection currently experiences 170 vehicles hours of delay (VHD) on a typical weekday. In the AM and PM peak hours, the average vehicle experiences nearly a minute of delay (58 seconds). The proposed project is anticipated to reduce this delay to 32 seconds per vehicle in the AM peak and 35 seconds in the PM peak hour; a total delay savings of over 100 hours per day.

5. One foundation of a sustainable and resilient economy is physical infrastructure and transportation. How will the **completed** project allow people and businesses to thrive and prosper?

The completed project will offer regional residents and employees a more reliable corridor and more mobility choice with the introduction of the multimodal facilities as well as the planned BRT route. Users of the corridor will experience less delay traveling between places of residency and employment. The completed project will enhance the quality of life for nearly 20,000 people who travel through the intersection every day. The improvements align with the vision from the SH 7 PEL to complete improvements at the intersections first, then complete more major capacity expansion between the intersections/along the corridor.

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

This project is a part of a larger vision for the SH 7 corridor to improve multimodal regional connectivity. The project includes transit queue jump lanes for the planned BRT, bike lanes, and sidewalks on the western side of the intersection. Over time, these facilities will be connected to other transit routes/stations (such as the major downtown station in Lafayette), and other regional trails.

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

The City of Lafayette, the Town of Erie, Boulder County, CDOT, and RTD have all actively participated in the visioning and planning of the SH 7 corridor for more than a decade. The City of Lafayette spearheaded the final design and environmental clearances in 2016. CDOT has completed their FIR and FOR review of the final design. A letter from the City of Lafayette confirming their financial commitment is attached (**Attachment G**).

In addition to the City of Lafayette, the Boulder County Housing Authority (BCHA) supports this project. A letter of support from BCHA is attached (**Attachment H**). At the time of this application submittal, the City of Lafayette and the Town of Erie are actively seeking resolution on multiple transportation matters that impact both municipalities. This application assumes a financial commitment of \$3 million (tentatively agreed to) for construction of the project from the Town of Erie, which is subject to resolution between the City of Lafayette and Town of Erie.

B. DRCOG Board-approved Metro Vision TIP Focus Areas

WEIGHT **30%**

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

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

The area within 1 mile of the project includes over 1,000 minorities, 280 low-income households, and more than

500 individuals with disabilities. These numbers are expected to increase in the near-term with the Boulder County Housing Authority's (BCHA) planned affordable housing (Willoughby Corner Project) being built immediately southwest of the intersection at N 120th Street and Emma Street. The neighborhood proposes 400 permanently affordable homes for a variety of residents. Residents of this neighborhood will be less than a quarter of a mile away from the project and able to access the multimodal facilities.

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

This intersection experiences severe congestion for many hours of the day, particularly westbound in the mornings and eastbound in the evenings as employees commute into and out of Boulder. The project will improve the reliability of the corridor by eliminating a corridor bottleneck at this intersection. The project improvements will increase reliability of the transportation network by reducing travel delay as well as prepare the corridor for future capacity and multimodal improvements including BRT.

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

From 2012 to 2016, the intersection experienced 17 crashes involving an injury and 19 property damage only (PDO) crashes. The proposed improvements are anticipated to reduce crashes by 65%, resulting in an anticipated 11 fewer injury crashes and 12 fewer PDO crashes over a 5-year period (using CMF 7566). Also, by providing designated spaces for multimodal users (designated bike lane and sidewalks), non-vehicular users will have a safer and more secure space for travel.

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

Yes, adjacent communities such as Lafayette and Erie are established communities with existing adequate facilities and services. Lafayette anticipates development in the southwest and southeast quadrants of the intersection (the southeast corner is currently owned by a national home improvement store and is anticipated to be developed in the near-term). Erie has annexed the northeast corner and development of residential and commercial uses is anticipated to start in 2019.

[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

Yes, SH 7 is an already established, highly-traveled, and direct connection between many key regional destinations such as Boulder, Lafayette, Erie, Broomfield, Thornton, and Brighton. Multimodal enhancements to this intersection will only further establish the SH 7 corridor's role as a multimodal backbone within the region.

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?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>Yes. This project includes multimodal facilities that currently do not exist at the intersection. Bike lanes in both directions, and sidewalks on the west side of the intersection will provide new connectivity and more mobility choice. Over time, as other adjacent facilities are built, this intersection will be connected to the regional multimodal network. The inclusion of queue jumps also increases mobility choice for future SH 7 BRT service. These improvements will impact Boulder County and other counties in the region.</p> <p>The SH 7 PEL, the Northwest Area Mobility Study, and the SH 7 BRT Study all considered the existing and planned transportation facilities along the SH 7 corridor and within the northwest area of the DRCOG region.</p>	
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?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>Yes. The project will increase travel choice which may minimize transportation-related fuel consumption, and may reduce greenhouse gas emissions as people choose to take transit, walk, or bike, instead of to drive.</p>	
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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>Yes. This project includes multimodal facilities that currently do not exist at the intersection. Bike lanes in both directions, and sidewalks on the west side of the intersection will provide active mobility choices that are a part of healthier lifestyles.</p>	
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?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>Yes. This project includes queue jumps to support RTD’s SH 7 BRT service. This service establishes more reliable transportation connections between key communities. The ability to take the bus instead of drive to key destinations minimizes any demographic disparity.</p>	
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

Yes. The region’s economic vitality depends on providing a high quality of life for current and prospective residents. A high quality of life includes being able to move freely and having the choice of multiple transportation modes. This project will be a part of completing a regional transportation corridor for residents and employees to use for commuting and/or recreation, increasing their transportation options and improving their quality of life. The project will reduce the delay of people and goods by over 100 hours a day, contributing to the region’s economic health and vitality.

D. Project Leveraging

WEIGHT 10%

9. What percent of outside funding sources (non-DRCOG-allocated Regional Share funding) does this project have? **72.14%**

80%+ outside funding sources High
60-79% Medium
59% and below Low

Part 3

Project Data Worksheet – Calculations and Estimates

(Complete all subsections applicable to the project)

A. Transit Use

1. Current ridership weekday boardings (within 1 mile of the intersection)	205
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	7,223	1,631	8,854
2040	9,926	2,061	11,987

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>	240	TBD* <i>(*very dependent on the BRT timeline)</i>
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>		
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>		
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) <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>		
8. = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)		
9. If values would be distinctly greater for weekends, describe the magnitude of difference: Not anticipated.		

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

N/A.

B. Bicycle Use

1. Current weekday bicyclists	6
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	7,223	1,631	8,854
2040	9,926	2,061	11,987

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.	20	60
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)		
5. = Initial number of new bicycle trips from project (#3 – #4)		
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)		
7. = Number of SOV trips reduced per day (#5 - #6)		
8. Enter the value of {#7 x 2 miles} . (= the VMT reduced per day) (Values other than 2 miles must be justified by sponsor)		
9. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)		
10. If values would be distinctly greater for weekends, describe the magnitude of difference: No.		
11. If different values other than the suggested are used, please explain here:		

C. Pedestrian Use

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

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	7,223	1,631	8,854
2040	9,926	2,061	11,987

Pedestrian Use Calculations	Year of Opening	2040 Weekday Estimate
3. Enter estimated additional weekday pedestrian one-way trips on the facility after project is completed	10	80
4. Enter number of the new pedestrian trips (in #3 above) that will be diverting from a different walking route (Example: {#3 X 50%} or other percent, if justified)	0	0
5. = Number of new trips from project (#3 – #4)	0	0
6. Enter number of the new trips produced (from #5 above) that are replacing an SOV trip. (Example: {#5 X 30%} or other percent, if justified)	0	0
7. = Number of SOV trips reduced per day (#5 - #6)	0	0
12. Enter the value of {#7 x .4 miles} . (= the VMT reduced per day) (Values other than .4 miles must be justified by sponsor)	0	0
8. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	0	0
9. If values would be distinctly greater for weekends, describe the magnitude of difference: No.		
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	703
	2. Minority persons	1,030
	3. Low-Income households	280
	4. Linguistically-challenged persons	391
	5. Individuals with disabilities	506
	6. Households without a motor vehicle	88
	7. Children ages 6-17	1,144
	8. Health service facilities served by project	0

E. Travel Delay <i>(Operational and Congestion Reduction)</i>	
Sponsor must use industry standard Highway Capacity Manual (HCM) based software programs and procedures as a basis to calculate estimated weekday travel delay benefits. <i>DRCOG staff may be able to use the Regional Travel Model to develop estimates for certain types of large-scale projects.</i>	
1. Current ADT (average daily traffic volume) on applicable segments	19,597
2. 2040 ADT estimate	30,200
3. Current weekday vehicle hours of delay (VHD) (before project)	170

Travel Delay Calculations (see the Synchro analysis in Attachment F)	Year of Opening
4. Enter calculated future weekday VHD (after project)	70
5. Enter value of {#3 - #4} = Reduced VHD	100
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)	140
7. After project peak hour congested average travel time reduction 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>	Anticipated reduction of 32 seconds per vehicle in the AM peak hour and reduction of 35 sections in the PM peak hour.
8. If values would be distinctly different for weekend days or special events, describe the magnitude of difference. Not anticipated.	
9. If different values other than the suggested are used, please explain here: N/A	

F. Traffic Crash Reduction

1. Provide the current number of crashes involving motor vehicles, bicyclists, and pedestrians (most recent 5-year period of data) (2012-2016)		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	17	
Property Damage Only crashes	19	
2. Estimated reduction in crashes <u>applicable to the project scope</u> (per the five-year period used above)		<i>Improvements assumed: add through lanes, right turn lanes</i> <i>CMF 7566 - 65% Crash Reduction</i>
Fatal crashes reduced	0	
Serious Injury crashes reduced	0	
Other Injury crashes reduced	11	
Property Damage Only crashes reduced	12	

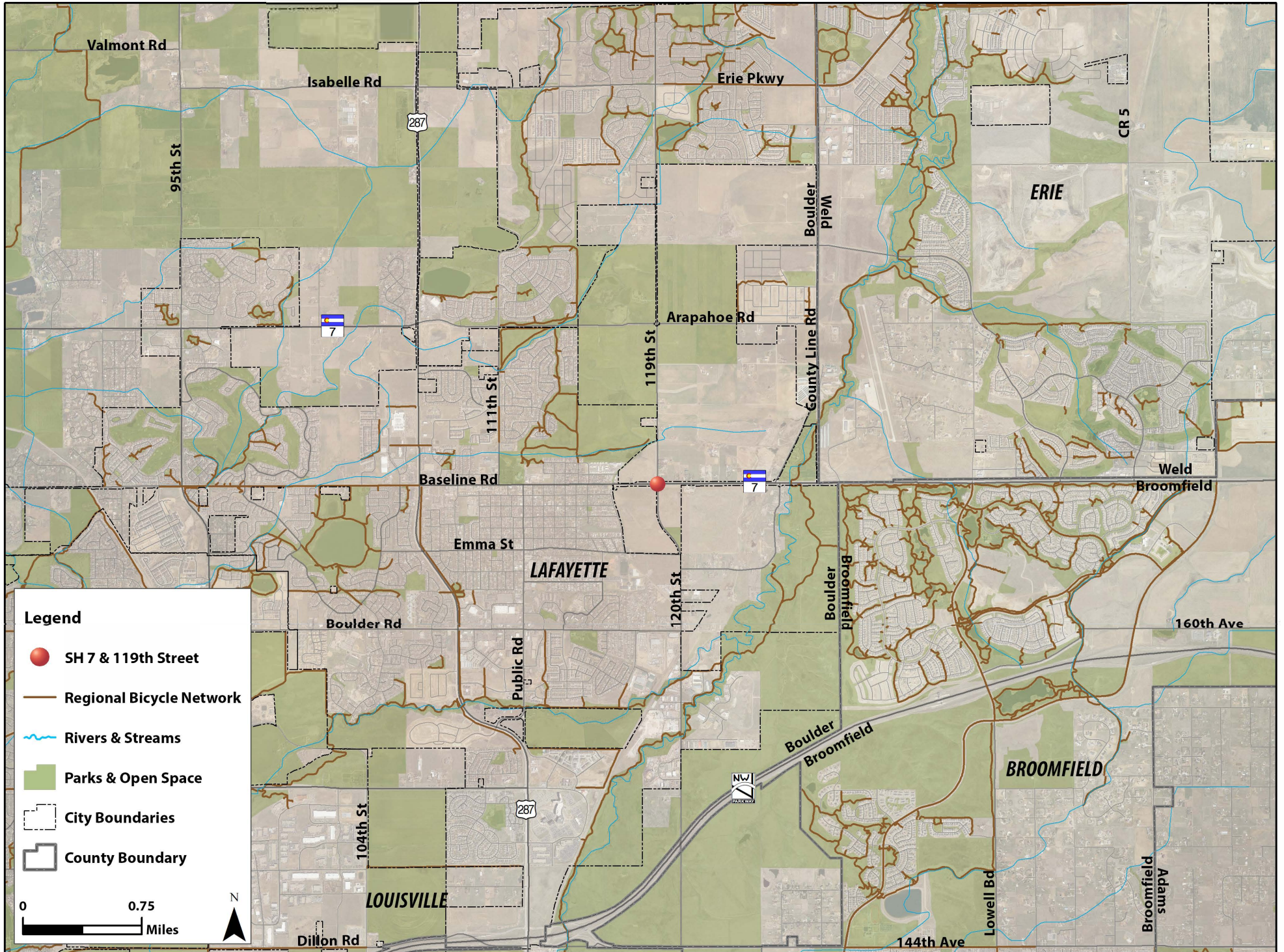
G. Facility Condition

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

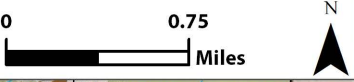
1. Current roadway pavement condition	Fair
2. Describe current pavement issues and how the project will address them.	
3. Average Daily User Volume	

Bicycle/Pedestrian/Other Facility	
4. Current bicycle/pedestrian/other facility condition	DNE
5. Describe current condition issues and how the project will address them. The project will add walking and biking facilities that currently do not exist today. Over time and as development occurs, these improvements will connect to other facilities.	
6. Average Daily User Volume	0
H. Bridge Improvements	
1. Current bridge structural condition from CDOT N/A	
2. Describe current condition issues and how the project will address them. N/A	
3. Other functional obsolescence issues to be addressed by project N/A	
4. Average Daily User Volume over bridge	N/A
I. Other Beneficial Variables <i>(identified and calculated by the sponsor)</i>	
1.	
2.	
3.	
J. Disbenefits or Negative Impacts <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
Minor decrease anticipated when BRT is introduced to the corridor.	
2. Negative impact on vulnerable populations None anticipated.	
3. Other:	



Legend


-  SH 7 & 119th Street
-  Regional Bicycle Network
-  Rivers & Streams
-  Parks & Open Space
-  City Boundaries
-  County Boundary



State Highway 7 and 119th Street Intersection Improvements (Final Design)



Attachment C

City of Lafayette - SH 7 & 119th St Intersection		 Date Prepared: February 8, 2019			
Estimate of Construction Costs					
Enhanced Signalized Intersection					
Contract Item No.	Contract Item	Unit	Project Totals	2019 Unit Cost	Total Cost
201-00000	CLEARING AND GRUBBING	LS	1	\$ 30,900.00	\$ 30,900.00
202-00026	REMOVAL OF SLOPE AND DITCH PAVING	SY	812	\$ 31.00	\$ 25,172.00
202-00250	REMOVAL OF PAVEMENT MARKING	SF	44,067	\$ 3.00	\$ 132,201.00
202-00033	REMOVAL OF PIPE	EA	23	\$ 2,534.00	\$ 58,282.00
202-00037	REMOVAL OF END SECTION	EA	46	\$ 255.00	\$ 11,730.00
202-00828	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	LS	1	\$ 9,693.00	\$ 9,693.00
202-00200	REMOVAL OF SIDEWALK	SY	6	\$ 22.00	\$ 132.00
202-00203	REMOVAL OF CURB AND GUTTER	LF	716	\$ 12.00	\$ 8,592.00
202-00220	REMOVAL OF ASPHALT MAT	SY	22,230	\$ 8.00	\$ 177,840.00
202-00240	REMOVAL OF ASPHALT MAT (PLANING)	SY	1,010	\$ 4.00	\$ 4,040.00
202-00810	REMOVAL OF GROUND SIGN	EA	14	\$ 66.00	\$ 924.00
202-00821	REMOVAL OF SIGN PANEL	EA	1	\$ 34.00	\$ 34.00
202-04002	CLEAN CULVERT	EA	3	\$ 2,575.00	\$ 7,725.00
203-00010	UNCLASSIFIED EXCAVATION (COMPLETE IN PLACE)	CY	34,627	\$ 17.00	\$ 588,659.00
203-01500	BLADING	HR	20	\$ 140.00	\$ 2,800.00
203-01510	BACKHOE	HR	40	\$ 175.00	\$ 7,000.00
203-01550	DOZING	HR	20	\$ 147.00	\$ 2,940.00
203-01597	POTHOLING	HR	76	\$ 196.00	\$ 14,896.00
203-01622	SWEEPING (WITH PICKUP BROOM)	HR	100	\$ 252.00	\$ 25,200.00
203-02330	LABORER	HR	80	\$ 54.00	\$ 4,320.00
207-00205	TOPSOIL	CY	3,550	\$ 21.00	\$ 74,550.00
208-00002	EROSION LOG (12 INCH)	LF	2,820	\$ 6.00	\$ 16,920.00
208-00020	SILT FENCE	LF	922	\$ 3.00	\$ 2,766.00
208-00045	CONCRETE WASHOUT STRUCTURE	EA	1	\$ 2,188.00	\$ 2,188.00
208-00051	STORM DRAIN INLET PROTECTION (TYPE 1)	LF	144	\$ 13.00	\$ 1,872.00
208-00052	STORM DRAIN INLET PROTECTION (TYPE 2)	LF	49	\$ 21.00	\$ 1,029.00
208-00070	VEHICLE TRACKING PAD	EA	2	\$ 2,327.00	\$ 4,654.00
208-00103	REMOVAL AND DISPOSAL OF SEDIMENT (LABOR)	HR	80	\$ 55.00	\$ 4,400.00
208-00106	SWEEPING (SEDIMENT REMOVAL)	HR	80	\$ 139.00	\$ 11,120.00
208-00107	REMOVAL OF TRASH	HR	80	\$ 74.00	\$ 5,920.00
208-00206	EROSION CONTROL SUPERVISOR	DAYS	15	\$ 279.00	\$ 4,185.00
210-00010	RESET MAILBOX STRUCTURE	EA	8	\$ 349.00	\$ 2,792.00
210-00050	RESET FIRE HYDRANT	EA	1	\$ 5,053.00	\$ 5,053.00
210-00065	RESET MONUMENT (TYPE 3A)	EA	2	\$ 618.00	\$ 1,236.00
210-00810	RESET GROUND SIGN	EA	1	\$ 296.00	\$ 296.00
210-00870	RESET COORDINATION UNIT	EA	1	\$ 944.00	\$ 944.00
210-01000	RESET FENCE	LF	4,379	\$ 27.00	\$ 118,233.00
210-04010	ADJUST MANHOLE	EA	3	\$ 840.00	\$ 2,520.00
210-04050	ADJUST VALVE BOX	EA	3	\$ 412.00	\$ 1,236.00
212-00006	SEEDING (NATIVE)	ACRE	6.5	\$ 747.00	\$ 4,855.50
212-00032	SOIL CONDITIONING	ACRE	6.5	\$ 1,499.00	\$ 9,743.50
213-00002	MULCHING (WEED FREE HAY)	ACRE	2.5	\$ 924.00	\$ 2,310.00
213-00061	MULCH TACKIFIER	LB	520	\$ 5.00	\$ 2,600.00
216-00201	SOIL RETENTION BLANKET (STRAW/COCONUT) (BIODEGRADABLE CLASS 1)	SY	18,305	\$ 4.00	\$ 73,220.00
217-00020	HERBICIDE TREATMENT	HR	30	\$ 185.00	\$ 5,550.00
240-00000	WILDLIFE BIOLOGIST	HR	24	\$ 106.00	\$ 2,544.00
240-00010	REMOVAL OF NESTS	HR	24	\$ 98.00	\$ 2,352.00
304-06000	AGGREGATE BASE COURSE (CLASS 6)	TON	14,570	\$ 34.00	\$ 495,380.00
403-00720	HOT MIX ASPHALT (PATCHING)	TON	50	\$ 165.00	\$ 8,250.00
403-33841	HOT MIX ASPHALT (GRADING S) (100) (PG 64-22)	TON	10,031	\$ 71.00	\$ 712,201.00
403-34851	HOT MIX ASPHALT (GRADING SX) (100) (PG 64-28)	TON	4,121	\$ 107.00	\$ 440,947.00
411-10255	EMULSIFIED ASPHALT (SLOW-SETTING)	GAL	1,903	\$ 5.00	\$ 9,515.00
412-00600	CONCRETE PAVEMENT (6 INCH)	SY	197	\$ 72.00	\$ 14,184.00
412-00800	CONCRETE PAVEMENT (8 INCH)	SY	8,155	\$ 129.00	\$ 1,051,995.00
420-00100	GEOTEXTILE (EROSION CONTROL)(CLASS A)	SY	428	\$ 5.00	\$ 2,140.00
503-00036	DRILLED CAISSON (36 INCH)	LF	38	\$ 719.00	\$ 27,322.00
503-00054	DRILLED CAISSON (54 INCH)	LF	42	\$ 715.00	\$ 30,030.00
506-00209	RIPRAP (9 INCH)	CY	63	\$ 196.00	\$ 12,348.00
506-00212	RIPRAP (12 INCH)	CY	132	\$ 123.00	\$ 16,236.00
603-01180	18 INCH REINFORCED CONCRETE PIPE	LF	340	\$ 94.00	\$ 31,960.00
603-01240	24 INCH REINFORCED CONCRETE PIPE	LF	633	\$ 118.00	\$ 74,694.00
603-01360	36 INCH REINFORCED CONCRETE PIPE	LF	880	\$ 165.00	\$ 145,200.00
603-02180	23 X 14 INCH REINFORCED CONCRETE PIPE ELLIPTICAL	LF	201	\$ 114.00	\$ 22,914.00
603-02240	30 X 19 INCH REINFORCED CONCRETE PIPE ELLIPTICAL	LF	422	\$ 129.00	\$ 54,438.00
603-02300	38 X 24 INCH REINFORCED CONCRETE PIPE ELLIPTICAL	LF	348	\$ 157.00	\$ 54,636.00
603-02360	45 X 29 INCH REINFORCED CONCRETE PIPE ELLIPTICAL	LF	380	\$ 181.00	\$ 68,780.00
603-05018	18 INCH REINFORCED CONCRETE END SECTION	EA	7	\$ 927.00	\$ 6,489.00

City of Lafayette - SH 7 & 119th St Intersection

Estimate of Construction Costs



Enhanced Signalized Intersection

Date Prepared: February 8, 2019

Contract Item No.	Contract Item	Unit	Project Totals	2019 Unit Cost	Total Cost
603-05024	24 INCH REINFORCED CONCRETE END SECTION	EA	13	\$ 1,248.00	\$ 16,224.00
603-05036	36 INCH REINFORCED CONCRETE END SECTION	EA	1	\$ 1,670.00	\$ 1,670.00
603-05118	23 X 14 INCH REINFORCED CONCRETE END SECTION ELLIPTICAL	EA	12	\$ 1,607.00	\$ 19,284.00
603-05124	30 X 19 INCH REINFORCED CONCRETE END SECTION ELLIPTICAL	EA	20	\$ 1,236.00	\$ 24,720.00
603-05130	38 X 24 INCH REINFORCED CONCRETE END SECTION ELLIPTICAL	EA	6	\$ 1,339.00	\$ 8,034.00
603-05136	45 X 29 INCH REINFORCED CONCRETE END SECTION ELLIPTICAL	EA	1	\$ 2,361.00	\$ 2,361.00
604-19105	INLET TYPE R L5 (5 FOOT)	EA	6	\$ 4,635.00	\$ 27,810.00
604-19110	INLET TYPE R L5 (10 FOOT)	EA	6	\$ 6,180.00	\$ 37,080.00
604-30005	MANHOLE SLAB BASE (5 FOOT)	EA	2	\$ 6,173.00	\$ 12,346.00
604-30010	MANHOLE SLAB BASE (10 FOOT)	EA	6	\$ 6,347.00	\$ 38,082.00
607-11525	FENCE (PLASTIC)	LF	100	\$ 6.00	\$ 600.00
608-00006	CONCRETE SIDEWALK (6 INCH)	SY	2,099	\$ 75.00	\$ 157,425.00
608-00010	CONCRETE CURB RAMP	SY	143	\$ 162.00	\$ 23,166.00
609-21010	CURB AND GUTTER TYPE 2 (SECTION I-B)	LF	935	\$ 29.00	\$ 27,115.00
609-21020	CURB AND GUTTER TYPE 2 (SECTION II-B)	LF	5,694	\$ 31.00	\$ 176,514.00
609-24006	GUTTER TYPE 2 (6 FOOT)	LF	110	\$ 81.00	\$ 8,910.00
610-00026	MEDIAN COVER MATERIAL (6 INCH PATTERNED CONCRETE)	SF	6,500	\$ 17.00	\$ 110,500.00
612-00001	DELINEATOR (TYPE I)	EA	20	\$ 29.00	\$ 580.00
612-00002	DELINEATOR (TYPE II)	EA	71	\$ 26.00	\$ 1,846.00
612-00260	LOCATION MARKER (FIBER OPTIC) (DOME)	EA	9	\$ 149.00	\$ 1,341.00
613-00206	2 INCH ELECTRICAL CONDUIT (BORED)	LF	520	\$ 21.00	\$ 10,920.00
613-00306	3 INCH ELECTRICAL CONDUIT (BORED)	LF	9,760	\$ 26.00	\$ 253,760.00
613-01200	2 INCH ELECTRICAL CONDUIT (PLASTIC)	LF	210	\$ 17.00	\$ 3,570.00
613-01300	3 INCH ELECTRICAL CONDUIT (PLASTIC)	LF	150	\$ 16.00	\$ 2,400.00
613-06000	METER POLE	EA	1	\$ 2,575.00	\$ 2,575.00
613-07000	PULL BOX (SPECIAL)	EA	5	\$ 2,060.00	\$ 10,300.00
613-07002	TYPE TWO PULL BOX	EA	5	\$ 927.00	\$ 4,635.00
613-07003	TYPE THREE PULL BOX	EA	3	\$ 1,030.00	\$ 3,090.00
613-07004	TYPE FOUR PULL BOX	EA	1	\$ 1,449.00	\$ 1,449.00
613-07023	PULL BOX (24"X36"X24")	EA	6	\$ 1,701.00	\$ 10,206.00
613-07034	PULL BOX (24"X36"X18")	EA	4	\$ 1,349.00	\$ 5,396.00
613-07040	PULL BOX (30"X48"X24")	EA	3	\$ 2,060.00	\$ 6,180.00
613-10000	WIRING	LS	1	\$ 30,900.00	\$ 30,900.00
613-13000	LUMINAIRE (LED)	EA	4	\$ 1,699.00	\$ 6,796.00
614-00011	SIGN PANEL (CLASS I)	SF	159	\$ 24.00	\$ 3,816.00
614-00012	SIGN PANEL (CLASS II)	SF	196	\$ 26.00	\$ 5,096.00
614-01582	STEEL SIGN SUPPORT (2-1/2 INCH ROUND) (POST AND SLIPBASE)	LF	296	\$ 33.00	\$ 9,768.00
614-70150	PEDESTRIAN SIGNAL FACE (16) (COUNTDOWN)	EA	8	\$ 652.00	\$ 5,216.00
614-70336	TRAFFIC SIGNAL FACE (12-12-12)	EA	20	\$ 841.00	\$ 16,820.00
614-72855	TRAFFIC SIGNAL CONTROLLER CABINET	EA	1	\$ 18,540.00	\$ 18,540.00
614-72860	PEDESTRIAN PUSH BUTTON	EA	8	\$ 1,070.00	\$ 8,560.00
614-72863	PEDESTRIAN PUSH BUTTON POST ASSEMBLY	EA	4	\$ 1,854.00	\$ 7,416.00
614-72866	FIRE PREEMPTION UNIT AND TIMER	EA	4	\$ 5,429.00	\$ 21,716.00
614-72871	LOOP DETECTOR WIRE (PREFAB) SPECIAL	LF	4,000	\$ 14.00	\$ 56,000.00
614-72886	INTERSECTION DETECTION SYSTEM (CAMERA)	EA	2	\$ 8,428.00	\$ 16,856.00
614-72889	TRAFFIC SIGNAL VEHICLE DETECTOR (MICRO TYPE) (NON-INVASIVE)	EA	4	\$ 1,212.00	\$ 4,848.00
614-81135	TRAFFIC SIGNAL-LIGHT POLE STEEL (1-35 FOOT MAST ARM)	EA	1	\$ 15,297.00	\$ 15,297.00
614-81145	TRAFFIC SIGNAL-LIGHT POLE STEEL (1-45 FOOT MAST ARM)	EA	1	\$ 17,390.00	\$ 17,390.00
614-81170	TRAFFIC SIGNAL-LIGHT POLE STEEL (1-70 FOOT MAST ARM)	EA	2	\$ 24,578.00	\$ 49,156.00
614-86245	CONTROLLER (TYPE 170E)	EA	1	\$ 1,236.00	\$ 1,236.00
614-86800	UNINTERRUPTED POWER SUPPLY	EA	1	\$ 15,450.00	\$ 15,450.00
614-87350	TEST FIBER OPTIC CABLE	LS	1	\$ 52,475.00	\$ 52,475.00
614-87412	FIBER OPTIC CABLE (SINGLE MODE) (12 STRANDS)	LF	100	\$ 16.00	\$ 1,600.00
614-87496	FIBER OPTIC CABLE (SINGLE MODE) (96 STRANDS)	LF	4,000	\$ 4.00	\$ 16,000.00
615-00050	EMBANKMENT PROTECTOR TYPE 5	EA	3	\$ 2,225.00	\$ 6,675.00
620-00002	FIELD OFFICE (CLASS 2)	EA	1	\$ 27,870.00	\$ 27,870.00
620-00012	FIELD LABORATORY (CLASS 2)	EA	1	\$ 26,057.00	\$ 26,057.00
620-00020	SANITARY FACILITY	EA	1	\$ 2,685.00	\$ 2,685.00
621-00450	DETOUR PAVEMENT	SY	6,057	\$ 58.00	\$ 351,306.00
625-00000	CONSTRUCTION SURVEYING	LS	1	\$ 36,050.00	\$ 36,050.00
626-00000	MOBILIZATION	LS	1	\$ 268,491.00	\$ 268,491.00
626-01000	PUBLIC INFORMATION SERVICES	LS	1	\$ 10,300.00	\$ 10,300.00
627-00001	PAVEMENT MARKING PAINT(WHITE)	GAL	108	\$ 36.00	\$ 3,888.00
627-00001	PAVEMENT MARKING PAINT (YELLOW)	GAL	118	\$ 36.00	\$ 4,248.00
627-00005	EPOXY PAVEMENT MARKING	GAL	251	\$ 62.00	\$ 15,562.00
627-01010	PREFORMED PLASTIC PAVEMENT MARKING (TYPE I) (INLAID)	SF	704	\$ 12.00	\$ 8,448.00
627-30327	PREFORMED PLASTIC PAVEMENT MARKING (WORD-SYMBOL) (TYPE III)	SF	1,192	\$ 17.00	\$ 20,264.00

City of Lafayette - SH 7 & I19th St Intersection



Estimate of Construction Costs

Enhanced Signalized Intersection

Date Prepared: February 8, 2019

Contract Item No.	Contract Item	Unit	Project Totals	2019 Unit Cost	Total Cost
627-30332	PREFORMED PLASTIC PAVEMENT MARKING (XWALK-STOPLINE) (TYPE III)	SF	996	\$ 13.00	\$ 12,948.00
630-00000	FLAGGING	HOUR	100	\$ 28.00	\$ 2,800.00
630-00003	UNIFORM TRAFFIC CONTROL	HOUR	40	\$ 102.00	\$ 4,080.00
630-00007	TRAFFIC CONTROL INSPECTION	DAY	100	\$ 247.00	\$ 24,700.00
630-00012	TRAFFIC CONTROL MANAGEMENT	DAY	100	\$ 802.00	\$ 80,200.00
630-80331	BARRICADE (TYPE 3 F-A) (TEMPORARY)	EA	4	\$ 60.00	\$ 240.00
630-80341	CONSTRUCTION TRAFFIC SIGN (PANEL SIGN A)	EA	58	\$ 57.00	\$ 3,306.00
630-80355	PORTABLE MESSAGE SIGN PANEL	EA	4	\$ 7,720.00	\$ 30,880.00
630-80358	ADVANCE WARNING FLASHING OR SEQUENCING ARROW PANEL (C TYPE)	EA	4	\$ 1,582.00	\$ 6,328.00
630-80360	DRUM CHANNELIZING DEVICE	EA	170	\$ 32.00	\$ 5,440.00
630-86800	TRAFFIC SIGNAL (TEMPORARY)	LS	1	\$ 15,450.00	\$ 15,450.00
SUBTOTAL CONSTRUCTION BID ITEMS					\$ 7,117,100.00
2.5% CONTINGENCIES					\$ 178,000.00
TOTAL CONSTRUCTION BID ITEMS (CBI)					\$ 7,295,100.00
700-70010	F/A MINOR CONTRACT REVISIONS	FA	1	\$ 50,000.00	\$ 50,000.00
700-70011	F/A PARTNERING	FA	1	\$ 4,000.00	\$ 4,000.00
700-70015	F/A CONCRETE PAVEMENT INCENTIVE	FA	1	\$ 8,000.00	\$ 8,000.00
700-70016	F/A FUEL COST ADJUSTMENT	FA	1	\$ 500.00	\$ 500.00
700-70018	F/A ROADWAY SMOOTHNESS INCENTIVE	FA	1	\$ 8,000.00	\$ 8,000.00
700-70019	F/A ASPHALT CEMENT COST ADJUSTMENT	FA	1	\$ 15,000.00	\$ 15,000.00
700-70021	F/A ON-THE-JOB TRAINEE	FA	1	\$ 5,000.00	\$ 5,000.00
700-70380	F/A EROSION CONTROL	FA	1	\$ 5,000.00	\$ 5,000.00
700-70589	F/A ENVIRONMENTAL HEALTH AND SAFETY MANAGEMENT	FA	1	\$ 5,000.00	\$ 5,000.00
FORCE ACCOUNT ITEMS (FA)					\$ 100,500.00
TOTAL CBI + FA					\$ 7,395,600.00
	CONSTRUCTION ENGINEERING	20% (CBI)			\$ 1,459,020.00
	XCEL UNDERGROUNDING	LS			\$ 750,000.00
	RIGHT-OF-WAY (assumed all permanent ROW takes and no easements)	SF	214,510	\$ 3.00	\$ 643,530.00
TOTAL					\$ 10,248,200.00

- Unit Costs based on CDOT 2018 project bids (available on CDOT's website) with an adjustment for expected 2019 costs.
- In providing opinions of probable construction cost, the Client understands that Felsburg Holt & Ullevig has no control over costs or the price of labor, equipment or materials, or over the Contractor's method of pricing, and that the opinions of probable construction costs provided herein are to be made on the basis of our qualifications and experience. FHU makes no warranty, expressed or implied, as to the accuracy of such opinions as compared to bid or actual costs.



COLORADO
Department of Transportation
Region 4

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

Attachment D

February 7, 2019

Doug Short
City of Lafayette
1290 S. Public Road
Lafayette, CO 80026

SH 7 and 119th Street Intersection Improvements

Dear Mr. Short,

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 Boulder County application for the DRCOG Sub-Regional FY20-23 TIP Call. This applies only to the SH 7 and 119th Street Intersection Improvements 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



From: Quinn, Chris <Chris.Quinn@RTD-Denver.com>

Sent: Friday, February 8, 2019 4:34 PM

To: Douglas Short <douglass@cityoflafayette.com>

Cc: Jenny Young <Jenny.Young@fhueng.com>; Sirois, William <William.Sirois@RTD-Denver.com>; Van Meter, Bill <Bill.VanMeter@RTD-Denver.com>

Subject: RE: Request for RTD concurrence on Lafayette's subregional submittal for the 2020-2023 TIP

Douglas,

This email is to provide RTD's concurrence for the City of Lafayette's TIP application proposal.

We will want to work closely with the City on the design details of the queue jumps as the project progresses.

Please contact me if you would like additional information.

Thanks

Chris

Chris Quinn

Project Manager

Regional Transportation District

Suite 700

1560 Broadway

Denver, CO 80202

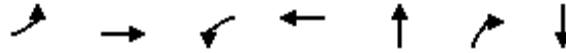
(303) 299-2439

chris.quinn@rtd-denver.com

Attachment F

Timings
11: 120th St/119th St & SH7

SH7 and 119th St
02/14/2019

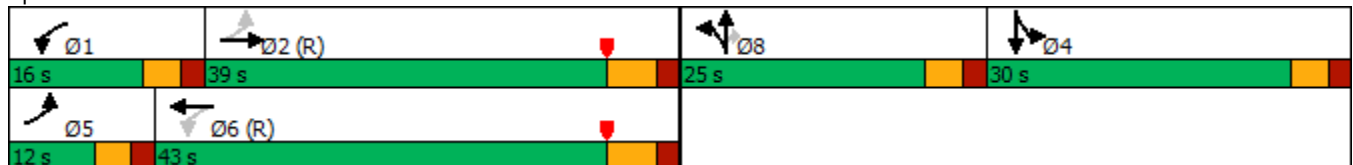


Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT
Lane Configurations							
Traffic Volume (vph)	30	240	380	552	78	147	307
Future Volume (vph)	30	240	380	552	78	147	307
Turn Type	pm+pt	NA	pm+pt	NA	NA	Perm	NA
Protected Phases	5	2	1	6	8		4
Permitted Phases	2		6			8	
Detector Phase	5	2	1	6	8	8	4
Switch Phase							
Minimum Initial (s)	3.0	15.0	3.0	15.0	5.0	5.0	5.0
Minimum Split (s)	8.0	23.0	8.0	23.0	29.0	29.0	29.0
Total Split (s)	12.0	39.0	16.0	43.0	25.0	25.0	30.0
Total Split (%)	10.9%	35.5%	14.5%	39.1%	22.7%	22.7%	27.3%
Yellow Time (s)	3.0	4.0	3.0	4.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	5.0	6.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			
Recall Mode	None	C-Min	None	C-Min	None	None	None
Act Effct Green (s)	39.2	33.0	49.9	42.5	12.2	12.2	32.8
Actuated g/C Ratio	0.36	0.30	0.45	0.39	0.11	0.11	0.30
v/c Ratio	0.22	0.52	1.00	1.03	0.57	0.51	0.84
Control Delay	20.7	35.4	69.6	76.8	56.6	12.6	52.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.7	35.4	69.6	76.8	56.6	12.6	52.0
LOS	C	D	E	E	E	B	D
Approach Delay		33.9		74.2	30.8		52.0
Approach LOS		C		E	C		D

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 45 (41%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.03
 Intersection Signal Delay: 58.2
 Intersection LOS: E
 Intersection Capacity Utilization 81.8%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 11: 120th St/119th St & SH7

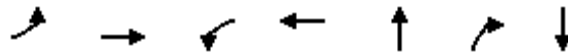


Network Totals

Number of Intersections	1
Total Delay (hr)	32
Stops (#)	1445
Average Speed (mph)	11
Total Travel Time (hr)	44
Distance Traveled (mi)	505
Fuel Consumed (gal)	58
Fuel Economy (mpg)	8.7
Unserved Vehicles (#)	20
Vehicles in dilemma zone (#)	58
Performance Index	36.5

Timings
11: 120th St/119th St & SH7

SH7 and 119th St
02/14/2019

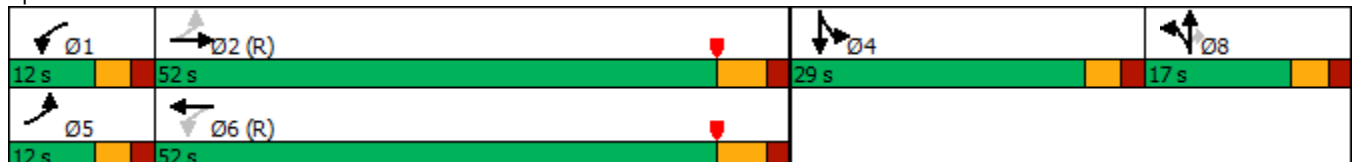


Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT
Lane Configurations							
Traffic Volume (vph)	49	597	167	342	166	351	112
Future Volume (vph)	49	597	167	342	166	351	112
Turn Type	pm+pt	NA	pm+pt	NA	NA	Perm	NA
Protected Phases	5	2	1	6	8		4
Permitted Phases	2		6			8	
Detector Phase	5	2	1	6	8	8	4
Switch Phase							
Minimum Initial (s)	3.0	15.0	3.0	15.0	5.0	5.0	5.0
Minimum Split (s)	8.0	23.0	8.0	23.0	29.0	29.0	29.0
Total Split (s)	12.0	52.0	12.0	52.0	17.0	17.0	29.0
Total Split (%)	10.9%	47.3%	10.9%	47.3%	15.5%	15.5%	26.4%
Yellow Time (s)	3.0	4.0	3.0	4.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	5.0	6.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			
Recall Mode	None	C-Max	None	C-Max	None	None	None
Act Effct Green (s)	52.5	46.1	55.9	49.3	12.0	12.0	24.0
Actuated g/C Ratio	0.48	0.42	0.51	0.45	0.11	0.11	0.22
v/c Ratio	0.13	0.82	0.72	0.54	1.00	1.03	1.01
Control Delay	13.2	38.7	33.5	25.2	114.6	80.4	91.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.2	38.7	33.5	25.2	114.6	80.4	91.8
LOS	B	D	C	C	F	F	F
Approach Delay		36.9		27.5	92.8		91.8
Approach LOS		D		C	F		F

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 88 (80%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
 Natural Cycle: 110
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.03
 Intersection Signal Delay: 57.9
 Intersection LOS: E
 Intersection Capacity Utilization 91.8%
 ICU Level of Service F
 Analysis Period (min) 15

Splits and Phases: 11: 120th St/119th St & SH7



Network Totals

Number of Intersections	1
Total Delay (hr)	36
Stops (#)	1566
Average Speed (mph)	9
Total Travel Time (hr)	45
Distance Traveled (mi)	410
Fuel Consumed (gal)	58
Fuel Economy (mpg)	7.1
Unserved Vehicles (#)	16
Vehicles in dilemma zone (#)	71
Performance Index	39.9

Timings
11: 120th St/119th St & SH7

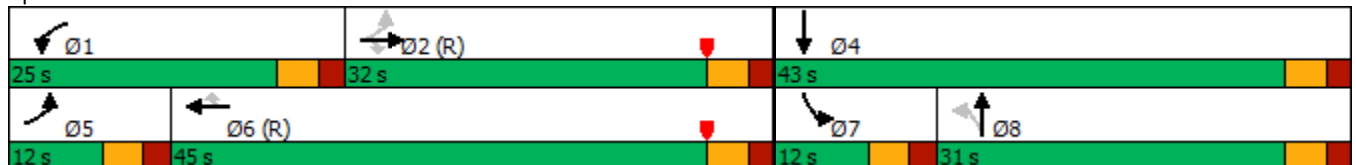
SH7 and 119th St
02/14/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	240	24	380	552	112	26	78	147	58	307	54
Future Volume (vph)	30	240	24	380	552	112	26	78	147	58	307	54
Turn Type	pm+pt	NA	Perm	Prot	NA	Perm	Perm	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6			8		7	4	
Permitted Phases	2		2			6	8		Free			Free
Detector Phase	5	2	2	1	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0	15.0	5.0	5.0		3.0	5.0	
Minimum Split (s)	8.0	23.0	23.0	8.0	23.0	23.0	29.0	29.0		8.0	29.0	
Total Split (s)	12.0	32.0	32.0	25.0	45.0	45.0	31.0	31.0		12.0	43.0	
Total Split (%)	12.0%	32.0%	32.0%	25.0%	45.0%	45.0%	31.0%	31.0%		12.0%	43.0%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Act Effct Green (s)	50.1	45.4	45.4	16.0	60.3	60.3	14.8	14.8	100.0	5.7	23.7	100.0
Actuated g/C Ratio	0.50	0.45	0.45	0.16	0.60	0.60	0.15	0.15	1.00	0.06	0.24	1.00
v/c Ratio	0.07	0.16	0.03	0.76	0.28	0.12	0.23	0.31	0.10	0.33	0.76	0.04
Control Delay	9.5	18.6	0.1	49.5	11.7	2.5	41.3	40.8	0.1	49.5	46.7	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.5	18.6	0.1	49.5	11.7	2.5	41.3	40.8	0.1	49.5	46.7	0.0
LOS	A	B	A	D	B	A	D	D	A	D	D	A
Approach Delay		16.2			24.5			17.1			41.1	
Approach LOS		B			C			B			D	

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
 Natural Cycle: 75
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.76
 Intersection Signal Delay: 25.8
 Intersection LOS: C
 Intersection Capacity Utilization 57.4%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 11: 120th St/119th St & SH7



Network Totals

Number of Intersections	1
Total Delay (hr)	14
Stops (#)	1206
Average Speed (mph)	18
Total Travel Time (hr)	27
Distance Traveled (mi)	487
Fuel Consumed (gal)	40
Fuel Economy (mpg)	12.3
Unserviced Vehicles (#)	0
Vehicles in dilemma zone (#)	54
Performance Index	17.7

Timings
11: 120th St/119th St & SH7

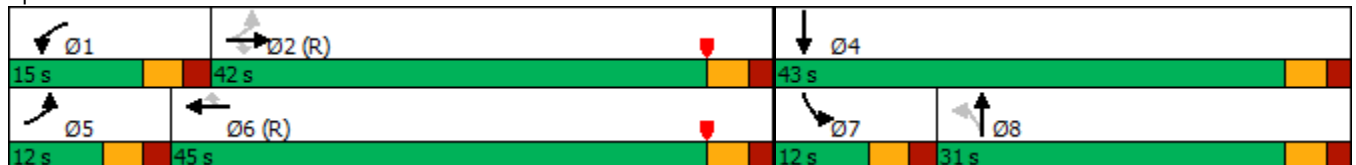
SH7 and 119th St
02/14/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	597	28	167	342	90	32	166	351	245	112	32
Future Volume (vph)	49	597	28	167	342	90	32	166	351	245	112	32
Turn Type	pm+pt	NA	Perm	Prot	NA	Perm	Perm	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6			8		7	4	
Permitted Phases	2		2			6	8		Free			Free
Detector Phase	5	2	2	1	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0	15.0	5.0	5.0		3.0	5.0	
Minimum Split (s)	8.0	23.0	23.0	8.0	23.0	23.0	29.0	29.0		8.0	29.0	
Total Split (s)	12.0	42.0	42.0	15.0	45.0	45.0	31.0	31.0		12.0	43.0	
Total Split (%)	12.0%	42.0%	42.0%	15.0%	45.0%	45.0%	31.0%	31.0%		12.0%	43.0%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	
Act Effct Green (s)	49.5	44.1	44.1	8.8	49.5	49.5	14.4	14.4	100.0	12.7	32.0	100.0
Actuated g/C Ratio	0.50	0.44	0.44	0.09	0.50	0.50	0.14	0.14	1.00	0.13	0.32	1.00
v/c Ratio	0.09	0.39	0.04	0.56	0.20	0.11	0.18	0.63	0.23	0.58	0.19	0.02
Control Delay	11.2	20.9	0.1	50.6	16.1	1.6	38.1	50.5	0.3	47.0	24.4	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.2	20.9	0.1	50.6	16.1	1.6	38.1	50.5	0.3	47.0	24.4	0.0
LOS	B	C	A	D	B	A	D	D	A	D	C	A
Approach Delay		19.3			23.5			17.7			36.6	
Approach LOS		B			C			B			D	

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.63
 Intersection Signal Delay: 23.1
 Intersection LOS: C
 Intersection Capacity Utilization 53.7%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 11: 120th St/119th St & SH7



Network Totals

Number of Intersections	1
Total Delay (hr)	14
Stops (#)	1257
Average Speed (mph)	12
Total Travel Time (hr)	21
Distance Traveled (mi)	253
Fuel Consumed (gal)	32
Fuel Economy (mpg)	8.0
Unserved Vehicles (#)	0
Vehicles in dilemma zone (#)	57
Performance Index	17.7



February 19, 2019

Denver Regional Council of Governments
1001 17th Street, #700
Denver, Colorado 80202

RE: 2020–2023 Transportation Improvement Program (TIP), State Highway (SH) 7 and 119th Street Intersection Improvements Funding Partner Confirmation

To the Denver Regional Council of Governments and the Boulder County Subregional Transportation Forum:

This letter is to confirm the City of Lafayette's commitment as a funding partner for the intersection improvements of SH 7 and 119th Street as a part of the 2020–2023 TIP application. This project is construction-ready as the City advanced final design and environmental clearances in 2016, including FIR and FOR reviews by CDOT's Regions 1 and 4. Lafayette will begin ROW acquisition in 2019 and update then finalize the environmental clearances. Lafayette is working to solicit additional support from the Town of Erie and Boulder County.

The City of Lafayette is committed to providing the funds for the undergrounding of the Xcel utilities. This will be funded by using the Xcel 1% Fund and is estimated to cost \$750,000. The City is also committed to providing the funds needed for the right-of-way. This will be funded using the City's general fund and is estimated to cost \$643,530 for approximately 4.92 acres. The City will additionally contribute \$3 million for construction from the general fund. The City of Lafayette's total funding contribution totals \$4.4 million.

If funded, the City of Lafayette will follow all DRCOG policies and state and federal regulations when completing the project.

Please contact the City of Lafayette's Public Works Department with any further questions.

Sincerely,



Douglas Short
Public Works Director
douglass@cityoflafayette.com



Brad Dallam
Deputy Public Works Director
bradd@cityoflafayette.com





Housing Authority

2525 13th Street, Suite 204 • Boulder, Colorado 80304 • Tel: 303.441.3929 Fax: 720.564.2283
www.bouldercountyhhs.org

February 25, 2019

Denver Regional Council of Governments 1001
17th Street, Suite 700
Denver, CO 80202

RE: 2020-2023 Transportation Improvement Program (TIP), State Highway 7 (SH7) and 119th Street Intersection Improvements Support Letter

Dear Denver Regional Council of Governments and the Boulder County Subregional Transportation Forum:

Boulder County Housing Authority (BCHA) supports the above TIP application for construction of multimodal intersection improvements at SH7 (Baseline Road) and 119th Street in Lafayette. This intersection is one-half mile north of a BCHA planned development in the SW corner of Emma & 120TH.

BCHA in partnership with the City of Lafayette purchased the 24-acre parcel of land at Emma Street and 120th in order to develop 400 units of affordable housing. BCHA recently provided its formal planning submittal to the City of Lafayette on February 22. The plan calls for a mix of rental and homeownership housing that will be affordable to households at below-market rate income levels, including duplexes, townhomes and multifamily apartments for families and seniors. The development is next to Peak to Peak Charter School and BCHA has coordinated the planning process with the school to minimize traffic impacts. BCHA worked with a diverse group of community organizations for over 1½ years to develop the housing plan, and transportation was a key component of the planning process. What is unique about this opportunity is that we have the chance to plan the broader transportation improvements early in the new development's planning process, thereby allowing for an informed process that integrates the community and staff planning feedback for both transportation improvements and housing development in an integrated, cost-effective, and focused manner.

In addition to the multi-modal intersection improvements on Baseline Road in Lafayette there is also a planned Bus Rapid Transit (BRT) station which will allow access to public transportation for our community. This public transportation infrastructure will allow residents of our community to commute to work or play using this BRT station and make bus connections at the Lafayette RTD Park-and-Ride to other destinations. This BRT station could also allow the buses to divert into our community and provide a local bus stop.

Boulder County Housing Authority urges DRCOG and the Boulder County Subregional TIP Forum to support this project for the TIP funding.

Sincerely,

DocuSigned by:
A handwritten signature in blue ink that reads "Frank L. Alexander".
EE05E7CEBEE014F2

Frank L. Alexander
Director, Boulder County Housing Authority