

# CHAPTER 8: IMPLEMENTATION

## COVER PAGE

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## INTRODUCTION

The policies and programs outlined in previous chapters can be implemented by actions of City Council, Transportation Mobility Board, and City staff. However, the plans and projects identified through this process are currently unfunded. The City has not historically had a dedicated funding stream for capital investments for transportation improvements. This has added to the strain on the transportation infrastructure experienced through the years, as resources have become tighter. A greater and greater share of City funds have been allocated to maintaining the current system as it has grown, making it harder to fund improvements.

In order to achieve its transportation mission, the City will need to identify new revenue streams, and dedicate funding to the projects and plans that it needs. This chapter outlines several actions the City can take to meet these needs.

This document is a living document that will be updated, amended, and modified through the annual budget process. A work program will be developed that functions as the City's to-do list each year, based on 3-year and 5-year outlooks. This implementation chapter is meant as a guide to available programs and as a starting point to identify the projects and plans the City should prioritize as it develops those work plans.

## FUNDING SOURCES

The purpose of this chapter is to support the initial funding discussions both internally within the City as well as with potential regional, State and federal funding partners. Included in this chapter is a review of Local versus Regionally Significant Project and the associated conceptual funding assumptions for each. Additionally, a conceptual analysis of a potential dedicated transportation sales tax is discussed as well as an overview of potential federal, State and regional funding programs that could be targeted to support implementation of the Regionally Significant Projects.

## CAPITAL COST SUMMARY

The table below summarizes the TMP's estimated capital costs by project category. Additionally, the costs are separated between Local Projects and Regionally Significant Projects. As discussed in more detail in the following sections, the purpose of this separation is to initiate the discussion with potential regional, State and federal funding partners regarding cost sharing to implement the Regionally Significant Projects.

Reflecting the separation of Projects, Regionally Significant Projects account for approximately 86 percent of the TMP Program with cost estimates totaling \$583.0 million. Local Projects account for the remaining 14 percent and total approximately \$94.8 million. Auto Projects (59 percent) account for the largest categories of improvements, followed by Transit Projects (34 percent) and Active Transportation Projects (7 percent). Within the Local Projects, Auto Projects still account for the largest share of costs (49.6 percent), however Active Transportation Projects (48.9 percent) surpass Transit Projects (1.5 percent). The table below also shows a summary of the City's projected local share of Regionally Significant Projects. For more detail on these assumptions, see the Conceptual Financial Strategies Analysis section below. The City of Littleton's projected Local Share for the Regionally Significant Projects is between \$92.8 million and \$157.3 million, depending on the Federal funding scenario.

Project Categories	Costs (2019\$, in millions)			Percent of Total Program	Local Share of Regionally Significant Projects	
	Local Projects	Regionally Significant Projects	Total		Max Federal Funding	Moderate Federal Funding
Auto	\$47.0	\$353.0	\$400.0	59%	\$35.3	\$88.3
Transit	\$1.5	\$230.0	\$231.5	34%	\$57.5	\$69.0
Active Transportation	\$46.3	\$0.0	\$46.3	7%	\$0.0	\$0.0
<b>Total</b>	<b>\$94.8</b>	<b>\$583.0</b>	<b>\$677.8</b>	<b>100%</b>	<b>\$92.8</b>	<b>\$157.3</b>

With \$94.8 million in Local Projects, and \$92.8 million to \$157.3 million in Local Share, the City of Littleton's projected total capital costs are between **\$187.6 million and \$252.0 million**.

## CONCEPTUAL TRANSPORTATION SALES TAX ANALYSIS

For this financial analysis it was assumed that the City's existing revenue sources would be available to implement the TMP projects. Reflecting the primary and most significant dedicated transportation revenue source used by other municipalities within Colorado, the first funding source evaluated was the potential role an increase in the City's sales and use tax could play in funding the program of projects. According to the City's Fiscal Year (FY) 2018 Comprehensive Annual Financial Report (CAFR), the existing 3 percent sales and use tax generated approximately \$33.8 million in revenue last year. Based on the FY 2018 level, the table below provides an estimate of the incremental additional revenue that could be generated if the sales tax rate was increased by 0.25 percent, 0.5 percent, 0.75 percent, and 1 percent. As indicated in the table, on an annual basis the additional sales tax revenue would range from \$2.8 million to \$11.3 million in these conceptual scenarios. On a pay-as-you-go implementation approach, these annual levels would not support timely implementation of the TMP.

However, these funds could be used to issue debt to support accelerated implementation of a portion of the TMP. For the purpose of this conceptual analysis, it was assumed bonds would be issued against the incremental sales tax levels using the following assumptions: interest rate of 5 percent, repayment term of 30 years, and a debt service coverage ratio of 1.2x. Based on these assumptions, bond proceeds would range from \$36 million to \$145 million and would provide funding for between 5 percent and 21 percent of the total program.

Conceptual Sale Tax Rate Increase	Annual Levels (2019\$, in millions)	Percent Share of Total Program	Conceptual Bond Proceeds (2019\$, in millions) <sup>1</sup>	Percent Share of Total Program
0.25% Increase	\$2.8	0.4%	\$36	5.3%
0.50% Increase	\$5.6	0.8%	\$72	10.6%
0.75% Increase	\$8.5	1.3%	\$108	15.9%
1.0% Increase	\$11.3	1.7%	\$145	21.4%

## LOCAL PROJECTS ANALYSIS

This section identifies the Local Projects that would likely require 100 percent of project funds to come from the City. These projects are contained within the City limits and tend to have localized impacts on the transportation network. Therefore, these projects are unlikely to be eligible for funding from the Colorado Department of Transportation (CDOT), the Regional Transportation District (RTD), and Denver Regional Council of Governments (DRCOG), and this analysis assumes the City is solely responsible for funding these projects. As shown in the second table below, the total cost estimate for Local Projects is \$94.8 million.

<sup>1</sup> Please note that HDR assists clients evaluate and apply for strategic funding. For the avoidance of doubt, the City is aware of the "Municipal Advisor Rule" of the Securities and Exchange Commission (effective July 1, 2014) and the "independent municipal advisor" exemption from the definition of "advice." The City understands that HDR Engineering Inc. is not a registered municipal advisor and is not subject to the fiduciary duty established in Section 15B(c)(1) of the Securities and Exchange Act. HDR uses financial information and interest rates publically available or provided by a client's Municipal Financial Advisor to complete the requested financial analysis. In evaluating funding sources, the City will be responsible for deciding to use or pursue funding/financing.

The table below indicates that the conceptual annual sales tax levels described in the prior section under a pay-as-you-go implementation approach would cover between 3 percent and 12 percent of the Local Projects costs. Under the assumption that bonds are issued, the 0.25 and the 0.5 percent sales tax increase would fund 38 percent and 76 percent of the Local Projects costs, and the remaining two increments would cover more than 100 percent of the Local Projects providing additional capacity to provide funds for ongoing operation and maintenance of the Local Projects and a share of the costs for the Regionally Significant Projects.

Conceptual Sale Tax Rate Increase	Annual Levels (2019\$, in millions)	Percent Share of Local Projects (\$94.8 M)	Conceptual Bond Proceeds (2019\$, in millions) <sup>2</sup>	Percent Share of Local Projects (\$94.8 M)
0.25% Increase	\$2.8	3%	\$36	38%
0.50% Increase	\$5.6	6%	\$72	76%
0.75% Increase	\$8.5	9%	\$108	100%
1.0% Increase	\$11.3	12%	\$145	100%

Local Project Type	Corridor	Intersection or Segment	Existing Condition	Description	Cost (2019\$, in millions)
Auto Operations and Safety	Belleview Ave	Prince St to Lowell Blvd	No median	Access control, median	\$1.5
Auto Operations and Safety	Ridge Rd	Corridor-wide		Curb and gutter, geometry, intersections	\$5.0
Auto Operations and Safety	S Platte Canyon Rd	Mineral Dr	Traffic Signal	Full movement intersection	\$0.2
Auto Operations and Safety	Bowles Ave	Federal Blvd	Traffic Signal	Interim intersection operation and safety improvements	\$0.5
Auto Operations and Safety	Belleview Ave	Federal Blvd	Traffic Signal	Intersection operation and safety improvements	\$1.0
Auto Operations and Safety	Belleview Ave	Prince St	Traffic Signal	Intersection operation and safety improvements	\$0.5
Auto Operations and Safety	Belleview Ave	Santa Fe Dr Interchange	Single-Point Urban Interchange	Intersection operation and safety improvements	\$1.0
Auto Operations and Safety	Bowles Ave	Federal Blvd	Traffic Signal	Intersection operation and safety improvements	\$4.3

<sup>2</sup> Ibid

Auto Operations and Safety	Bowles Ave	Platte Canyon Rd/Lowell Blvd	Traffic Signal	Intersection operation and safety improvements	\$1.0
Auto Operations and Safety	Broadway	Arapahoe Rd	Traffic Signal	Intersection operation and safety improvements	\$1.0
Auto Operations and Safety	Broadway	Dry Creek Rd	Traffic Signal	Intersection operation and safety improvements	\$0.5
Auto Operations and Safety	Broadway	Jamison Ave	Traffic Signal	Intersection operation and safety improvements	\$0.5
Auto Operations and Safety	Broadway	Littleton Blvd	Traffic Signal	Intersection operation and safety improvements	\$1.5
Auto Operations and Safety	Broadway	Mineral Ave	Traffic Signal	Intersection operation and safety improvements	\$1.0
Auto Operations and Safety	Lowell Blvd	Berry Ave	Traffic Signal	Intersection operation and safety improvements	\$1.0
Auto Operations and Safety	Mineral Ave	Platte Canyon Rd	Traffic Signal	Intersection operation and safety improvements	\$0.8
Auto Operations and Safety	Prince St	Church Ave	Traffic Signal	Intersection operation and safety improvements	\$0.5
Auto Operations and Safety	Mineral Ave	Jackass Hill Rd	Traffic Signal	Intersection operation and safety improvements; bicycle focus	\$1.0
Auto Operations and Safety	Littleton Blvd	Main St/Alamo Ave	Yield Control	Roundabout	\$2.0
Auto Operations and Safety	Prentice Ave	Delaware St	2-Way Stop	Roundabout	\$0.3
Auto Operations and Safety	Prentice Ave	Huron St	2-Way Stop	Roundabout	\$0.3
Auto Operations and Safety	Prince St	Centennial Dr	2-Way Stop	Roundabout	\$1.5
Auto Operations and Safety	Ridge Rd	Apache St	3-Way Stop	Roundabout	\$1.0

Auto Operations and Safety	Ridge Rd	Elati St	4-Way Stop	Roundabout	\$1.0
Auto Operations and Safety	Ridge Rd	Gallup St	4-Way Stop	Roundabout	\$1.0
Auto Operations and Safety	Ridge Rd	Prince St	4-Way Stop	Roundabout	\$1.0
Auto Operations and Safety	Ridge Rd	Windermere St	4-Way Stop	Roundabout	\$1.0
Auto Operations and Safety	Sante Fe Dr	Prince St	Traffic Signal	Safety improvements: signal timing and phasing, advanced detection and geometry, NB Left	\$0.1
Auto Operations and Safety	Sante Fe Dr	Aspen Grove Way	Traffic Signal	Safety improvements: signal timing and phasing, advanced detection and geometry	\$0.1
Auto Operations and Safety	Sante Fe Dr	Bowles Ave	Traffic Signal	Safety improvements: signal timing and phasing, advanced detection and geometry	\$0.1
Auto Operations and Safety	Winderwere St	Corridor-wide		Traffic Calming	\$2.0
Auto Operations and Safety	Prince St	Corridor-wide		Turn lanes, curb and gutter	\$10.0
Auto Operations and Safety	Broadway	Corridor-wide		V2I and ITS	\$2.0
Auto Operations and Safety	Sante Fe Dr	Corridor-Wide		V2I and ITS	\$1.0
Active Transportation	Caley Ave	Prince St to Broadway	Shared Lane	Advisory Bike Lane or Bike Lane	\$0.2
Active Transportation	Powers Ave	Windermere St to Bannock St	Shared Lane	Advisory Bike Lane or Bike Lane	\$0.1
Active Transportation	Berry Ave	Blue Sage Dr to Federal Blvd	Shared Lane	Bike Lane	\$0.1
Active Transportation	Powers Ave	Bannock St to Broadway	Shared Lane	Bike Lane	\$0.0
Active Transportation	Elati St	Shepperd Ave to High Line Canal	Shared Lane	Bike Lane	\$0.2
Active Transportation	Delaware St	Lehow Ave to Powers Ave	Shared Lane	Bike Lane	\$0.1
Active Transportation	Windermere St	Ridge Rd to Rangeview Dr	Shared Lane	Buffered Bike Lane & Traffic Calming	\$0.2

				(Reduce to 25 MPH)	
Active Transportation	Windermere St/Jamison Ave	Mineral Ave to Broadway	Bike Lane/ Bike Shoulder	Buffered Bike Lane & Traffic Calming (Reduce to 25 MPH)	\$0.3
Active Transportation	Bellevue Ave	City Limits/Prospect Rd to Irving St	Bike Lane/None	Protected Bike Lane	\$0.3
Active Transportation	Windermere St	City Limits/Layton Ave to Littleton Blvd	Bike Lane/Shared Parking	Protected Bike Lane	\$0.2
Active Transportation	Windermere St	Littleton Blvd to Ridge Road	Bike Lane/Shared Parking	Protected Bike Lane	\$0.1
Active Transportation	Ridge Rd	Prince St to Broadway	Bike Lane	Protected Bike Lane	\$0.3
Active Transportation	Alamo Ave	Prince St to Court Pl	None	Protected Bike Lane	\$1.0
Active Transportation	Main St	Prince St to Court Pl	None	Protected Bike Lane	\$0.0
Active Transportation	Church Ave	Santa Fe Dr to Prince St	None	Protected Bike Lane	\$0.0
Active Transportation	Federal Blvd	Bellevue Ave to Bowles Ave	Bike Lane	Protected Bike Lane	\$0.3
Active Transportation	Lowell Blvd	Bellevue Ave to Bowles Ave	Shared Lane	Protected Bike Lane	\$0.2
Active Transportation	Prince St	Centennial Dr to Mineral Ave	Bike Lane/Shared Lane/Shared Parking/Bike Lane/Bike Shoulder	Protected Bike Lane	\$0.7
Active Transportation	Southpark Ln	Mineral Ave to County Line Rd	Shared Lane	Protected Bike Lane	\$0.2
Active Transportation	Centennial Dr/ Prentice Ave/ Progress Ave	Prentice Ave to Prince St	Bike Lane	Protected Bike Lane	\$0.2
Active Transportation	Broadway	High Line Canal Trail south of Arapahoe Rd to Ridge Road	None	Shared Use Path	\$0.2
Active Transportation	Broadway	Bannock St to Caley Ave	None	Shared Use Path	\$0.1
Active Transportation	Bellevue Ave	Irving St to Fox St	None	Shared Use Path	\$1.5
Active Transportation	Mineral Ave	Broadway to E Dry Creek Rd	Bike Lane/ Shared Lane	Shared Use Path	\$0.5
Active Transportation	Broadway	Jamison Ave to City Limits	None	Shared Use Path	\$0.5
Active Transportation	Broadway	Powers Ave	Traffic Signal	Bicycle Intersection Improvements	\$0.1

Active Transportation	Santa Fe Dr	Prince St	Traffic Signal	Bicycle Intersection Improvements	\$0.5
Active Transportation	Prince St	Alamo Ave	Traffic Signal	Bicycle Intersection Improvements	\$0.1
Active Transportation	Santa Fe Dr	Belleview Ave	Traffic Signal - SPUI	Bicycle Intersection Improvements	\$0.3
Active Transportation	Lowell Blvd	Berry Ave	Traffic Signal	Bicycle Intersection Improvements	\$0.1
Active Transportation	Mary Carter Greenway	Bowles Ave	Grade-Separated Crossing	Bridge Widening	\$1.0
Active Transportation	Middlefield Rd	Bowles Ave	Traffic Signal	Bicycle Intersection Improvements	\$0.1
Active Transportation	Prince St	Caley Ave	Cross traffic does not stop	Bicycle Intersection Improvements	\$0.2
Active Transportation	Bannock St	Littleton Blvd	Traffic Signal	Bicycle Intersection Improvements	\$0.1
Active Transportation	Windermere St	Littleton Blvd	Traffic Signal	Bicycle Intersection Improvements	\$0.1
Active Transportation	Prince St	Main St	Traffic Signal	Bicycle Intersection Improvements	\$0.1
Active Transportation	Jackass Hill Rd/ Long Ave	Mineral Ave	Traffic Signal	Bicycle Intersection Improvements	\$0.1
Active Transportation	Santa Fe Dr	Mineral Ave	Traffic Signal	Bicycle Intersection Improvements	\$1.0
Active Transportation	Apache St/ High Line Canal Trail	Ridge Rd	3-Way Stop	Bicycle Intersection Improvements	\$0.2
Active Transportation	Elati St	Ridge Rd	4-Way Stop	Bicycle Intersection Improvements	\$0.2
Active Transportation	Gallup St	Ridge Rd	4-Way Stop	Bicycle Intersection Improvements	\$0.2
Active Transportation	Prince St	Ridge Rd	4-Way Stop	Bicycle Intersection Improvements	\$0.2
Active Transportation	Windermere St	Ridge Rd	4-Way Stop	Bicycle Intersection Improvements	\$0.2

Active Transportation	Broadway	High Line Canal Trail (S of Arapahoe Rd)	Cross traffic does not stop	Grade-Separated	\$3.0
Active Transportation	Mineral Ave	Peninsula Dr/ High Line Canal Trail	Traffic Signal	Grade-Separated	\$3.0
Active Transportation	Rio Grande St	Slaughterhouse Gulch Trail	None	Grade-Separated	\$5.0
Active Transportation	Santa Fe Dr	Berry Ave	None	Grade-Separated	\$6.0
Active Transportation	Santa Fe Dr	Ridge Rd		Grade-Separated	\$6.0
Active Transportation	Federal Blvd	Bellevue Ave	Traffic Signal	Protected Bicycle Intersection	\$0.8
Active Transportation	Lowell Blvd	Bellevue Ave	Traffic Signal	Protected Bicycle Intersection	\$0.8
Active Transportation	Windermere St	Bellevue Ave	Traffic Signal	Protected Bicycle Intersection	\$0.8
Active Transportation	Southpark Ln	Mineral Ave	Traffic Signal	Protected Bicycle Intersection	\$0.8
Active Transportation	Windermere St	Powers Ave	Traffic Signal	Protected Bicycle Intersection	\$0.8
Active Transportation	Federal Blvd	Bowles Ave/ Trail Crossing	Traffic Signal	Raised Crossing In Channelized Right Turn Lane	\$0.1
Active Transportation	Prince St	Little's Creek Trail	Pedestrian Warning Signage	RRFB/Raised Pedestrian Crossing	\$0.2
Active Transportation	Berry Ave	Federal Blvd	Cross traffic does not stop	Pedestrian Signal	\$0.2
Active Transportation	Bega Park Trail	Alamo Ave	Pedestrian Warning Signage	RRFB/Raised Pedestrian Crossing	\$0.2
Active Transportation	Elati Way	Littleton Blvd	Cross traffic does not stop	RRFB	\$0.0
Active Transportation	Gallup St	Littleton Blvd	Cross traffic does not stop	RRFB	\$0.0
Active Transportation	Bega Park Trail	Main St	Pedestrian Warning Signage	RRFB/Raised Pedestrian Crossing	\$0.2
Active Transportation	Mary Carter Greenway	Mineral Ave	Grade-Separated Crossing	Bridge Widening	\$1.0
Active Transportation	Broadway	Caley Ave/ High Line Canal Trail	Traffic Signal	Signal Phasing Changes	\$0.0
Active Transportation	Platte Canyon Rd	Mineral Ave/ Ken Caryl Rd	Traffic Signal	Signal Phasing Changes	\$0.0
Active Transportation	Broadway	Ridge Rd/ High Line Canal Trail	Traffic Signal	Signal Phasing Changes	\$0.0
Active Transportation	Federal Blvd	Progress Ave	Cross traffic does not stop	Traffic Signal	\$0.3

Active Transportation	Mineral Ave	Jackass Hill Rd to Broadway	Bike Lane	Protected Bike Lane	\$0.4
Active Transportation	Broadway	Leigh Gulch	Cross traffic does not stop	Grade-Separated	\$5.0
Active Transportation	Elati St	Highline Canal	Dirt path	Improve Connection	\$0.1
Transit	Broadway	Corridor Wide	No transit prioritization	Transit speed and reliability improvements	\$0.4
Transit	Littleton Boulevard	Corridor Wide	n/a	Circulator Shuttle	N/A
Transit	Littleton Boulevard	Corridor Wide	No transit prioritization	Transit speed and reliability improvements	\$0.2
Transit	Bowles Ave.	Corridor	No transit prioritization	Transit speed and reliability improvements	\$0.1
Transit	Downtown	District	No transit prioritization	Transit speed and reliability improvements	\$0.1
Transit	Downtown	Station	361 parking spaces in surface lot	Station improvements (rider information, wayfinding, parking lot reconfiguration)	\$0.1
Transit	Mineral Ave/Sante Fe Dr	Station	1,200 spaces in surface lot	Station improvements (rider information, wayfinding, parking lot reconfiguration)	\$0.1
Transit	Broadway	Littleton Blvd	Varies	Bus stop/mobility hub improvements (amenities, wayfinding, stop connectivity)	\$0.1
Transit	Broadway	Arapahoe Rd	Varies	Bus stop/mobility hub improvements (amenities, wayfinding, stop connectivity)	\$0.1
Transit	Broadway	Mineral Ave	Varies	Bus stop/mobility hub improvements (amenities, wayfinding, stop connectivity)	\$0.1
Transit	Downtown	Arapahoe Community	Varies	Bus stop/mobility hub	\$0.1

		College		improvements (amenities, wayfinding, stop connectivity)	
Transit	Littleton Blvd	S Windermere St	Varies	Bus stop/mobility hub improvements (amenities, wayfinding, stop connectivity)	\$0.1
Transit	Littleton Blvd	S Datura St	Varies	Bus stop/mobility hub improvements (amenities, wayfinding, stop connectivity)	\$0.1
Transit	Littleton Blvd	S Bannock St	Varies	Bus stop/mobility hub improvements (amenities, wayfinding, stop connectivity)	\$0.1
<b>Total</b>					<b>\$94.8</b>

## REGIONALLY SIGNIFICANT PROJECTS ANALYSIS

The remaining Regionally Significant Projects are summarized in the table below and result in a total cost estimate of \$583.0 million. As shown below, the annual sales tax increments on a pay-as-you-go implementation approach would cover between 0.5 percent and 1.9 percent of the Regionally Significant Projects costs. Under the assumption that bonds are issued and the Local Projects are funded first, the 0.25 percent and 0.5 sales tax increase does not have any remaining bond proceeds available to support the Regionally Significant Projects. The remaining bond proceeds under the 0.75 percent and 1.0 percent sales tax increase increments could provide between 2 percent and 9 percent of the Regionally Significant Projects total costs.

Conceptual Sale Tax Rate Increase	Annual Levels (2019\$, in millions)	Percent Share of Regionally Significant Projects (\$583 M)	Remaining Conceptual Bond Proceeds (2019\$, in millions)	Percent Share of Regionally Significant Projects (\$583 M)
0.25% Increase	\$2.8	0.5%	\$0	0.0%
0.50% Increase	\$5.6	1.0%	\$0	0.0%
0.75% Increase	\$8.5	1.5%	\$13	2.3%
1.0% Increase	\$11.3	1.9%	\$50	8.6%

Regionally Significant Project Type	Corridor	Intersection or Segment	Existing Condition	Description	Cost (2019\$, in millions)
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<b>Auto</b>	Santa Fe Drive	Bowles Avenue	Traffic Signal	Reconfigure into expressway with grade-separated interchange	\$150.0
<b>Auto</b>	Santa Fe Drive	Mineral Avenue	Traffic Signal	Reconfigure into expressway with grade-separated interchange	\$75.0
<b>Auto</b>	South Platte Parkway	Corridor Wide (Excluding ROW)		Extend South Platte River Pkwy to Vinewood Dr on the north as a 2-lane Mixed Use Connector with Pedestrian and Bicycle Priorities.	\$8.0
<b>Auto</b>	Santa Fe Drive	Bowles Avenue	Traffic Signal	Alternative Intersection Configuration	\$15.0
<b>Auto</b>	Santa Fe Drive	Mineral Avenue	Traffic Signal	Alternative Intersection Configuration, Quadrant Roadway or Continuous Flow Intersection	\$15.0
<b>Auto</b>	County Line Rd	Santa Fe to Broadway		Widening	\$20.0
<b>Auto</b>	County Line Rd	Broadway to University		Widening	\$20.0
<b>Auto</b>	Santa Fe Drive	Corridor-Wide		Widening	\$50.0
<b>Transit</b>	Broadway	Corridor Wide	n/a	BRT	\$64.0
<b>Transit</b>	Santa Fe Drive	Corridor Wide	n/a	Relieve burden on parking via full light rail extension (cost shown), partial light rail extension, or parking capacity improvements at existing station	\$166.0
<b>Total</b>					<b>\$583.0</b>

## CONCEPTUAL FINANCIAL STRATEGIES ANALYSIS

For the purposes of the TMP Financial Analysis, two conceptual financial strategies were evaluated to provide an estimate of the level of funding the City of Littleton would need to generate in order to provide local match funds for potential federal, State and regional funds. For each of the conceptual financial strategies, it was assumed that the City would fully fund the \$72.1 million required for the Local Projects. The two conceptual strategies for the Regionally Significant Projects reflect the following assumptions regarding the allocation of costs among Federal programs, State/Regional programs, and the City of Littleton:

- Maximum Federal Participation:
  - Transit Projects: 50 percent Federal; 25 percent State/Regional; and 25 percent City of Littleton
  - Active Transportation and Auto Projects: 80 percent Federal; 10 percent State/Regional; and 10 percent City of Littleton
  - As shown in the table below, based on these assumptions, Federal funding would total \$397 million, State/Regional funding would total \$93 million and the City of Littleton share would total \$188 million (\$95 million for Local Projects and \$93 million for Regionally Significant Projects).
  - Additionally, based on the previously described annual sales tax estimates based on the four increments and the associated level of bonds that could be issued against these increments:
    - It would take between 17 and 67 years to cover the City of Littleton's share on a pay-as-you go basis.

- Assuming bonds are issued against a new sales tax, between 19 and 77 percent of the City of Littleton's share would be funded.
- Moderate Federal Participation:
  - Transit Projects: 40 percent Federal; 30 percent State/Regional; and 30 percent City of Littleton
  - Active Transportation and Auto Projects: 50 percent Federal; 25 percent State/Regional; and 25 percent City of Littleton.
  - Based on these assumptions, Federal funding would total \$269 million, State/Regional funding would total \$157 million and the City of Littleton share would total \$252 million (\$95 million for Local Projects and \$157 million for Regionally Significant Projects).
  - Additionally, based on the previously described annual sales tax estimates based on the four increments and the associated level of bonds that could be issued against these increments:
    - It would take between 22 and 90 years to cover the City of Littleton's share on a pay-as-you go basis.
    - Assuming bonds are issued against a new sales tax, between 14 and 58 percent of the City of Littleton's share would be funded.

<b>Conceptual Financial Strategies</b>				
<b>Scenario 1 - Maximum Federal Participation</b>	<b>Costs</b>	<b>Federal</b>	<b>State/Regional</b>	<b>City of Littleton</b>
Local Projects	\$94.8			\$94.8
Regional Projects	\$583.0	\$397.4	\$92.8	\$92.8
<b>Total</b>	<b>\$677.8</b>	<b>\$397.4</b>	<b>\$92.8</b>	<b>\$187.6</b>
<b>Potential New Sales Tax (cash basis)</b>	<b>0.25%</b>	<b>0.50%</b>	<b>0.75%</b>	<b>1%</b>
Annual Estimates	\$2.80	\$5.60	\$8.50	\$11.30
<i>Number of years to cover City's share of costs on a pay-go basis</i>	67.0	33.5	22.1	16.6
<b>Potential New Sales Tax (issue bonds)</b>				
Conceptual Amount of Bonds Issued	\$36	\$72	\$108	\$145
<i>% share of City's Funding Needs</i>	19%	38%	58%	77%
<b>Scenario 2 - Moderate Federal Participation</b>	<b>Costs</b>	<b>Federal</b>	<b>State/Regional</b>	<b>City of Littleton</b>
Local Projects	\$94.8			\$94.8
Regional Projects	\$583.0	\$268.5	\$157.3	\$157.3
<b>Total</b>	<b>\$677.8</b>	<b>\$268.5</b>	<b>\$157.3</b>	<b>\$252.0</b>
<b>Potential New Sales Tax (cash basis)</b>	<b>0.25%</b>	<b>0.50%</b>	<b>0.75%</b>	<b>1%</b>
Annual Estimates	\$2.80	\$5.60	\$8.50	\$11.30
<i>Number of years to cover City's share of costs on a pay-go basis</i>	90.0	45.0	29.7	22.3
<b>Potential New Sales Tax (issue bonds)</b>				
Conceptual Amount of Bonds Issued	\$36	\$72	\$108	\$145
<i>% share of City's Funding Needs</i>	14%	29%	43%	58%

The next section provides an initial list of federal, State and other local revenue sources that could be targeted in partnership with CDOT, RTD, and DRCOG to address the non-City of Littleton funding needs beyond use of a conceptual sales tax increase.

## POTENTIAL FUNDING SOURCES

The following sections provide summary descriptions of potential federal, state, and other local sources that could be targeted in partnership with RTD, CDOT, and DRCOG to implement the Regionally Significant Projects. Additional details on these funding programs and other sources considered for this analysis are provided in the Funding Guidebook, which is submitted under a separate cover.

### POTENTIAL FEDERAL PROGRAMS

This section provides descriptions of potential federal funding sources that could support implementation of Regionally Significant Projects within the Auto, Transit, and Active Transportation projects. The sources reflect both discretionary (competitive) and formula programs.

The federal funding sources described below reflect existing grant programs. The current federal transportation authorization legislation for these programs (Fixing America's Surface Transportation Act, or the FAST Act) is scheduled to expire in September 2020. Based on prior legislative history, it is likely that most, if not all, of these programs will continue. However, it is also important to note that there are ongoing discussions in Washington, D.C. regarding the return of Congressional earmarks. Cities and transportation agencies across the country have started the process of marketing major capital investment projects to their federal delegations with the goal of getting these projects named and funded as part of future transportation legislation, assuming earmarks return. When Congressional earmarks were part of federal transportation legislation in the past, the average project grant awards were significantly higher than grant awards provided through the programs described below.

#### **Discretionary/Competitive Grants**

As the preferred program of projects defined in the TMP moves through the planning, environmental, and design process, there may be opportunities to leverage federal funds for entire projects or specific cost elements of projects through competitive grant opportunities offered by the Federal Transit Administration (FTA), Federal Highway Administration (FHWA), and United States Department of Transportation (USDOT). A brief overview of competitive grant programs used to support the planning, engineering, and/or construction of Auto Capacity, Auto Operations and Safety, Transit, and Active Transportation projects is provided below.

Finally, as indicated in the descriptions, there are a limited number of competitive federal grant programs and due to the volume of applications received, grant awards are typically less than \$15 million for individual projects.

- **USDOT BUILD Grant Program (formerly known as the TIGER Grant Program)**

**Description:** The Better Utilizing Investments to Leverage Development (BUILD) program, formerly known as the Transportation Investment Generating Economic Recovery (TIGER) program, is one of USDOT's largest multimodal discretionary grant programs and supports innovative projects that would be otherwise difficult to fund through traditional federal programs. USDOT seeks projects that will catalyze long-lasting, positive changes in economic development, safety, quality of life, environmental sustainability, and state of good repair. Prior rounds of BUILD/TIGER have prioritized projects seeking to improve access to reliable, safe, and affordable transportation to enhance connectivity and provide ladders of opportunity for communities in urban, suburban, and rural areas.

The BUILD/TIGER program is extremely competitive with 7,300 applications submitted to USDOT requesting \$143 billion in BUILD/TIGER funds over the program's eight rounds for which summaries have been released. USDOT has awarded a total of \$5.1 billion to 421 projects, which is less than six percent of all applicants. The table below illustrates overall supply and demand for the program since it was first authorized under the American Recovery and Reinvestment Act of 2009 (ARRA). While there have been annual appropriations for BUILD/TIGER every FY since 2009, including the most recent BUILD notice of funding opportunity (NOFO) released in April 2019, the program is not specifically authorized in federal legislation.

Fiscal Year (FY)	Program Size	Applicants	Projects Funded	Percent of Projects Funded
2009	\$1,500 million	~1,400	51	3.6 percent
2010	\$600 million	~1,700	75	4.4 percent
2011	\$510 million	848	46	5.4 percent
2012	\$500 million	703	47	6.7 percent
2013	\$474 million	585	52	8.9 percent
2014	\$600 million	797	72	9.0 percent
2015	\$500 million	627	39	6.2 percent
2016	\$500 million	585	40	6.8 percent

Source: USDOT

Note: 2017 and 2018 BUILD awards summaries have not been released by USDOT.

**Eligible Project Categories:** Auto, Transit, and Active Transportation

**Revenue Potential:** Despite the program's \$25 million statutory maximum grant amount, the typical BUILD/TIGER grant awarded to projects in urban areas is \$10 to \$15 million. USDOT rarely awards close to its maximum of \$25 million in BUILD/TIGER funding to any one project. Between 2012 and 2016, only 20 out of 250 TIGER awards were \$20 million or larger. Notably, nearly two-thirds of the 40 grant recipients in FY 2016 were repeat applicants.

**Most Recent Application Cycle:** July 15, 2019

**Example Projects:** The table below provides a summary of projects from around the country that are similar to what is being considered in the TMP. The purpose of the table is to highlight successful project examples and the share of costs the federal grant covered.

Applicant	Project Summary	Grant Award/ Share of Total Costs	Project Type
Miami-Dade County	Expand and improve two existing park-and-ride facilities along the South Dade Bus Rapid Transit (BRT) line. The project includes additional sidewalks, improved pedestrian access, bicycle parking facilities, a kiss-and-ride, additional parking for individuals with disabilities, and electric vehicle parking with charging stations.	\$9.5 M (50%)	Transit
Maquoketa, IA	The project will make several roadway improvements including new and resurfaced street pavement; replacement curbs, gutters, pedestrian curb ramps, and sidewalks for compliance with the Americans with Disabilities Act (ADA); repair and replacement of the storm sewer, sanitary sewer, and water main; installation of a new broadband fiber-optic network; and traffic signal upgrades.	\$3.8 M (40%)	Roadway
Calloway County, KY	The project will widen an approximately 5.7-mile section of US 641 South from a two-lane divided highway to a four-lane divided highway between the Kentucky/Tennessee state line at Hazel north to the Middle Fork of the Clarks River.	\$23 M (41%)	Roadway
Hickory, NC	The project will develop an approximately 1.7-mile bicycle and pedestrian trail and a bridge over US 321, and construct a 1.2-mile complete streetscape loop in downtown Hickory that will add designated space for bicycles and pedestrians and concurrently incorporate underground fiber cable systems.	\$17 M (77%)	Active Transportation
Butler County, PA	The project will realign and widen to 4 lanes the approximately 1.5-mile Balls Bend and the approximately 0.75-mile Haines School- Commonwealth sections of Route 228, including adding turn lanes, medians, connecting access roads, and pedestrian/bicycle facilities. This project is part of a larger to widen approximately 26 miles of Route 228 in Butler County.	\$20 M (47%)	Roadway

Source: BUILD 2018 Fact Sheets

- **USDOT INFRA Grant Program (formerly known as the FASTLANE Grant Program)**

**Description:** The Infrastructure for Rebuilding America (INFRA) grant program, formerly known as the Fostering Advancements in Shipping and Transportation for the Long-term Achievement of National Efficiencies (FASTLANE) grant program, provides dedicated, discretionary funding for projects that address critical issues facing our nation's highway and bridges. Eligible costs include reconstruction, rehabilitation, acquisition of property, environmental mitigation, construction contingencies, equipment acquisition, and operational improvements directly related to system performance.

**Eligible Project Categories:** Auto only – however the focus of the grant program is to improve freight and goods movement.

**Revenue Potential:** In FY 2018, USDOT awarded over \$1.5 billion in INFRA awards to 26 projects, or an average award of \$59.1 million. Each year, 90 percent of available INFRA funds are awarded to large projects, or those with a minimum grant size of \$25 million. The remaining 10 percent of available funds are reserved for small projects, which have a minimum grant size of \$5 million.

**Most Recent Application Cycle:** The FY 2019 INFRA NOFO was released on December 21, 2018. The application deadline was March 4, 2019, and FY 2019 awards were announced on July 25, 2019.

- **FHWA Advanced Transportation and Congestion Management Technologies Deployment**

**Description:** The FAST Act established the Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) Program to make competitive grants for the development of model deployment sites for large-scale installation and operation of advanced transportation technologies to improve safety, efficiency, system performance, and infrastructure return on investment.

ATCMTD grants can cover up to 50 percent of the total project cost. Recipients can use funds to deploy advanced transportation and congestion management technologies, including:

- advanced traveler information systems;
- advanced transportation management technologies;
- infrastructure maintenance, monitoring, and condition assessment;
- advanced public transportation systems;
- transportation system performance data collection, analysis, and dissemination systems;
- advanced safety systems, including vehicle-to-vehicle and vehicle-to-infrastructure communications;
- technologies associated with autonomous vehicles, and other collision avoidance technologies, including systems using cellular technology;
- integration of intelligent transportation systems with the Smart Grid and other energy distribution and charging systems;
- electronic pricing and payment systems; and
- advanced mobility and access technologies, such as dynamic ridesharing and information systems to support human services for elderly and disabled individuals.

**Eligible Project Categories:** Roadway – capital costs only

**Revenue Potential:** In the most recent application cycle, 51 applicants requested more than \$265 million. Ten grants were awarded ranging from \$2.4 million to \$12 million for a total of \$53.2 million, or an average award of \$5.3 million. CDOT secured a \$2.4 million grant for Wolf Creek Pass Advanced Technology Deployment.

**Most Recent Application Cycle:** The FY 2018 NOFO was published on April 18, 2018, grant applications were due on June 18, 2018, and awards were announced on April 1, 2019.

- **FTA Section 5309 Capital Investment Grant Program (New Starts / Small Starts)**

**Description:** This FTA discretionary grant program funds transit capital investments, including heavy rail, commuter rail, light rail, streetcars, and bus rapid transit. Federal transit law requires transit agencies seeking Capital Investment Grants (CIG) funding to complete a series of steps over several years. For New Starts projects, the law requires completion of two phases (Project Development and Engineering) in advance of receipt of a construction grant agreement. For Small Starts projects, the law requires completion of one phase (Project Development only) in advance of receipt of a construction grant agreement. The law also requires projects to be rated by FTA at various points in the process according to statutory criteria evaluating project justification and local financial commitment.

**Eligible Project Categories:** Transit

**Revenue Potential:** The FAST Act authorized \$2.3 billion in CIG funding annually through 2020. New Starts projects require a total project cost of greater than \$300 million and CIG funding of at least \$100 million. Small Starts projects have total project costs of less than \$300 million and less than \$100 million in CIG funds. Maximum CIG share of total project cost is 60 percent for New Starts and 80 percent for Small Starts.

Recently, RTD successfully pursued \$92 million in CIG funds for the \$224 million Southeast Rail Extension to Lone Tree. Local funding was provided through a combination of RTD sales tax revenue and local contributions including donated right-of-way and cash contributions. Previously, RTD obtained CIG funds for earlier lines of the FasTracks Program, with the non-federal share provided by the RTD sales tax.

**Most Recent Application Cycle:** Ongoing submittal and review process

### **Federal Formula Programs**

The following provides an overview of FTA and FHWA formula grant programs that could be pursued separately or in combination with the previously described competitive grant programs. While there is no limitation on the number of federal funding programs that can be included in a project's financial strategy, the maximum federal funding participation that can be used on a project is 80 percent of the total capital costs.

If there is interest to pursue funding from any of these programs, there will need to be coordination with RTD, DRCOG, or CDOT. Use of these funds is typically identified several years in advance and is documented in the region's transportation planning and programming documents, including the Regional Transportation Plan (RTP) and the Transportation Improvement Program (TIP). More specifically, the current TIP programs federal funds through DRCOG over the 2020 to 2023 period. If FTA or FHWA formula programs are to be targeted for projects included in the TMP, the funds would have to be programmed after the current TIP period (2024 or later), or the City would have to work with DRCOG to reprogram and transfer funds from projects in the current TIP.

### **Programs Administered by RTD**

- **FTA Section 5307 Urbanized Area Formula Program**

**Description:** The Urbanized Area Formula Funding program (49 U.S.C. 5307) makes federal resources available to urbanized areas for transit capital and operating assistance and for transportation-related planning.

Eligible activities for Section 5307 funds include planning, engineering, design, and evaluation of transit projects and other technical transportation-related studies; crime prevention and security equipment; vehicle acquisition and replacement; construction of maintenance and **passenger facilities**; and **capital investments in new and existing fixed guideway systems** including rolling stock, overhaul and rebuilding of vehicles, track, signals, communications, and computer hardware and software.

**Eligible Project Categories:** Transit

**Revenue Potential:** FY 2019 FTA Apportionment to the Denver Region: \$58.4 million

- **FTA Section 5337 State of Good Repair Formula Grants**

**Description:** The State of Good Repair Program provides funding to transit agencies through a statutory formula for maintenance, replacement, and rehabilitation projects of high-intensity fixed guideway and bus systems to help transit agencies maintain assets in a state of good repair. Eligible activities include implementing transit asset management plans and replacing or rehabilitating rolling stock; track; line equipment and structures; signals and communications; power equipment and substations; **passenger stations and terminals**; security equipment and systems; maintenance facilities and equipment; and operational support equipment, including computer hardware and software.

**Eligible Project Categories:** Transit

**Revenue Potential:** FY 2019 FTA Apportionment to the Denver Region: \$16.3 million

**Programs Administered by DRCOG through the TIP Process**

**Description:** The TIP programs the federally-funded transportation improvements and management actions to be completed by CDOT, RTD, local governments, and other project sponsors over a four-year period within the DRCOG region. As required by federal and State law, the TIP must be fiscally constrained to funds expected to be available. All projects selected to receive federal and State surface transportation funds, and all regionally significant projects regardless of funding type, must be identified in the TIP.

DRCOG is responsible for developing and approving the TIP. DRCOG directly selects projects with federal and State funding, and reviews CDOT and RTD-submitted projects for consistency with regional plans. ***This discussion focuses on the DRCOG-selected projects***, which draw from the following funding sources:

- **Surface Transportation Block Grant Program (STBG):** provides funding for projects that preserve and improve the conditions and performance on any federal-aid highway, bridge, and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects. Potential TMP elements that could be eligible for STBG funds include:
  - Construction, reconstruction, rehabilitation, resurfacing, restoration, preservation, or operational improvements for highways;
  - Capital costs for transit projects;
  - Corridor parking facilities;
  - Improvements at intersections with high crash rates or levels of congestion; and
  - Infrastructure-based ITS capital improvements.
- **Transportation Alternatives (TA):** provides funding for non-motorized elements of high capacity transit projects. Potential eligible expenses within the TMP could include planning, design, and construction of facilities for pedestrians and bicyclists.
- **Congestion Mitigation and Air Quality (CMAQ):** Program funds are available for transportation projects likely to contribute to the attainment or maintenance of a national ambient air quality standard, with a high level of effectiveness in reducing air pollution and congestion. More specifically, to be eligible for CMAQ funding, a transportation project must generate an emissions reduction, and it must be located in or benefit a nonattainment or maintenance area. Potential TMP elements that could be eligible for CMAQ funds are summarized below. Further, as noted in the list, CMAQ can be used to cover a portion of the increased operating costs associated with the introduction of expanded transit service.
  - Planning and engineering activities;
  - New or rehabilitation of existing transit facilities (e.g., lines, stations, terminals, transfer facilities) if associated with new or enhanced public transit, passenger rail, or other similar services that will increase transit service capacity;
  - Advanced signal and communications systems for transit;
  - Fuel, whether conventional or alternative fuel, if part of a project providing operating assistance for new or expanded transit service under the CMAQ program; and
  - Operating assistance to introduce new transit service or expand existing transit service.
- **State Multimodal Transportation Options Fund (MMOF):** SB 18-001 includes a provision that establishes a Multimodal Options Fund. The Multimodal Options Fund has \$96.75 million in dedicated revenue. Of that \$96.75 million, \$2.5 million is dedicated to the Rail Commission. The remaining \$94.25 million is split between CDOT (15 percent, or \$14.13 million) and local governments (85 percent, or \$80.12 million). The legislation directs the CDOT Transportation Commission to establish a distribution formula for the local portion. The distribution formula must be based on population and ridership. The legislation also states that recipients shall provide a match equal

to the amount of the award. However, the CDOT Transportation Commission, per legislation, may create a formula for reducing or exempting the match requirement for local governments or agencies due to their size or any other special circumstance. As of May 2019, the allocation methodology was still being developed by CDOT.

**Selection Process:** DRCOG selects projects in three phases:

1. **Set-Asides:** “Off-the-top” regional programs totaling \$49.4 million over the four-year TIP period. Funding is provided through Calls for Projects and includes:
  - a. Community Mobility Planning & Implementation: \$4.8 million and reflects a combination of the current STAMP/UC Set-Aside and small infrastructure projects from the current TDM Set-Aside;
  - b. TDM Services: \$13.4 million and rebranded to include the TMA partnerships, non-infrastructure TDM projects, and Way to Go;
  - c. Regional Transportation Operations & Technology: \$20 million, of which 25 percent is directed to staff DRCOG Traffic Signal Program with the remaining available for project solicitation;
  - d. Air Quality Improvements: \$7.2 million; and
  - e. Human Service Transportation: \$4.0 million and is a new set-aside to improve service and mobility options for vulnerable populations.
2. **Regional Share:** \$32 million available for transformative projects that will provide benefits to the entire region. This represents 20 percent of available funds after accounting for the Set-Asides. Applications are submitted through subregions, and DRCOG evaluates and selects the projects. The table below shows the projects that were selected as part of the current TIP and the ranked waitlisted projects to provide examples of the types of projects that scored well in the DRCOG evaluation process as well as the per project grant award amounts. Finally, it should be noted that the City of Littleton is a funding partner on the US-85 PEL Study listed in the table

## TRANSPORTATION MASTER PLAN IMPLEMENTATION ELEMENT

TIP Regional Share Funding Recommendation								
	Project Sponsor	Project Name	Regional Share Funding Request	Total DRCOG Weighted Score H=3, M=2, L=1	Tier	Project Activity	Regional Share Funding Level	Project Highlights
Boulder	Boulder County	SH-119 BRT Enhancements	\$8.2	2.5	1	Construction	\$8.2	1) Center busway in Longmont on Coffman St between 1st and 9th, 2) transit bypass lanes on SH119 at SH52, and 3) Bus Access Transit (BAT) lanes in Boulder on 28th St between Iris and Valmont.
Denver	Denver	16th St Mall Rehabilitation	\$20.0	2.5	1	Construction	\$9.1	Reconstruct with new granite paver system, install bulb-outs, landscaping, realign transitway and sidewalks.
Jefferson	Jefferson County	Peaks to Plains Trail - SH-6 Tunnel 1 to Huntsman Gulch	\$4.0	2.5	1	Construction	\$4.0	Build a 3-mile 10-foot ADA path along SH-6, including pedestrian bridges, parking lots, and creek access points.
Arapahoe	Arapahoe County	High Plains Trail/Cherry Creek Trail Connector	\$2.0	2.4	1	Construction	\$2.0	New trail connecting existing High Plains and Cherry Creek Trails, including a grade separation over Parker Road.
RTD	RTD	Mobility as a Service: Implementing an Open-Ticketing Platform	\$1.8	2.4	1	Construction	\$1.8	1) Upgrade back-end administration of fare payment system to account-based, and 2) install new fare validators on all RTD revenue vehicles.
RTD	RTD	RTD Transportation Transformation Comprehensive Plan	\$1.4	2.3	1	Study	\$1.4	Study will provide a vision for base transit system and maximize FasTracks investments.
Arapahoe	Arapahoe County	US-85 PEL Study	\$1.5	2.2	1	Study	\$1.5	Planning and Environmental Linkages study on US-85, between C-470 and Alameda Ave/I-25
Broomfield	Broomfield	SH-7 Preliminary and Environmental Engineering	\$4.0	2.2	1	Pre-construction	\$4.0	Develop preliminary and environmental engineering, and identify ROW and utility needs on SH-7 from Folsom St in Boulder to US-85 in Brighton.

## TRANSPORTATION MASTER PLAN IMPLEMENTATION ELEMENT

TIP Regional Share Funding <b>Waiting List</b>							
	Project Sponsor	Project Name	Regional Share Funding Request	Total DRCOG Weighted Score H=3, M=2, L=1	Tier	Project Activity	Waiting List Ranking
Denver	Denver	Broadway Station and I-25 Safety and Access Improvements	\$20.0	2.3	1	Construction	1
Adams	Commerce City	I-270 Corridor EA and Vasquez Blvd Construction	\$6.0	2.2	1	Construction	2
Jefferson	Wheat Ridge	Ward Rd and BNSF Grade Separation	\$1.0	2.0	1	Pre-construction	3
Boulder	Boulder County	US-287 BRT Feasibility and Corridor Safety Study	\$0.3	1.9	1	Study	4
Douglas	Lone Tree	I-25/Lincoln Interchange Traffic and Mobility Improvements	\$1.0	1.9	1	Pre-construction	5
Arapahoe	Englewood	US-285 Congestion Management and Operations Study	\$0.9	1.8	1	Study	6
Denver	Denver	I-25 Valley Highway Phase 2.0 (I-25 and Alameda)	\$15.0	2.0	2	Construction	7
Jefferson	Wheat Ridge	Wadsworth Blvd Widening: 48th Ave to I-70	\$3.3	2.0	2	Construction	8
Adams	Commerce City	US-85/120th Ave Interchange: Phase 1	\$8.8	1.9	2	Pre-construction	9
Broomfield	Broomfield	US-36 Bikeway Realignment and Safety Improvements	\$1.2	1.9	2	Construction	10
Adams	Bennett	I-70/SH79 Interchange Operational Improvements	\$0.8	1.7	2	Construction	11
<b>Total Requested</b>			<b>\$ 58</b>				
CDOT	CDOT	Central 70 (Part 2 of DRCOG's previous commitment)					

3. **Subregional Share:** The subregional model is new as of the 2020-2023 TIP cycle with approximately \$160 million available among the subregions. It divides the region into 8 subregions according to county boundaries. The subregional funding pool is distributed according to a formula weighing population, employment, and VMT within each county. All DRCOG-member local governments who are partially or entirely within a given county boundary must be invited to participate in the subregional forum.

Scoring criteria for both regional and subregional shares are based on the following categories (although subregional forums may choose to alter the criteria or weighting for the subregional share):

1. Regional Significance (40 percent)
2. TIP Focus Area (30 percent)
3. Consistency with Metro Vision Objectives (20 percent)
4. Leveraging of funds (10 percent)

For the February 2019 Subregional Call for Projects, the City submitted applications for the following projects: Bowles Avenue and Federal Boulevard Intersection Improvements, Broadway Corridor Plan, and Mineral Avenue and Santa Fe Drive Intersection Improvements. Of the three projects submitted, only a portion of the Mineral Avenue and Santa Fe Drive Intersection Improvements was funded.

## POTENTIAL STATE PROGRAMS

CDOT receives revenue from five sources: state revenues, federal revenues, grants, miscellaneous sources (including the sale of property, permits, and fines), and enterprise revenues. The three largest sources of revenue for CDOT (FY 2019-2020 Estimate) are:

1. General fund transfers approved by the State Legislature (\$678 million)
2. The Highway User Tax Fund (HUTF), which is made up of a combination of federal and State motor fuel taxes, vehicle registration fees, and other sources (\$586 million)
3. FHWA revenue – the Highway Trust Fund (\$573 million)

CDOT distributes its funds through a variety of programs, and most of its funding programs are only eligible on state-owned highways. Within the City of Littleton, this includes US 85 and Belleview Avenue where intersection or corridor projects could be done in conjunction with CDOT and therefore these projects could access state highway funds.

- **Highway Safety Improvement Program**

**Description:** The primary goal of the Highway Safety Improvement Program (HSIP) is to achieve a significant reduction in fatalities and serious injuries on all publicly maintained roads. This includes public roads not owned by the State and roads on tribal lands. To comply with this program, CDOT is required to:

- Develop a strategic highway safety plan (SHSP) that identifies and analyzes highway safety problems and opportunities;
- Create projects to reduce the identified safety problems; and
- Evaluate and update the SHSP on a regular basis.

The City of Littleton currently has one project that was awarded funding under HSIP.

**Eligible Project Categories:** Auto

**Revenue Potential:** \$43.1 million (FY 2018-19)

- **Traffic Signal and Ramp Metering Program**

**Description:** The Traffic Signal and Ramp Metering (TSRM) Program was developed as a result of the 2013 Mobility Operations Reorganization Report. The objective of this program is to develop statewide policies, procedures, and guidelines on design, maintenance, life-cycle asset management, integration, and operation of traffic signal and ramp meters; manage various statewide funding programs and pools; and facilitate informed decision making on project prioritization. The TSRM Program is focused on implementing new and innovative technology, including CV/AV applications, deploying and integrating statewide ITS systems, incorporating

automated performance measures, and extending technical resources to CDOT Regions in the areas of traffic signal and ramp metering. The TSRM Program also leads and/or participates in the development and implementation of arterial and freeway management strategies throughout the State. This includes integrating these systems and using them in conjunction with other intelligent transportation system devices to more efficiently manage our transportation system. This program works collaboratively with CDOT Regions, FHWA, metropolitan planning organizations, local agencies, and other stakeholders to develop and implement policies, standards, and operational procedures for traffic signals and ramp meters.

#### Statewide Traffic Signal Pool (SGN)

CDOT's Traffic Signal Pool Program delivers funding to each Engineering Region on an annual basis. These funds are designated specifically for signal construction or signal system improvements. The Regions rely on these funds to address, on a priority basis, safety, mobility, and operational needs at locations with existing signals or where signals are warranted but not yet constructed. In a typical application, these funds are directed to activities such as new traffic signal or ramp meter construction, equipment or system upgrades, signal expansion due to intersection widening, signal interconnect, and operational improvements including minor hardware or software upgrades to facilitate safety and improve corridor traffic operations.

#### Statewide Traffic Signal Asset Management (SGA)

CDOT owns approximately 1,850 signals statewide. CDOT is responsible for the eventual replacement of these signals at the end of its useful life. The SGA pool delivers much needed capital replacement funding to each Engineering Region on an annual basis to replace the traffic signal infrastructure in poor or severe condition. CDOT's Signal Program is leading the effort in collaborating with the Regions by establishing a process to identify, select and prioritize the replacement of statewide traffic signal infrastructure. The Signal program has established capital replacement guidelines, including performance measures and targets, focused on high-level core criteria that provide a basis for Regions to quickly evaluate, and determine a list of traffic signal capital replacement projects.

#### Transportation Improvement Program (TIP) - Regional Funding Pool Administration

This program pool was established by DRCOG in the TIP to be funded through the federal CMAQ program. CDOT's Signal Program, in conjunction with FHWA, DRCOG, and local agencies, administers two pools under the TIP program - the Traffic Signal System Improvement Program (TSSIP) pool and the Intelligent Transportation Systems (ITS) pool. The TSSIP program delivers a capital improvement program, which provides equipment and installs communications links to improve system components, and a traffic signal timing improvement program, which provides new traffic signal timing and coordination plans to demonstrate the benefits of the capital improvements. The ITS program awards funds to ITS projects that implement the adopted Denver Regional Intelligent Transportation Systems Strategic Plan and achieve the goals and objectives of the Regional Concept of Transportation Operations.

#### Current Signal Program Initiatives

- Statewide central traffic signal control system upgrade
- Statewide traffic signal controller upgrade
- Ramp Metering system upgrade
- Implementation of Automated Traffic Signal Performance Measures (ATSPMs)
- Piloting and mainstreaming new and innovative technologies (CV/DSRC, Adaptive, etc.)
- Enhancing condition-based asset management guidelines for signal asset
- Administration of DRCOG TSSIP and TIP funding pools

**Eligible Project Categories:** Auto

**Revenue Potential:** \$17.8 million (FY 2018-19), \$16.1 million (FY 2019-20)

- **FASTER Safety**

**Description:** In 2009 the General Assembly created new funding sources to aid CDOT and local governments in funding road safety projects. Per Section 43-4-803 (21), C.R.S. (2018), a "Road Safety Project" means construction, reconstruction, or maintenance projects that:

- The Transportation Commission determines are needed to enhance the safety of a state highway.
- A county determines are needed to enhance the safety of a county road.
- A municipality determines needed to enhance the safety of a city street.

FASTER funds flow through the Colorado Highway User Trust Fund (HUTF) and are distributed to CDOT, counties, and municipalities.

In 2014, The Transportation Commission approved new administration of the FASTER Safety program. CDOT FASTER road safety funding is now allocated to two statewide programs administered by HQ: FASTER Safety Asset Management and FASTER Safety Mitigation. HQ coordinates with the Regions to select projects for Region delivery.

The City of Littleton currently has one project that was awarded FASTER funding.

**Eligible Project Categories:** Auto

**Revenue Potential:** \$67.4 million (FY 2018-19), \$68.5 million (FY 2019-20)

- **Regional Priority Program**

**Description:** The objective of the Regional Priority Program (RPP) is to supplement the formula-driven funding allocations to the five CDOT engineering regions with flexible funding for use at the discretion of each Regional Transportation Director in consultation with local elected officials and other stakeholders in each region. This is accomplished through the transportation planning process. RPP funds are distributed to the CDOT Regions according to a formula based on 50 percent population, 35 percent state highway system lane miles, and 15 percent state highway system truck VMT.

**Eligible Project Categories:** Auto

**Revenue Potential:** \$48.7 million (FY 2018-19), \$48.4 million (FY 2019-20)

- **Transportation Alternatives Program**

**Description:** CDOT uses a call for projects approach to allocated federal Transportation Alternatives Program (TAP) funds. These federal funds are allocated under TAP to transportation improvement projects that expand travel choice, strengthen the local economy, improve quality of life, and protect the environment. Many TAP projects enhance non-motorized forms of transportation like biking and walking. The TAP provides funding for bicycle, pedestrian, historic, scenic, and environmental mitigation transportation projects.

Eligible activities include but are not limited to:

- Construction, planning, and design of facilities for pedestrians and bicyclists
- Construction of turnouts, overlooks and viewing areas, and preservation of historic transportation facilities
- Some environmental mitigation activities, including vegetation management, and archeological and storm water mitigation related to highway projects
- The recreational trails program

**Eligible Project Categories:** Active Transportation

**Revenue Potential:** CDOT Region 1, which encompasses the City, is projected to allocate \$1.8 million per year through FY2020.

- **Surface Transportation Program – Metro**

**Description:** The Surface Transportation Program (STP) is a federally mandated program. STP provides flexible funding that may be used by States and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge, and tunnel projects on any public road; pedestrian and bicycle infrastructure; and transit capital projects, including intercity bus terminals. STP-Metro is a subprogram of STP for urbanized areas with populations greater than 200,000. Project selection for STP-Metro funds is conducted by federally designated regional Transportation Management Areas (TMAs) comprised of local governments. In Colorado, DRCOG, the Pikes Peak Area Council of Governments (PPACG), and the North Front Range Metropolitan Planning Organization (NFRMPO) select projects, and the member governments that receive funding contribute matching funds. Project finance is administered by CDOT.

**Eligible Project Categories:** Auto, Transit, and Active Transportation

**Revenue Potential:** \$54.0 million (FY 2018-19), \$55.4 million (FY 2019-20)

- **Congestion Mitigation & Air Quality**

**Description:** CMAQ is a federally mandated program, the objective of which is to improve air quality in nonattainment and maintenance areas for ozone, carbon monoxide, and particulate matter. These include the areas of the NFRMPO, DRCOG, PPACG, portions of the Upper Front Range Transportation Planning Region (UFR TPR), Aspen, Cañon City, Pagosa Springs, Steamboat Springs, and Telluride. Funds may be used for transportation projects designed to contribute to the attainment or maintenance of national ambient air quality standards (NAAQS), with a high level of effectiveness in reducing air pollution.

Eligible activities include:

- Establishment or operation of a traffic monitoring, management, and control facility, including advanced truck stop electrification systems, if it contributes to attainment of an air quality standard
- Projects that improve traffic flow, including projects to improve signalization, construct HOV lanes, improve intersections, add turning lanes, improve transportation systems management and operations that mitigate congestion and improve air quality, and implement ITS and other CMAQ eligible projects, including projects to improve incident and emergency response or improve mobility, such as real-time traffic, transit, and multimodal traveler information
- Purchase of integrated, interoperable emergency communications equipment
- Projects that shift traffic demand to nonpeak hours or other transportation modes, increase vehicle occupancy rates, or otherwise reduce demand
- Complete diesel retrofits of fleet vehicles
- Development of alternative fueling infrastructure and assistance in the conversion of public and private fleets to alternative fuel vehicles such as compressed natural gas (CNG), propane, or electric vehicles
- Expanded authority to use funds for transit operations

**Eligible Project Categories:** Auto, Transit, and Active Transportation

**Revenue Potential:** \$50.3 million (FY 2018-19), \$50.2 million (FY 2019-20)

## POTENTIAL LOCAL DISTRICTS

In addition to increasing the sales tax rate that was described earlier, other locally controlled revenue programs that could be considered include:

- **Increase Mill Levy for Transportation:** Temporarily increase the local mill levy for a specific transportation improvement. This approach would require voter approval. An example of this approach is Larimer County, which temporarily increased the Road & Bridge Fund Mill Levy share of the total current county-wide mill levy to implement the I-25 Improvement Project.
- **Regional Transportation Authority (RTA):** Implementation of a multi-jurisdiction sales tax dedicated for transportation infrastructure improvements. RTAs need to establish boundaries for the proposed authority and have all participating government entities agree on the structure and tax amount. A vote is required to establish

the authority and also to approve the sales tax. The RTA approach was implemented in El Paso County in 2004 to provide funding for roadway maintenance, roadway capital projects, and transit enhancements.

- **Local Improvement Districts (LID):** A LID allows property owners within a defined geographic area to construct and finance public streets, storm drainage, water system, or sanitary sewer improvements over a period of time so the whole cost of the improvement does not have to be paid at once. Following a referendum among the property owners within the district, the cost of the public improvements is paid by the property owners through their property taxes.
- **Metropolitan District:** These districts are units of local government that provide public improvements and services to its property owners and residents through property tax revenue. Voter approval is required to implement the district. A metropolitan district provides two or more types of improvements and services which could include: parks and recreation; sanitation sewer and storm water improvements; traffic and safety controls; street improvements; water system improvements; public transportation; television relay and translation systems; fiber optic communications systems; mosquito control; and fire protection.

## PROJECT PRIORITIZATION

Each project's overall value was determined through the aggregation of benefits, measured based upon an evaluation criteria that reflects how well a project is expected to achieve the previously-identified goals and objectives. Only the goals and objectives that translated into effective evaluation criteria for capital projects were included. The following table illustrates the evaluation criteria used to score each project, consistent with the City's goals and objectives:

No.	Topic	Evaluation Criteria
1	Quality of Life	Provide people with a sense of personal safety regardless of transportation mode
2	Quality of Life	Provide transportation infrastructure that meets local business needs
3	Community	Provide transportation facilities that are well integrated with land use and character
4	Community	Minimize transportation-related air quality degradation
5	Community	Minimize transportation-related water quality degradation
6	Community	Minimize transportation-related noise impacts
7	Mobility	Provide a reliable transportation system
8	Mobility	Achieve a balanced mode share
9	Mobility	Provide high-quality transportation systems people can afford to use
10	Active (Bike)	Provide a well-connected, direct bicycling network
11	Active (Bike)	Provide a safe biking environment
12	Active (Pedestrian)	Provide a well-connected pedestrian network
13	Active (Pedestrian)	Provide a safe walking environment
14	Active (Bike & Pedestrian)	Provide healthy transportation choices
15	Auto	Provide a well-connected automotive network
16	Auto	Provide for safe automobile travel
17	Auto	Provide a resilient and responsive traffic operations system
18	Auto	Provide an efficient automotive network
19	Auto	Provide a roadway network that allows for excellent emergency response
20	Transit	Connect people effectively to the transit system
21	Transit	Provide an efficient transit system
22	Transit	Provide safe & comfortable transit stops and stations
23	Freight	Provide a reliable freight network
24	Freight	Provide a well-connected freight network
25	Freight	Provide a safe freight network

**Score.** The scoring for each evaluation criteria ranged from 0 to 5 points. A score of 5 represents the best possible score for a given objective while a score of zero equates to a project having no positive impact on the objective.

**Weight.** Each criteria score was then multiplied by a criteria-specific weight. The weights applied to the criteria were developed with two goals. First, the weights balance scoring between topics in order to compensate for the fact that some topics relate to more objectives than others. For example, the “Quality of Life” topic is only associated with two scoreable objectives, whereas “Community” is associated with four. The second function of the weighting system is to reflect the understanding that certain objectives may be considered of greater value based on community input or may affect more travelers. For example, in general projects that improve auto capacity or operations/safety are given the highest weight, based on the prevalence of auto travel in Littleton. The table below shows the maximum possible score for each topic area based on the weighting criteria.

Project Categories	Maximum Possible Score
Quality of Life	60
Community	80
Mobility	75
Active (Bike & Pedestrian)	150
Auto	135
Transit	250
Freight	60
<b>Total</b>	<b>930</b>

**Results.** The weighted scores were then summed to produce the “evaluation score.” The table below illustrates the projects ranked from highest value to lowest based on this evaluation criteria scoring method. The far right column illustrates the project value. The full project criteria scoring/weighting table can be found in [Appendix X](#).

The bike/pedestrian grade-separated crossings of Santa Fe Dr and the South Platte River Pkwy extension received the highest scores with project values of 438. This was followed by reconfiguring the Santa Fe Dr/Bowles and Santa Fe Dr/Mineral Ave intersections to grade-separated interchanges. Bus Rapid Transit along the Broadway corridor was the next highest.

ID	Project Type	Corridor	Intersection or Segment	Description	Cost (2019 Dollars)	Evaluation Score
A5	Auto Capacity	South Platte River Pkwy	Corridor Wide (Excluding ROW)	Extend South Platte River Pkwy to Vinewood Dr on the north as a 2-lane Mixed Use Connector with Pedestrian and Bicycle Priorities.	\$8,000,000	438
BP47	Active Transportation	Santa Fe Dr	Berry Ave	Grade-Separated	\$6,000,000	438
BP48	Active Transportation	Santa Fe Dr	Ridge Rd	Grade-Separated	\$6,000,000	438
A23	Auto Capacity	Santa Fe Dr	Bowles Ave	Reconfigure into expressway with grade-separated interchange	\$150,000,000	431
A24	Auto Capacity	Santa Fe Dr	Mineral Ave	Reconfigure into expressway with grade-separated interchange	\$75,000,000	431
T1	Transit	Broadway	Corridor Wide	BRT	\$64,000,000	403
BP31	Active Transportation	Mary Carter Greenway	Bowles Ave	Bridge Widening	\$1,000,000	391
BP21	Active	Broadway	High Line Canal	Shared Use Path	\$150,000	368

ID	Project Type	Corridor	Intersection or Segment	Description	Cost (2019 Dollars)	Evaluation Score
	Transportation		Trail south of Arapahoe Rd to Ridge Road			
BP22	Active Transportation	Broadway	Bannock St to Caley Ave	Shared Use Path	\$120,000	368
BP23	Active Transportation	Bellevue Ave	Irving St to Fox St	Shared Use Path	\$1,535,000	368
BP24	Active Transportation	Mineral Ave	Broadway to E Dry Creek Rd	Shared Use Path	\$545,000	368
BP25	Active Transportation	Broadway	Jamison Ave to City Limits	Shared Use Path	\$450,000	368
BP75	Active Transportation	Elati St	Highline Canal	Improve Connection	\$50,000	340
BP9	Active Transportation	Bellevue Ave	City Limits/Prospect Rd to Irving St	Protected Bike Lane	\$280,000	326
BP10	Active Transportation	Windermere St	City Limits/Layton Ave to Littleton Blvd	Protected Bike Lane	\$230,000	326
BP11	Active Transportation	Windermere St	Littleton Blvd to Ridge Road	Protected Bike Lane	\$145,000	326
BP12	Active Transportation	Ridge Rd	Prince St to Broadway	Protected Bike Lane	\$280,000	326
BP13	Active Transportation	Alamo Ave	Prince St to Court Pl	Protected Bike Lane	\$1,000,000	326
BP14	Active Transportation	Main St	Prince St to Court Pl	Protected Bike Lane	\$35,000	326
BP15	Active Transportation	Church Ave	Santa Fe Dr to Prince St	Protected Bike Lane	\$10,000	326
BP16	Active Transportation	Federal Blvd	Bellevue Ave to Bowles Ave	Protected Bike Lane	\$335,000	326
BP17	Active Transportation	Lowell Blvd	Bellevue Ave to Bowles Ave	Protected Bike Lane	\$200,000	326
BP18	Active Transportation	Prince St	Centennial Dr to Mineral Ave	Protected Bike Lane	\$720,000	326
BP19	Active Transportation	Southpark Ln	Mineral Ave to County Line Rd	Protected Bike Lane	\$215,000	326
BP20	Active Transportation	Centennial Dr/ Prentice Ave/ Progress Ave	Prentice Ave to Prince St	Protected Bike Lane	\$220,000	326
BP73	Active Transportation	Mineral Ave	Jackass Hill Rd to Broadway	Protected Bike Lane	\$370,500	326
BP67	Active Transportation	Mary Carter Greenway	Mineral Ave	Bridge Widening	\$1,000,000	306
BP74	Active Transportation	Broadway	Leigh Gulch	Grade-Separated	\$5,000,000	306
A43	Auto Capacity	Sante Fe Dr	Corridor-Wide	Widening	\$50,000,000	302
BP7	Active	Windermere	Ridge Rd to	Buffered Bike Lane & Traffic	\$150,000	284

ID	Project Type	Corridor	Intersection or Segment	Description	Cost (2019 Dollars)	Evaluation Score
	Transportation	St	Rangeview Dr	Calming (Reduce to 25 MPH)		
BP8	Active Transportation	Windermere St/Jamison Ave	Mineral Ave to Broadway	Buffered Bike Lane & Traffic Calming (Reduce to 25 MPH)	\$265,000	284
A2	Auto Operations and Safety	Sante Fe Dr	Bowles Ave	Alternative Intersection Configuration	\$15,000,000	283
A3	Auto Operations and Safety	Sante Fe Dr	Mineral Ave	Alternative Intersection Configuration, Quadrant Roadway or Continuous Flow Intersection	\$15,000,000	283
T5	Transit	Sante Fe Dr	Corridor Wide	Relieve burden on parking via full light rail extension (cost shown), partial light rail extension, or parking capacity improvements at existing station	\$166,000,000	281
BP44	Active Transportation	Broadway	High Line Canal Trail (S of Arapahoe Rd)	Grade-Separated	\$3,000,000	270
BP45	Active Transportation	Mineral Ave	Peninsula Dr/ High Line Canal Trail	Grade-Separated	\$3,000,000	270
BP46	Active Transportation	Rio Grande St	Slaughterhouse Gulch Trail	Grade-Separated	\$5,000,000	270
A37	Auto Operations and Safety	Winderwere St	Corridor-wide	Traffic Calming	\$2,000,000	244
A39	Auto Operations and Safety	Broadway	Corridor-wide	V2I and ITS	\$2,000,000	234
T3	Transit	Littleton Blvd	Corridor Wide	Circulator Shuttle	TBD	231
A40	Auto Operations and Safety	Sante Fe Dr	Corridor-Wide	V2I and ITS	\$1,000,000	228
T9	Transit	Downtown	Station	Station improvements (rider information, wayfinding, parking lot reconfiguration)	\$80,000	224
T10	Transit	Mineral Ave/Sante Fe Dr	Station	Station improvements (rider information, wayfinding, parking lot reconfiguration)	\$80,000	224
BP3	Active Transportation	Berry Ave	Blue Sage Dr to Federal Blvd	Bike Lane	\$105,000	214
BP4	Active Transportation	Powers Ave	Bannock St to Broadway	Bike Lane	\$15,000	214
BP5	Active Transportation	Elati St	Shepperd Ave to High Line Canal	Bike Lane	\$180,000	214
BP6	Active Transportation	Delaware St	Lehow Ave to Powers Ave	Bike Lane	\$55,000	214
A4	Auto Operations and Safety	Ridge Rd	Corridor-wide	Curb and gutter, geometry, intersections	\$5,000,000	190
A38	Auto Operations	Prince St	Corridor-wide	Turn lanes, curb and gutter	\$10,000,000	190

ID	Project Type	Corridor	Intersection or Segment	Description	Cost (2019 Dollars)	Evaluation Score
	and Safety					
BP56	Active Transportation	Federal Blvd	Bowles Ave/ Trail Crossing	Raised Crossing In Channelized Right Turn Lane	\$50,000	183
BP57	Active Transportation	Prince St	Little's Creek Trail	RRFB/Raised Pedestrian Crossing	\$150,000	183
BP58	Active Transportation	Berry Ave	Federal Blvd	Pedestrian Signal	\$150,000	183
BP59	Active Transportation	Bega Park Trail	Alamo Ave	RRFB/Raised Pedestrian Crossing	\$150,000	183
BP62	Active Transportation	Elati Way	Littleton Blvd	RRFB	\$30,000	183
BP63	Active Transportation	Gallup St	Littleton Blvd	RRFB	\$30,000	183
BP64	Active Transportation	Bega Park Trail	Main St	RRFB/Raised Pedestrian Crossing	\$150,000	183
BP68	Active Transportation	Broadway	Caley Ave/ High Line Canal Trail	Signal Phasing Changes	\$5,000	183
BP69	Active Transportation	Platte Canyon Rd	Mineral Ave/ Ken Caryl Rd	Signal Phasing Changes	\$5,000	183
BP70	Active Transportation	Broadway	Ridge Rd/ High Line Canal Trail	Signal Phasing Changes	\$5,000	183
BP72	Active Transportation	Federal Blvd	Progress Ave	Traffic Signal	\$300,000	183
A41	Auto Capacity	County Line Rd	Broadway to University Blvd	Widening	\$20,000,000	179
A42	Auto Capacity	County Line Rd	Santa Fe Dr to Broadway	Widening	\$20,000,000	179
A36	Auto Operations and Safety	Sante Fe Dr	Bowles Ave	Safety improvements: signal timing and phasing, advanced detection and geometry	\$100,000	167
A35	Auto Operations and Safety	Sante Fe Dr	Aspen Grove Way	Safety improvements: signal timing and phasing, advanced detection and geometry	\$100,000	159
A26	Auto Operations and Safety	Prentice Ave	Delaware St	Roundabout	\$250,000	153
A29	Auto Operations and Safety	Ridge Rd	Apache St	Roundabout	\$1,000,000	153
A30	Auto Operations and Safety	Ridge Rd	Elati St	Roundabout	\$1,000,000	153
A31	Auto Operations and Safety	Ridge Rd	Gallup St	Roundabout	\$1,000,000	153
A32	Auto Operations and Safety	Ridge Rd	Prince St	Roundabout	\$1,000,000	153
A33	Auto Operations and Safety	Ridge Rd	Windermere St	Roundabout	\$1,000,000	153
A34	Auto Operations and Safety	Sante Fe Dr	Prince St	Safety improvements: signal timing and phasing, advanced detection	\$100,000	153

ID	Project Type	Corridor	Intersection or Segment	Description	Cost (2019 Dollars)	Evaluation Score
				and geometry, NB Left		
BP1	Active Transportation	Caley Ave	Prince St to Broadway	Advisory Bike Lane or Bike Lane	\$205,000	152
BP2	Active Transportation	Powers Ave	Windermere St to Bannock St	Advisory Bike Lane or Bike Lane	\$120,000	152
A25	Auto Operations and Safety	Littleton Blvd	Main St/Alamo Ave	Roundabout	\$2,000,000	151
A27	Auto Operations and Safety	Prentice Ave	Huron St	Roundabout	\$250,000	143
BP26	Active Transportation	Broadway	Powers Ave	Bicycle Intersection Improvements	\$75,000	139
BP27	Active Transportation	Santa Fe Dr	Prince St	Bicycle Intersection Improvements	\$500,000	139
BP28	Active Transportation	Prince St	Alamo Ave	Bicycle Intersection Improvements	\$75,000	139
BP29	Active Transportation	Santa Fe Dr	Bellevue Ave	Bicycle Intersection Improvements	\$300,000	139
BP30	Active Transportation	Lowell Blvd	Berry Ave	Bicycle Intersection Improvements	\$75,000	139
BP32	Active Transportation	Middlefield Rd	Bowles Ave	Bicycle Intersection Improvements	\$75,000	139
BP33	Active Transportation	Prince St	Caley Ave	Bicycle Intersection Improvements	\$150,000	139
BP34	Active Transportation	Bannock St	Littleton Blvd	Bicycle Intersection Improvements	\$75,000	139
BP35	Active Transportation	Windermere St	Littleton Blvd	Bicycle Intersection Improvements	\$75,000	139
BP36	Active Transportation	Prince St	Main St	Bicycle Intersection Improvements	\$75,000	139
BP37	Active Transportation	Jackass Hill Rd/ Long Ave	Mineral Ave	Bicycle Intersection Improvements	\$75,000	139
BP38	Active Transportation	Santa Fe Dr	Mineral Ave	Bicycle Intersection Improvements	\$1,000,000	139
BP39	Active Transportation	Apache St/ High Line Canal Trail	Ridge Rd	Bicycle Intersection Improvements	\$150,000	139
BP40	Active Transportation	Elati St	Ridge Rd	Bicycle Intersection Improvements	\$150,000	139
BP41	Active Transportation	Gallup St	Ridge Rd	Bicycle Intersection Improvements	\$150,000	139
BP42	Active Transportation	Prince St	Ridge Rd	Bicycle Intersection Improvements	\$150,000	139
BP43	Active Transportation	Windermere St	Ridge Rd	Bicycle Intersection Improvements	\$150,000	139
BP51	Active Transportation	Federal Blvd	Bellevue Ave	Protected Bicycle Intersection	\$800,000	139
BP52	Active Transportation	Lowell Blvd	Bellevue Ave	Protected Bicycle Intersection	\$800,000	139
BP53	Active Transportation	Windermere St	Bellevue Ave	Protected Bicycle Intersection	\$800,000	139

ID	Project Type	Corridor	Intersection or Segment	Description	Cost (2019 Dollars)	Evaluation Score
BP54	Active Transportation	Southpark Ln	Mineral Ave	Protected Bicycle Intersection	\$800,000	139
BP55	Active Transportation	Windermere St	Powers Ave	Protected Bicycle Intersection	\$800,000	139
T2	Transit	Broadway	Corridor Wide	Transit speed and reliability improvements	\$415,000	138
T4	Transit	Littleton Blvd	Corridor Wide	Transit speed and reliability improvements	\$160,000	138
T7	Transit	Bowles Ave	Corridor	Transit speed and reliability improvements	\$75,000	138
T8	Transit	Downtown	District	Transit speed and reliability improvements	\$90,000	138
A1	Auto Operations and Safety	Bellevue Ave	Prince St to Lowell Blvd	Access control, median	\$1,500,000	137
A28	Auto Operations and Safety	Prince St	Centennial Dr	Roundabout	\$1,500,000	137
A6	Auto Operations and Safety	S Platte Canyon Rd	Mineral Dr	Full movement intersection	\$200,000	133
T12	Transit	Broadway	Littleton Blvd	Bus stop/mobility hub improvements (amenities, wayfinding, stop connectivity)	\$100,000	127
T12	Transit	Broadway	Arapahoe Rd	Bus stop/mobility hub improvements (amenities, wayfinding, stop connectivity)	\$75,000	127
T12	Transit	Broadway	Mineral Ave	Bus stop/mobility hub improvements (amenities, wayfinding, stop connectivity)	\$80,000	127
T12	Transit	Downtown	Arapahoe Community College	Bus stop/mobility hub improvements (amenities, wayfinding, stop connectivity)	\$100,000	127
T12	Transit	Littleton Blvd	S Windermere St	Bus stop/mobility hub improvements (amenities, wayfinding, stop connectivity)	\$75,000	127
T12	Transit	Littleton Blvd	S Datura St	Bus stop/mobility hub improvements (amenities, wayfinding, stop connectivity)	\$75,000	127
T12	Transit	Littleton Blvd	S Bannock St	Bus stop/mobility hub improvements (amenities, wayfinding, stop connectivity)	\$75,000	127
A22	Auto Operations and Safety	Mineral Ave	Jackass Hill Rd	Intersection operation and safety improvements; bicycle focus	\$1,000,000	112
A7	Auto Operations	Bowles Ave	Federal Blvd	Interim intersection	\$500,000	97

ID	Project Type	Corridor	Intersection or Segment	Description	Cost (2019 Dollars)	Evaluation Score
	and Safety			operation and safety improvements		
A8	Auto Operations and Safety	Belleview Ave	Federal Blvd	Intersection operation and safety improvements	\$1,000,000	97
A9	Auto Operations and Safety	Belleview Ave	Prince St	Intersection operation and safety improvements	\$500,000	97
A10	Auto Operations and Safety	Belleview Ave	Santa Fe Dr Interchange	Intersection operation and safety improvements	\$1,000,000	97
A11	Auto Operations and Safety	Bowles Ave	Federal Blvd	Intersection operation and safety improvements	\$4,250,000	97
A12	Auto Operations and Safety	Bowles Ave	Platte Canyon Rd/Lowell Blvd	Intersection operation and safety improvements	\$1,000,000	97
A13	Auto Operations and Safety	Broadway	Arapahoe Rd	Intersection operation and safety improvements	\$1,000,000	97
A14	Auto Operations and Safety	Broadway	Dry Creek Rd	Intersection operation and safety improvements	\$500,000	97
A16	Auto Operations and Safety	Broadway	Jamison Ave	Intersection operation and safety improvements	\$500,000	97
A17	Auto Operations and Safety	Broadway	Littleton Blvd	Intersection operation and safety improvements	\$1,500,000	97
A18	Auto Operations and Safety	Broadway	Mineral Ave	Intersection operation and safety improvements	\$1,000,000	97
A21	Auto Operations and Safety	Prince St	Church Ave	Intersection operation and safety improvements	\$500,000	97
A20	Auto Operations and Safety	Mineral Ave	Platte Canyon Rd	Intersection operation and safety improvements	\$750,000	91
A19	Auto Operations and Safety	Lowell Blvd	Berry Ave	Intersection operation and safety improvements	\$1,000,000	85

**Note:** Key takeaways derived from the project scoring and prioritization process will be included in the final draft of the TMP, pending approval of evaluation methodology and project details from key stakeholders.