

Executive Summary

Transportation Master Plan



Adopted October 1, 2019

EXECUTIVE SUMMARY



Transportation Master Plan

The TMP is the first effort conducted by the City to look comprehensively at transportation conditions and options throughout Louisville and region for all modes of transportation. Previously, the City's transportation goals were housed within multiple planning documents that the City developed over time, including the Comprehensive Plan and corridor specific plans such as the South Boulder Road and McCaslin Small Area Plans and Highway 42 Gateway Alternative Analysis Report. In recognizing the benefits of coordinated transportation planning city-wide, rather than incrementally for specific corridors or areas of the city, the city has developed this Transportation Master Plan (TMP).

The TMP represents a long-range planning effort that describes baseline conditions of the City's transportation network, establishes eight overarching Transportation Goals that are supported by specific transportation Policies, Programs and Projects. The City developed the plan with extensive community outreach and input from the City's advisory boards and commission, regional partners and surrounding jurisdictions, and City staff.

It is important to note that the plan reflects a particular moment in time. The TMP should provide guidance, but City priorities may change over time and transportation decisions will need to reflect these updated community needs, opportunities and priorities. The City should update the TMP periodically to ensure consistency with changing conditions.

TMP ORGANIZATION AND CONTENTS

Chapter 1 Introduction

The first chapter establishes the background and purpose of the TMP, describes the key goals of the plan, and explains the organization of the document.

Chapter 2 Community Input

This chapter details the community feedback received through the outreach conducted during this project. It summarizes the major conclusions from the community input that have informed the plan elements and priorities.

Chapter 3 Existing Conditions

This chapter covers existing data and trends that help to form an understanding of the current state of Louisville's transportation system, as well as demographic trends related to transportation needs.

Chapter 4 Policies, Projects, & Programs

This chapter presents the TMP's recommendations based on community input and the analysis of existing conditions. The recommendations are organized into Policies, Programs and Projects.

Chapter 5 Implementation

This chapter establishes a framework for prioritizing the plan's recommendations and evaluating the City's progress towards the TMP's goals.



TMP GOALS

Developing the Goals:

The City's goals for transportation are rooted in the core values in the Comprehensive Plan, which focus on a balanced transportation system where people of all ages and abilities are partners in mobility. Furthermore, the Comprehensive Plan envisions a transportation network that contributes to the economic prosperity, public health, and quality of life in Louisville. In addition to the guidance from the Comprehensive plan, the City developed the TMP goals based on conversations with the public and stakeholders from across the City.

Louisville's transportation network will:

1

Operate **efficiently and safely** for all users.

2

Be a **cohesive and layered system** of streets and trails for walking, biking, transit, driving, and recreation.

3

Provide **local and regional travel** options that balance needs for Louisville residents, employees, and visitors.

4

Utilize **new technologies** to provide safe, reliable, clean, and convenient transportation choices.

5

Increase **mobility options and access** for people of all ages, abilities, and income levels.

6

Provide **complete streets** that are inviting, enhance livability, and reflect the City's small-town atmosphere.

7

Support **economic opportunities** and businesses.

8

Improve **environmental and community health** by reducing emissions, and supporting mode share and sustainability.

COMMUNITY INPUT & EXISTING CONDITIONS

Prior to development of the recommendations in the TMP, the planning process included extensive analysis of existing conditions within the City and a broad public input process. This work informed the recommendations in Chapter 4: Policies, Projects, and Programs.

Major themes from the **Community Input** included:

- While driving is how most people get around, the participants wanted more investment in multi-modal infrastructure such as underpasses, transit connections, bike lanes, and safer road crossing.
- The City's trails are a great amenity for residents and continued investment in trails is desired.
- Traffic congestion and cut-through regional traffic are getting worse.
- Safety was a key theme. A lack of safe or perceived lack of safe and comfortable facilities is a barrier to walking and biking.

Major themes from the **Existing Conditions** analysis included:

- With the exception of the former StorageTek site and parts of Centennial Valley, the City of Louisville is largely built out.
- Local and regional population and employment growth will impact transportation patterns and traffic volumes on key corridors.
- Louisville's share of in-commuting and out-commuting is high, resulting in a large percentage of trips occurring at a regional scale.
- The average age of Louisville residents is increasing, resulting in a larger percentage of the population that will rely on alternative transportation modes.
- The existing pedestrian and trail network is extensive and well-utilized, however gaps were identified along streets and trail corridors for bicycles, transit and pedestrians.

TMP Community Input Opportunities:

- Community Meeting
- Farmers' Market
- Street Faire
- Labor Day Parade and Fall Festival
- Online Survey
- Interactive Online Map
- Direct Email
- Focus Groups



							
	Drive Alone	Carpool	Transit	Bike	Walk	Work at Home	Other
City of Louisville	72.3%	4.7%	5.9%	2.3%	1.7%	12.7%	0.5%
City of Boulder	51.3%	4.9%	8.3%	10.3%	11.4%	12.5%	1.2%
Boulder County	65.2%	7.6%	5.0%	4.4%	5.3%	11.3%	1.3%
Denver Region	74.8%	8.5%	4.4%	1.2%	2.5%	7.5%	1.0%

POLICIES, PROJECTS, & PROGRAMS

The TMP provides specific recommendations and strategies for the City of Louisville to improve safety, expand mobility options, increase access to destinations, and overall meet the TMP goals. The recommendations are in the form of Policies, Projects, and Programs, which work together to achieve a desired outcome.

Policies

The policies support the TMP goals and further defines the vision for the community wants to advance those goals. The Policies will also provide guidance on how to develop the specific Projects and Programs and inform city priorities on transportation investment.

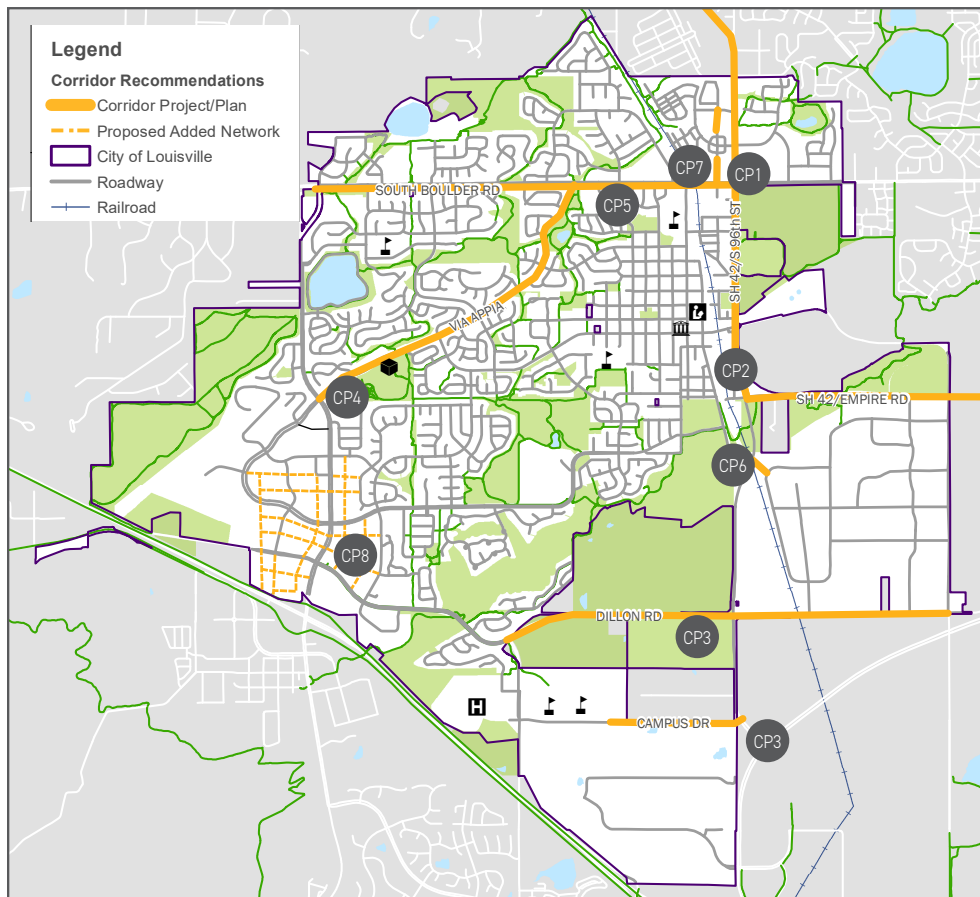
Policy	Description
Policy 1: Great Streets	Great Streets, or complete streets, are streets that are designed and operated to be safe and accessible for all users, regardless of ability, age, or mode. This policy provides a guide for the design of new streets, improving infrastructure on existing streets, and recommends that new designs consider the surrounding context and land uses. It also provides a framework to help consider modal priorities on an individual street.
Policy 2: Guidelines for Walkable & Bikeable Places	In areas where new development or redevelopment is anticipated, the City's policy is to facilitate design that promotes walkable and bikeable places. Elements that contribute to walking and biking include wide sidewalks, pedestrian amenities, higher intersection density, buffers for bicycles, and trail connections. The City's design standards and guidelines should promote the development of walkable places, with a focus on corridors, including McCaslin Boulevard and South Boulder Road.
Policy 3: Transit Oriented Development Guidelines	Transit Oriented Development (TOD) is the creation of compact, walkable, pedestrian-oriented, mixed-use neighborhoods centered around reliable and frequent transit service. Benefits of TOD include increased mobility and transit ridership, reduced regional congestion, enhanced economic competitiveness. TOD design concepts should include a mix of uses, integration of bicycle accommodation, plazas and public space, and specialized retail and services for commuters.
Policy 4: Applications for Technology	Investments in new technologies have the potential to improve safety and efficiency of the transportation network and provide more equitable access to transportation options. Transportation technology may include shared mobility (ride share, bike share, etc.), Transportation systems optimization (smart parking, signal timing, traffic management), and autonomous or interconnected vehicles. The City should be proactive in exploring and investing in technology and continue to monitor advances and changes in new transportation technology.

POLICIES, PROJECTS, & PROGRAMS

Projects

Projects contain recommendations and descriptions for facility or design improvements that will improve access and mobility options. Current funding levels would not allow completion of all the recommendations proposed in the TMP. Therefore, prioritization of projects is critical, and evaluation of additional funding sources would be necessary to fully fund all contemplated Projects.

CORRIDOR PROJECTS		
Project	Location/Detail	Description
CP1	SH 42 Conceptual Design	Expand portion of SH 42/S 96th, add new signal at Short St., add connections to open space trails, consider future multi-modal needs
CP2	SH 42 Enhancements	
CP3	Dillon Road & Campus Drive	New underpasses, new bicycle facilities, trail connections, capacity improvements, and new Campus Dr. connection
CP4	Via Appia	New underpass at South Boulder Rd., enhance pedestrian crossings
CP5	South Boulder Road Corridor	Work with neighboring jurisdictions for multi-modal improvements
CP6	CTC Connector, Arthur Ave to S 96th St	Create new connection from Arthur Avenue to S 96th
CP7	Kaylix Connector, Summit View Dr to South Boulder Rd	Create new connections between Kaylix Dr., South Boulder Rd. and Summit View Dr.
CP8	McCaslin Network Additions, Various locations along McCaslin area	Increase roadway connectivity by filling in the block grid, add multi-use separated path, consider underpass



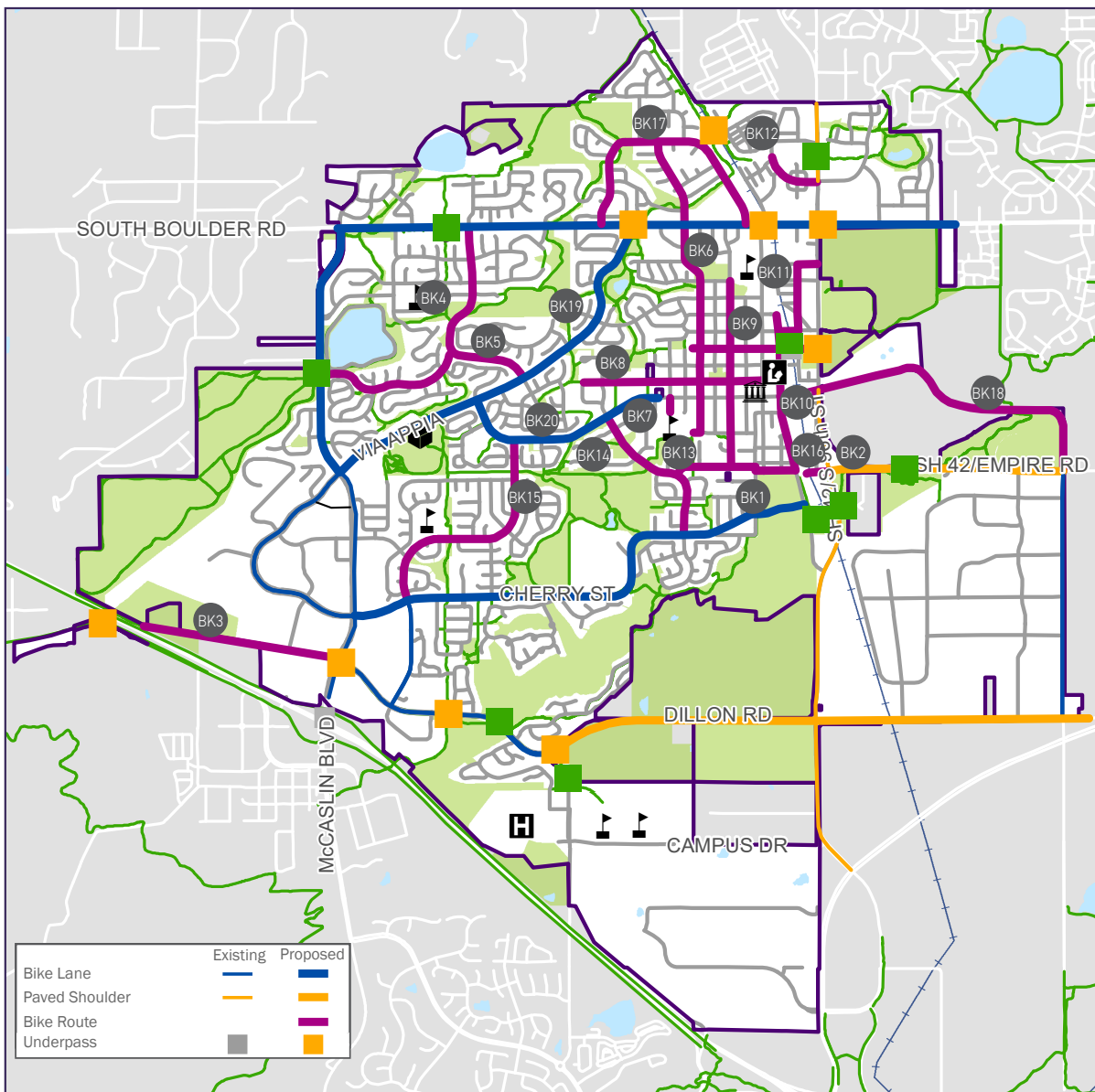
POLICIES, PROJECTS, & PROGRAMS

BIKE NETWORK ON-STREET PROJECTS

Project	Description	Location
BK1	Bike Lane	Bella Vista Dr
BK2	Bike Shoulder Improvements	SH 42/Empire Rd
BK3	Bike Route	W Dyer Rd
BK4	Bike Route	Washington Ave
BK5	Bike Route	Tyler Ave
BK6	Bike Route	Garfield/Lincoln
BK7	Bike Route	McKinley Ave
BK8	Bike Route	Spruce St
BK9	Bike Route	Jefferson Ave
BK10	Bike Route	Front St

BIKE NETWORK ON-STREET PROJECTS

Project	Description	Location
BK11	Bike Route	DELO to Downtown
BK12	Bike Route	Hecla Dr
BK13	Bike Route	Rex/West St
BK14	Bike Route	Hoover Ave
BK15	Bike Route	Polk Ave/Dahlia St
BK16	Bike Route	Lock St
BK17	Bike Route	Centennial north of South Boulder Rd
BK18	Bike Route	Empire Rd
BK19	Bike Lane	Via Appia buffered bike lanes
BK20	Bike Lane	Pine St



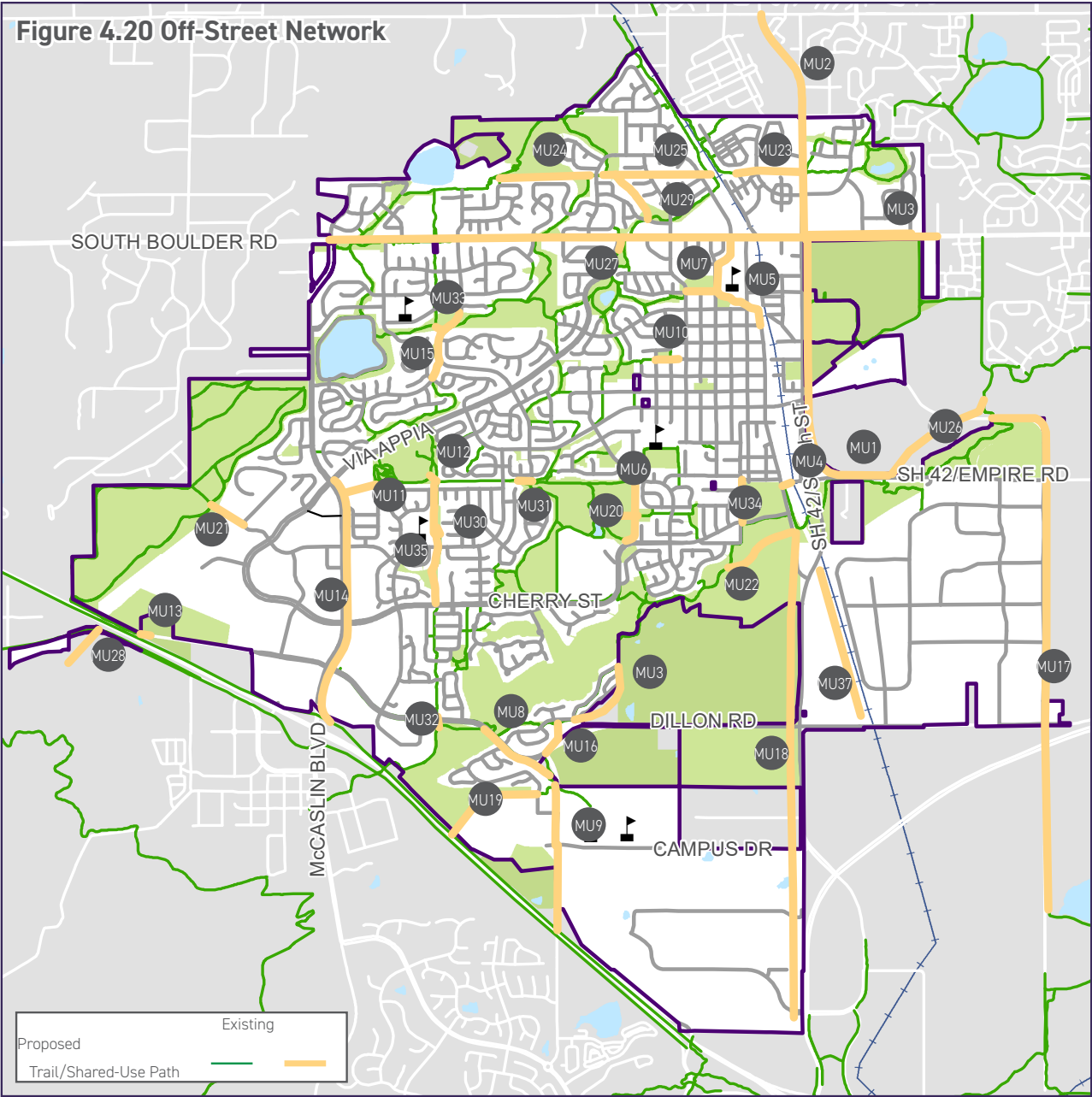
POLICIES, PROJECTS, & PROGRAMS

BIKE NETWORK OFF-STREET PROJECTS			
Multi-Use Paths	Project	Description	Location
	MU1	Off-Street Shared Path	SH 42 to CTC
	MU2	Off-Street Shared Path	SH 42 north of South Boulder Rd
	MU3	Off-Street Shared Path	North of South Boulder Rd, east of SH 42
	MU4	Off-Street Shared Path	Lock St to Community Park
	MU5	Off-Street Shared Path	Louisville Middle School connection
	MU6	Off-Street Shared Path	Warembourg north-south Trail
	MU7	Off-Street Shared Path	Griffith St
	MU8	Off-Street Shared Path	St Andrews to Dillon at proposed 88th St Underpass
	MU9	Off-Street Shared Path	88th to US 36
	MU10	Off-Street Shared Path	McKinley Park
	MU11	Off-Street Shared Path	Arboretum Trail
	MU12	Off-Street Shared Path	Power Line Trail to Mining Trail
	MU13	Off-Street Shared Path	US36 to Dyer
	MU14	Off-Street Shared Path	McCaslin Blvd
	MU15	Off-Street Shared Path	Washington Ave through Coyote Run
	MU16	Off-Street Shared Path	St Andrews Ln (Coal Creek bypass) to Dillon Rd
	MU17	Off-Street Gravel Trail	104th regional connection
	MU18	Off-Street Gravel Trail	Dillon to Coal Creek west of 96th St conceptual alignment
	MU19	Off-Street Shared Path	US36 to St Andrews Ln (Avista)
	MU20	Off-Street Gravel Trail	Warembourg east-west trail
	MU21	Off-Street Gravel Trail	Centennial Parkway to Davidson Mesa Trail
	MU22	Off-Street Gravel Trail	County Rd to Coal Creek Trail conceptual alignment
	MU23	Off-Street Shared Path	Kestrel Trail to SH 42 Underpass/Bullhead Gulch
	MU24	Off-Street Shared Path	North Open Space
	MU25	Off-Street Shared Path	Garfield to Centennial
	MU26	Off-Street Gravel Trail	Coal Creek Trail connection north of Empire Rd conceptual alignment
	MU27	Off-Street Gravel Trail	Cottonwood Park
	MU28	Off-Street Shared Path	Overlook Underpass conceptual connection
	MU29	Off-Street Shared Path	Via Appia to North Open Space
	MU30	Off-Street Shared Path	Fireside Realignment
	MU31	Off-Street Shared Path	Warembourg, Mining to Goodhue Realignment
	MU32	Off-Street Shared Path	Powerline to Coal Creek Trail
	MU33	Off-Street Trail	Coyote Run
	MU34	Off-Street Shared Path	Coal Creek to Downtown Connection
	MU35	Fun Route	Powerline Trail Fun Route
	MU36	Off-Street Shared Path	Coal Creek Trail rerouting around neighborhood
	MU37	Off-Street Gravel Trail	Dillon to Coal Creek, east of 96th St

POLICIES, PROJECTS, & PROGRAMS

BIKE NETWORK OFF-STREET PROJECTS

Figure 4.20 Off-Street Network



CONNECTIVITY & SAFETY IMPROVEMENTS

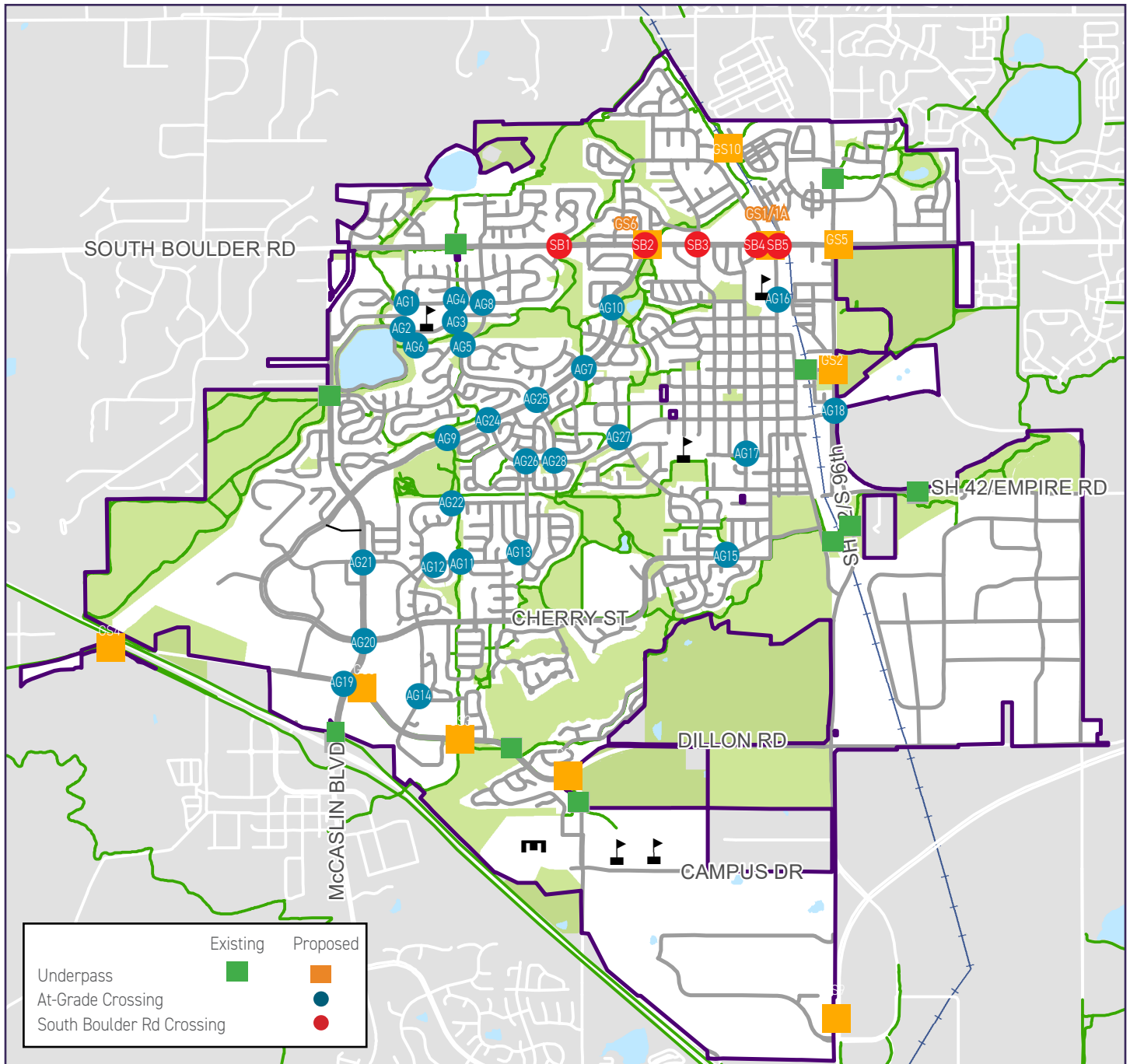
	Project	Description	Location
Sidewalks	SW1	Sidewalk Improvement	South Boulder Rd from Garfield Ave to Jefferson Ave
	SW2	Sidewalk Improvement	Via Appia near Cottonwood Park
	SW3	Sidewalk Improvement	Pine St at railroad
	SW4	Sidewalk Improvement	Griffith St at railroad
	SW5	Sidewalk Improvement	Spruce from Miners Field to Lee Ave, west of SH 42
	SW6	Sidewalk Improvement	East side of street North of Clementine Subdivision to Pine
	SW7	Sidewalk Improvement	Washington near Coyote Run

POLICIES, PROJECTS, & PROGRAMS

CONNECTIVITY & SAFETY IMPROVEMENTS		
	Project Description	Location
Grade-Separated Crossings	GS1/1A Underpass/Gateway	South Boulder Rd at Main St
	GS2 Underpass	SH 42 at South St/Short St
	GS3 Underpass	Powerline Trail at Dillon Rd
	GS4 Underpass	Davidson Mesa Overlook
	GS5 Underpass	South Boulder Rd at SH 42 Regional Trail
	GS6 Underpass	South Boulder Rd at Via Appia
	GS7 Underpass	Dillon Rd at S 88th St
	GS8 Underpass	Dillon Rd east of McCaslin Blvd
	GS9 Underpass	Tape Rd at NW Pkwy
	GS10 Underpass	Bullhead Gulch
At-Grade Crossings	SBR1-5 All South Boulder Rd Improvements	South Boulder Rd at Via Appia
	AG1 Shortened Crossing Distance	Willow Dr at Kennedy Ave
	AG2 Shortened Crossing Distance	W Tamarisk St at Kennedy Ave
	AG3 Neckdowns or enhanced crossing	Power Line Trail at Tamarisk St
	AG4 Neckdowns or enhanced crossing	Power Line Trail at Willow Dr
	AG5 Neckdowns or enhanced crossing	Coyote Run at Washington Ave
	AG6 Enhanced Crossing Markings	Coyote Run at Kennedy Ave
	AG7 Flashing Beacon Crosswalk	Sagebrush Way at Via Appia
	AG8 Enhanced Crossing Markings	Willow Dr at Washington Ave
	AG9 Upgrade Beacon	Power Line Trail at Via Appia
	AG10 Enhanced Crossing Markings	Coyote Run at Via Appia
	AG11 Enhanced Crossing	Power Line Trail at Dahlia St
	AG12 Improve signage/striping	Dahlia St at W Dahlia Ct
	AG13 Enhanced Crossing Markings	Polk Ave at Madison Ave
	AG14 Beacon & Enhanced Crossing Markings	Dahlia St at Ridge Pl
	AG15 Flashing Beacon Crosswalk	Bella Vista Dr near Aspen Way
	AG16 Raised Crossing with Refuge	Main St at Louisville Middle School
	AG17 Shortened Crossing Distance	Hutchinson St at Jefferson Ave
	AG18 Enhanced Crossing Markings	SH 42 at Pine St
	AG19 Enhanced Crossing	Dillon Rd at McCaslin Blvd
	AG20 Enhanced Crossing	Centennial Pkwy at McCaslin Blvd
	AG21 Enhanced Crossing	W Century Dr at McCaslin Blvd
	AG22 Enhanced Crossing	Vista Ln and Mulberry St
	AG23 Formalize Painted Bump Outs	City-wide
	AG24 Reconfigure intersection	Via Appia at Pine St
	AG25 Shortened Crossing Distance	Via Appia at Tyler St
	AG26 Shortened Crossing Distance	Pine St at Polk St
	AG27 Shortened Crossing Distance	Pine St at Hoover St
	AG28 Shortened Crossing Distance	Pine St at Tyler St

POLICIES, PROJECTS, & PROGRAMS

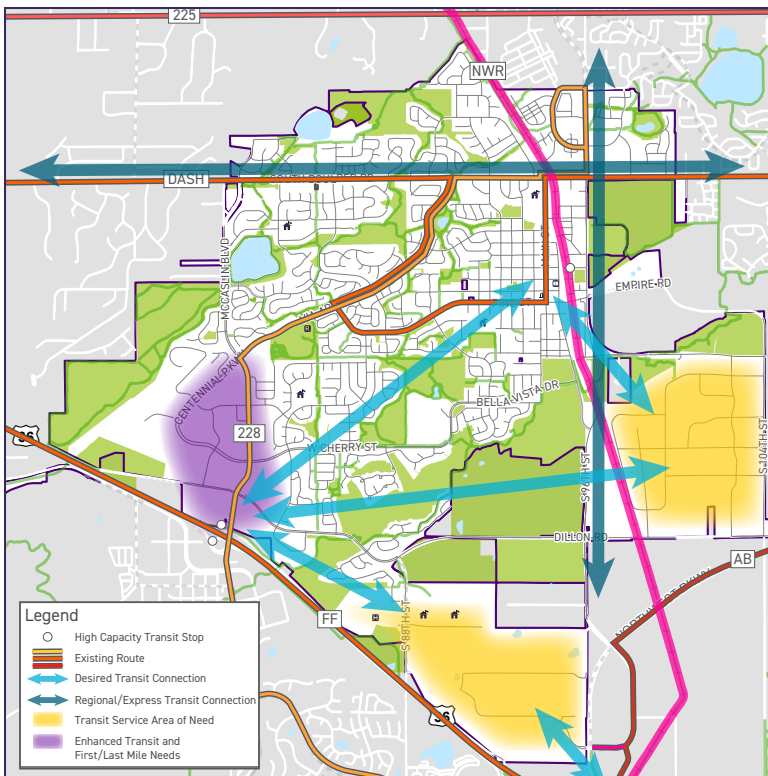
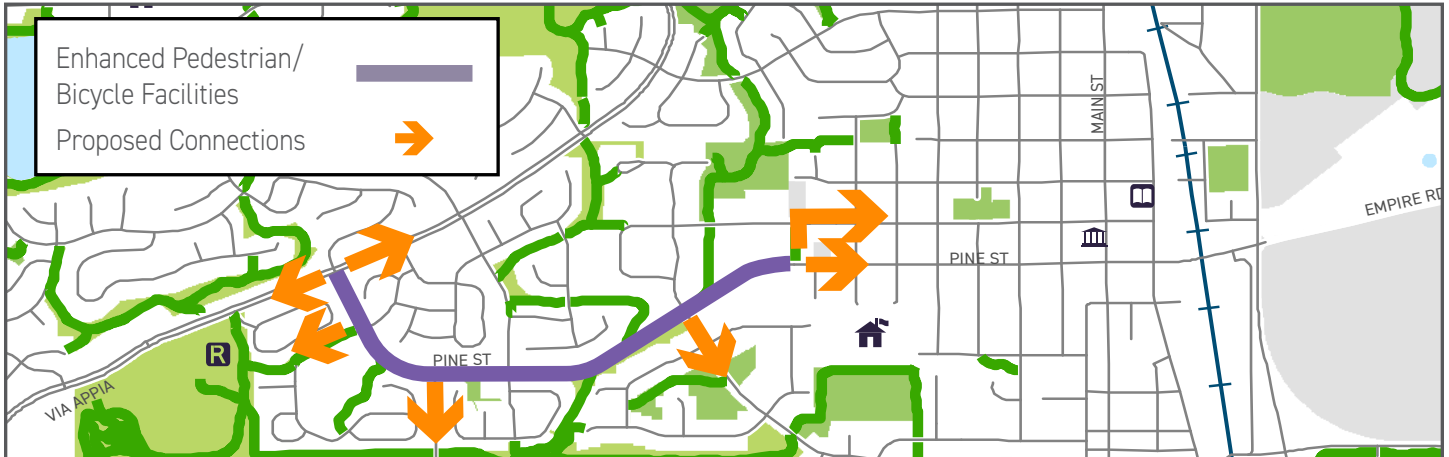
CONNECTIVITY & SAFETY IMPROVEMENTS



POLICIES, PROJECTS, & PROGRAMS

DOWNTOWN CONNECTION ENHANCEMENTS

The Downtown Connection Enhancements project recommends an enhanced connection between the Rec Center, neighborhood bikeways, trails, and Downtown. This focuses on enhancing proposed bikeways through separation and protection from vehicles and widening sidewalks to improve accessibility. This connection would provide comfortable and safe facilities for people of all ages and abilities.



TRANSIT VISION & SERVICE NEEDS

Project	Description	Location
TR1	Proposed Transit Network	Citywide
TR2	EcoPass & Other Incentives	Neighborhood or Business Incentives for Employees
TR3	Access Improvements to McCaslin Station	Multimodal Connections, Improve Bus Route for Possible Circulator
TR4	Bus Stop Improvements	Citywide
TR5	NW Rail Peak Hour Service	Beginning of rail service for peak hour only
TR6	NW Rail Station Area Planning	Downtown and CTC Planning

POLICIES, PROJECTS, & PROGRAMS

Programs

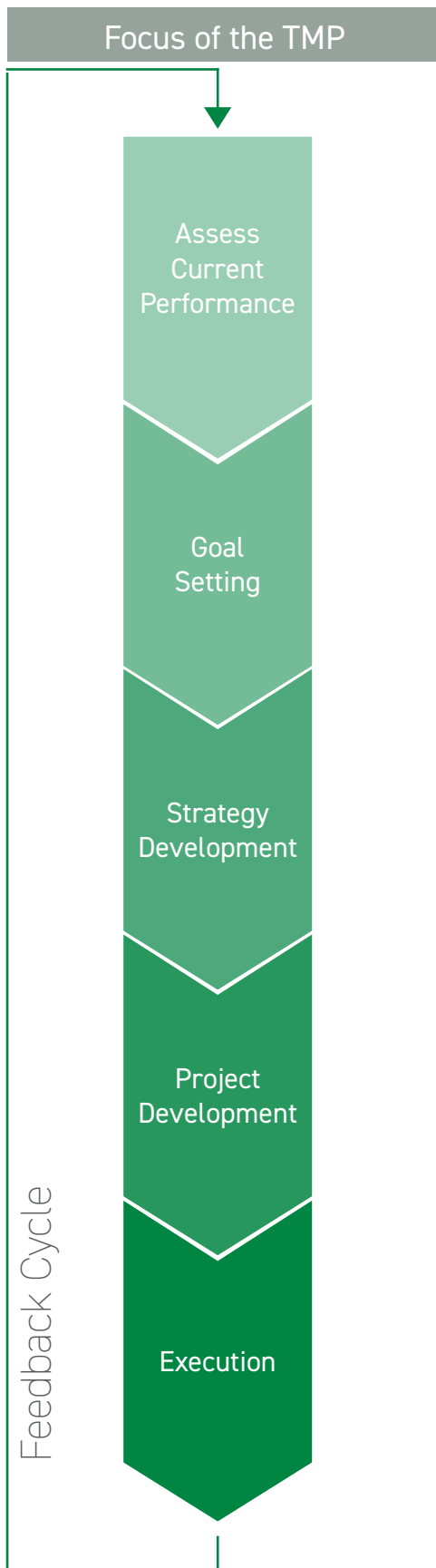
These recommendations support the development, expansion, or enhancement of programs that generally encourage, educate, and support mobility options. Programs may be implemented by or in partnership with organizations outside of the City as well, such as non-profit organizations and are typically short-term opportunities to make meaningful impacts.

Program	Description
Program 1: Neighborhood Traffic Management Program	A Neighborhood Traffic Management Program (NTMP) focuses on neighborhood-level traffic calming and safety improvements. These improvements help maintain the City's family-friendly small-town character. The City of Louisville has begun development of an NTMP.
Program 2: Travel Demand Management	Transportation Demand Management (TDM) strategies inform, encourage, and incentivize the use of non-vehicular transportation modes and decrease single-occupancy driving. TDM strategies may include a wide range of programs that promote walking, biking, transit, and ridesharing.
Program 3: Safe Routes Program	A Safe Routes program aims to create safe and convenient opportunities to walk or bike to schools and key destinations including parks, the Recreation Center and other community centers. For school children, these programs can help instill habits of walking and biking, along with safety and education around multimodal mobility. For older adults, Safe Routes programs can promote active aging, and contribute to health benefits.
Program 4: Fun Routes Program	As an added way to encourage kids to ride their bikes to school, or other community destinations, "Fun Routes" would utilize singletrack sidewalks, often adjacent and parallel to an existing paved trail or street. Designed primarily for youth, they are a way to incorporate fun into commuting through neighborhoods and a way to try trail riding.
Program 5: Open Streets Program	Open Streets programs temporarily close streets to automobiles and organize public activities to encourage healthier transportation and living habits. Open Streets events can also be a way to do pop-up demonstration projects for new types of infrastructure, to introduce a pilot project, or celebrate recent design changes. City events such as Street Faire, the Farmer's Market, or the McCaslin Movie Night recently held at the former Sam's Club are ideal time to hold such events.
Program 6: Coordinate Bike Share Network	A bike share program can encourage bicycle use between key destinations help fill gaps in first and last mile infrastructure around transit. In Louisville, bike share could be a viable way to connect areas like McCaslin Station, Avista Hospital, the former StorageTek site, the CTC, Downtown, DELO, and Kestrel. The City should continue efforts to coordinate on a regional level to implement a bike share program.
Program 7: Safety, Maintenance & Training Programs	Education campaigns can be targeted to inform the public about laws and consistent concerns that need to be addressed. These campaigns can be focused on people in cars, on bikes, or walking. Safety courses, bike repair workshops, and awareness campaigns are examples.

POLICIES, PROJECTS, & PROGRAMS

Program 8: Coordinated Wayfinding System	Wayfinding systems are navigational systems that help people move around the city, whether they are in a car, on foot, on a bike, or using transit. Traditionally consisting of signs, wayfinding systems can now also involve GPS systems, web connectivity, and mobile technology. Wayfinding systems can be designed and implemented formally by municipalities, business districts, and even advocacy organizations.
Program 9: Bicycle-Friendly Designation	The Bicycle Friendly Community (BFC) program is administered by the League of American Bicyclists, which guides communities in understanding the opportunities to improve conditions for bicycling. The League has identified focus areas, known as the “Five E’s”, for creating a bicycle friendly community: engineering, education, encouragement, enforcement, and evaluation/planning.
Program 10: Data Collection	Data is utilized when developing projects, identifying community priorities, and understanding whether implemented projects are having the desired impacts. Collecting data consistently helps to understand current demand and use, and plan appropriately for the future. The before and after data is also particularly useful as a means to support future infrastructure investments.

IMPLEMENTATION



Success in achieving the goals and recommendations of the TMP can only be realized through effective implementation that identifies strategies, manages progress towards the goals, and strategically allocate resources. Chapter 5 provides an overview of three key components of implementation that support the recommendations in the TMP.

Project Prioritization & Development

Implementation will require coordination between multiple City departments, external public agencies, developers, private businesses, and other organizations. In addition, some of the policies, projects and programs identified in Chapter 4 have greater opportunity for making immediate impacts, some require more resources, and some will take more time than others. This section identifies strategies for project prioritization, development and management to effectively realize the recommendations in the TMP.

Funding Framework

Revenues to support the City's transportation programs come from a variety of sources, primarily the General Fund and Capital Improvement Fund. The City does not have a dedicated source of funding for transportation investments, and transportation projects compete for funding through the regular budget prioritization process. The City's capital fund is limited and does not provide the level of funding necessary to fully implement all of the contemplated projects in the TMP.

This section discusses additional ways the City could fund the recommendations, including additional revenues through taxes or fees, securing grants or other external funding sources, and other financing tools. Different funding scenarios are included to represent possible means of achieving the goals in the TMP.

Managing Performance Toward the Goals

The goals identified for the TMP represent building blocks to continue to develop a community with a high degree of mobility that is accessible and safe for people of all ages and abilities to travel. It will be important to measure how the City is performing towards those goals. This section identifies performance metrics to monitor progress of implementing the TMP. This will enable the City to understand the degree to which progress is being made and identify areas of focus for future improvements.

IMPLEMENTATION, CONT.

Funding Scenarios

To understand the magnitude of impact on implementation that could occur if various funding tools were utilized, three implementation scenarios were developed as examples for the TMP. This plan is not recommending one particular scenario but has developed each scenario as a potential avenue to implementation. The funding scenarios are designed to demonstrate the variety of tools that can be utilized and leveraged against each other as well as highlight how some funding tools can impact the overall timeline of implementation.

	Scenario 1	Scenario 2	Scenario 3
Description	Continuation of current CIP funding levels	Increase in CIP funding plus additional grant funding	Further increase in CIP funding, grant funding, and additional new funding sources
Funding Level	\$\$\$	\$\$\$	\$\$\$
Total Funding	\$26 Million	\$43.8 Million	\$93.8 Million
2019-2024 CIP	\$8 Million	\$10 Million	\$15 Million
 Miles of corridor projects	3 miles 1 corridor study	3 miles 1 corridor study	5 miles 1 corridor study
 Number of crossing improvements	3 grade separated 29 at-grade	5 grade separated 29 at-grade	9 grade separated 32 at-grade
 Miles of new trails and sidewalk connections	4 miles	8 miles	8 miles
 Miles of bike network enhancements	17 miles	20 miles	26 miles
 Transit service & accessibility	Begin circulator pilot for CTC & McCaslin access McCaslin access improvements 6 bus stop enhancements	Begin circulator pilot for CTC & McCaslin access McCaslin access improvements 9 bus stop enhancements Begin peak-hour rail service or investment in other high-capacity/frequency transit service	Begin circulator pilot for CTC & McCaslin access McCaslin access improvements 12 bus stop enhancements Begin peak-hour rail service or investment in other high-capacity/frequency transit service

IMPLEMENTATION, CONT.

Prioritization Table

Implementation will require coordination between multiple City departments, external public agencies, developers, private businesses, and other organizations. As roles are defined, the departments that have coordinated to develop the Plan (Planning & Building Safety, Public Works, and Parks & Recreation) should organize and maintain accountability for their respective pieces of implementation.

Of the policies and programs identified in Chapter 4, some have greater opportunity for making immediate impacts, some require more resources, and some will take more time than others. The City should prioritize policies and programs to ensure resources are used as efficiently as possible. Some elements of the TMP may only be realized if new financial resources or grants become available.

This section identifies recommended priorities and potential project timing. The highest priority projects meet one or more of the following conditions:

- Policy changes that require limited or no additional financial resources
- Projects able to be implemented within current funding levels
- Programs that can be implemented with partners and require limited additional resources from the City

High-profile projects that meet significant needs or build momentum for additional future improvements

IMPLEMENTATION, CONT.

	Project	Description	Location	Cost	Priority	Timeframe	Partner/Coordination	Benefit(s)	S1	S2	S3	Notes
Corridor Projects	CP1	Roadway Improvement	SH 42 Conceptual Design	\$75,000	High	Short	Boulder Co., Lafayette, RTD. CDOT	Travel time reliability, safety	Y	Y	Y	\$500,000 total cost, \$350,000 TIP and \$75,000 Lafayette contribution
	CP2	Roadway Improvement	SH 42 Widening	\$25,000,000	High	Long	Boulder Co., Lafayette, RTD. CDOT	Travel time reliability, safety	Y	Y	Y	Rebuild Empire to South Boulder Road
	CP3	Roadway Improvement	Dillon Road, Campus Drive Extension, Widen 88th	\$10,400,000	High	Medium	-	Capacity and bicycle visibility	N	N	Y	88th to 104th bike and applicable ADA paint/signage. Increase queue length capacity on EB and WB lanes around BNSF . Widen Dillon WB at 96th on the north increasing queue length. Could be phased to provide lower-cost improvements on Dillon first.
	CP4	Roadway Improvement	Via Appia Way	\$253,440	Medium	Short	-	Safety and visibility for all modes	Y	Y	Y	Reduce lane widths, extend bike lanes, extend refuges, remove right turn lanes
	CP5	South Boulder Rd Study	SBR Corridor	\$100,000	Medium	Short	Boulder Co., Lafayette, RTD	Safety, travel reliability, transit service	Y	Y	Y	
	CP6	CTC Connector	Arthur to 96th	\$2,000,000	Medium	Medium	-	Network connectivity	N	N	Y	
	CP7	Kaylix Connector	Hecla to South Boulder	\$2,500,000	High	Medium	-	Network connectivity	N	N	Y	Requires ROW acquisition or property owner coordination
	CP8	McCaslin Network Additions	Various within McCaslin area to create network grid	TBD	High	Long	Developer(s)	Network connectivity, economic access	Y	Y	Y	Likely implemented by developer in redevelopment. If not, requires ROW acquisition or property owner coordination
Bike Network Improvements	BK1	Bike Lane	Bella Vista	\$33,000	Medium	Short	-	Safety	Y	Y	Y	Missing segment where currently shared lane, continue bike lane for consistency and safety
	BK2	Bike Shoulder Improvements	SH 42/Empire Rd	\$201,600	High	Short	-	Safety, network connectivity	N	Y	Y	Could include signs, striping and official designation
	BK3	Bike Route	W Dyer Rd	\$5,240	High	Short	-	Network connectivity	Y	Y	Y	Could include signs, striping and official designation
	BK4	Bike Route	Washington Ave	\$12,360	Medium	Short	-	Network connectivity	Y	Y	Y	Could include signs, striping and official designation
	BK5	Bike Route	Tyler Ave	\$3,240	Medium	Short	-	Network connectivity	Y	Y	Y	Could include signs, striping and official designation
	BK6	Bike Route	Garfield/Lincoln	\$12,960	High	Short	-	Network connectivity	Y	Y	Y	Could include signs, striping and official designation
	BK7	Bike Route	McKinley Ave	\$640	Medium	Short	-	Network connectivity	Y	Y	Y	Could include signs, striping and official designation
	BK8	Bike Route	Spruce St	\$8,320	High	Short	-	Network connectivity	Y	Y	Y	Could include signs, striping and official designation
	BK9	Bike Route	Jefferson Ave	\$8,000	Medium	Short	-	Network connectivity	Y	Y	Y	Could include signs, striping and official designation
	BK10	Bike Route	Front St	\$8,300	Medium	Short	-	Network connectivity	Y	Y	Y	Could include signs, striping and official designation
	BK11	Bike Route	DELO to Downtown	\$11,720	Medium	Short	-	Network connectivity	Y	Y	Y	Could include signs, striping and official designation
	BK12	Bike Route	Hecla Dr	\$2,600	Medium	Short	-	Network connectivity	Y	Y	Y	Could include signs, striping and official designation
	BK13	Bike Route	Rex/West St	\$5,320	Medium	Short	-	Network connectivity	Y	Y	Y	Could include signs, striping and official designation
	BK14	Bike Route	Hoover Ave	\$10,120	Medium	Short	-	Network connectivity	Y	Y	Y	Could include signs, striping and official designation
	BK15	Bike Route	Polk Ave/Dahlia St	\$10,200	Medium	Short	-	Network connectivity	Y	Y	Y	Could include signs, striping and official designation
	BK16	Bike Route	Lock St	\$1,000	Low	Short	-	Network connectivity	Y	Y	Y	Could include signs, striping and official designation
	BK17	Bike Route	Centennial North of SBR	\$5,680	Medium	Short	-	Network connectivity	Y	Y	Y	Could include signs, striping and official designation
	BK18	Bike Route	Empire Rd	\$13,750	Medium	Short	-	Safety, network connectivity	Y	Y	Y	Could include signs, striping and official designation
	BK19	Bike Lane	Via Appia buffered bike lanes	CP4 & MU23	Medium	Medium	-	Safety	N	N	Y	Could include signs, striping and official designation
	BK20	Protected Bike Lane & Widened Sidewalks	Pine St	\$750,000	High	Short	-	Safety, network connectivity	Y	Y	Y	Can be coordinated with Pine St repaving

Project	Description	Location	Cost	Priority	Timeframe	Partner/Coordination	Benefit(s)	S1	S2	S3	Notes	
Mixed-Use Paths/Trails	MU1	Off-Street Shared Path	SH 42 to CTC	\$780,000	High	Long	Boulder County	Regional access, connections, safety	Y	Y	Y	
	MU2	Off-Street Shared Path	SH42 N of South Boulder Rd	\$100,800	Medium	Short	-	Connectivity, safety	Y	Y	Y	
	MU3	Off-Street Shared Path	N of South Boulder Rd E of SH42	\$276,000	Low	Long	-	Business access, safety	N	Y	Y	
	MU4	Off-Street Shared Path	Lock St to Community Park	\$20,000	Medium	Medium	BNSF Railroad	Network connectivity	Y	Y	Y	New 10' trail with rail crossing, requires RR coordination
	MU5	Off-Street Shared Path	LMS Connection	\$360,000	Low	Long	Boulder Valley School District	Safety, school access	N	N	Y	Do not own ROW, cost will be higher
	MU6	Off-Street Shared Path	Warembourg N/S Trail	\$145,000	Medium	Short	-	Network connectivity	Y	Y	Y	
	MU7	Off-Street Shared Path	Griffith St	\$60,000	Medium	Long		Safety, school access	Y	Y	Y	
	MU8	Off-Street Shared Path	St Andrews to 88th Underpass	\$120,000	High	Short	-	Safety, school access	Y	Y	Y	
	MU9	Off-Street Shared Path	88th to US 36	\$60,000	High	Short	-	Network connectivity	Y	Y	Y	
	MU10	Off-Street Shared Path	McKinley Park	\$60,000	Medium	Medium	-	Network connectivity	Y	Y	Y	
	MU11	Off-Street Shared Path	Arboretum Trail	\$80,000	Medium	Medium	-	Network connectivity	Y	Y	Y	
	MU12	Off-Street Shared Path	Powerline to Mining connection	\$30,000	Low	Short	-	Network connectivity	Y	Y	Y	
	MU13	Off-Street Shared Path	US36 to Dyer Connection	\$10,000	High	Short	-	Network connectivity	Y	Y	Y	
	MU14	Off-Street Shared Path	McCaslin Blvd	\$609,600	High	Medium	-	Safety, economic access	N	N	Y	
	MU15	Off-Street Shared Path	Washington Ave	\$154,000	Low	Medium	-	Trail connectivity	Y	Y	Y	Widen sidewalk to be mixed-use trail south to Powerline Trail, add new trail to the north
	MU16	Off-Street Shared Path	St. Andres (Coal Creek Bypass) to Dillon	\$92,400	Medium	Medium	-	Network connectivity	Y	Y	Y	
	MU17	Off-Street Gravel Trail	104th regional connection	\$158,334	High	Short	Boulder Co., Lafayette	Regional connectivity, safety	Y	Y	Y	\$950,000 total cost, \$158,333 Boulder County, \$158,333 Lafayette and \$475,000 TIP
	MU18	Off-Street Gravel Trail	Coal Creek to US36 West of 96th	\$500,000	Medium	Long	Boulder Co., Broomfield	Regional connectivity, safety	N	Y	Y	
	MU19	Off-Street Shared Path	US36 to St. Andrews	\$280,000	Low	Medium	-	Network connectivity	N	Y	Y	
	MU20	Off-Street Gravel Trail	Warembourg E/W Trail	\$21,000	Low	Short	-	Trail connectivity	Y	Y	Y	
	MU21	Off-Street Gravel Trail	Centennial Parkway to Davidson Mesa Trail	\$90,000	High	Medium	-	Network connectivity	Y	Y	Y	
	MU22	Off-Street Gravel Trail	Reroute Coal Creek Trail to follow creek	\$125,000	High	Short	-	Enhanced trail experience	Y	Y	Y	East side of street.
	MU23	Off-Street Shared Path	Kestrel Trail to SH 42 Underpass	\$125,000	High	Short	-	Trail connectivity	Y	Y	Y	Should already be doing with underpass
	MU24	Off-Street Shared Path	North Open Space Trail - West	\$220,000	Low	Long		Trail connectivity	N	Y	Y	
	MU25	Off-Street Shared Path	North Open Space Trail - East	\$220,000	Low	Long	-	Trail & network connectivity	N	Y	Y	
	MU26	Off-Street Gravel Trail	Coal Creek Trail Connection north of Empire Rd	\$80,000	Low	Long	-	Enhanced trail experience	N	Y	Y	New route through open space
	MU27	Off-Street Gravel Trail	Cottonwood Park connection	\$27,500	Medium	Medium	-	Trail connectivity	N	Y	Y	
	MU28	Off-Street Shared Path	Overlook underpass conceptual connection	\$85,000	Low	Long	Superior, Boulder County	Trail connectivity	Y	Y	Y	Requires coordination and partnerships
	MU29	Off-Street Shared Path	Via Appia to North Open Space	\$165,000	Medium	Medium	-	Trail connectivity	N	Y	Y	
	MU30	Off-Street Shared Path	Fireside Realignment	\$300,000	Low	Long	-	Enhanced trail experience	N	Y	Y	
	MU31	Off-Street Shared Path	Warembourg, Mining to Goodhue Realignment	\$75,000	Low	Medium	-	Enhanced trail experience	N	Y	Y	
	MU32	Off-Street Shared Path	Powerline to Coal Creek Trail	\$35,000	High	Short	-	Trail connectivity	Y	Y	Y	
	MU33	Off-Street Gravel Trail	Coyote Run	\$30,000	High	Short	-	Safety, trail connectivity	Y	Y	Y	
	MU34	Off-Street Shared Path	Coal Creek to Downtown Connection	\$77,500	Medium	Short	-	Safety, trail connectivity	N	Y	Y	
	MU35	Fun Route	Powerline Trail Fun Route	\$150,000	High	Short	-	Quality-of-life, multimodal options	Y	Y	Y	
	MU36	Off-Street Shared Path	Coal Creek Trail	\$225,000	Low	Long	Boulder County	Enhanced trail experience	N	N	Y	Reroute trail out of neighborhood; grade issues
	MU37	Off-Street Gravel Trail	Dillon to Coal Creek East of 96th	\$500,000	Medium	Long	Developer	Regional connectivity, safety	N	Y	Y	

Project	Description	Location	Cost	Priority	Timeframe	Partner/Coordination	Benefit(s)	S1	S2	S3	Notes	
Sidewalks	SW1	Sidewalk Improvement	South Boulder Rd [Garfield,Jefferson]	\$81,000	High	Short	-	Safety, eliminate gaps	Y	Y	Y	Widen sidewalk to 10', where possible; coordinate w underpass construction
	SW2	Sidewalk Improvement	Via Appia near Cottonwood Park	\$36,000	High	Short	-	Safety, eliminate gaps	Y	Y	Y	Alternative: Build bridge to sidewalk within park
	SW3	Sidewalk Improvement	Washington near Coyote Run	\$68,000	High	Short	-	Safety, eliminate gaps	Y	Y	Y	East side. Hopefully already happening.
	SW4	Sidewalk Improvement	East North of Clementine Sub to Pine	\$96,000	High	Short	Developer	Safety, eliminate gaps	Y	Y	Y	Upgrade Sidewalk to Pine - either East or West Side
	SW5	Sidewalk Improvement	Pine St at Rail	\$7,600	High	Short	-	Safety, eliminate gaps	Y	Y	Y	New sidewalk both sides
	SW6	Sidewalk Improvement	Griffith St @ Rail	\$14,600	High	Short	-	Safety, eliminate gaps	Y	Y	Y	New sidewalk, rail crossing, south side
	SW7	Sidewalk Improvement	Spruce to Miners Field to Lee W of SH42	\$64,000	High	Short	-	Safety, eliminate gaps	Y	Y	Y	New wide sidewalk to provide ped and bike access - Expand through Miners Field
Grade Separated Crossings	GS1	Underpass	South Boulder Rd @ Main St	\$8,000,000	Medium	Long	BNSF (potential)	Safety, connectivity	N	Y	N	
	GS1A	Underpass Gateway	South Boulder Rd @ Main St	\$20,000,000	Medium	Long	Property Owner	Safety, connectivity, quality-of-life	N	N	Y	Alternative to GS1 that Include Property Acquisition and Public Plaza or Entry Features
	GS2	Underpass	SH 42 @ South St	\$8,000,000	High	Medium	CDOT	Safety, connectivity	Y	Y	Y	
	GS3	Underpass	Power Line Trail @ Dillon Rd	\$4,000,000	Medium	Medium	-	Network connectivity	Y	Y	Y	
	GS4	Underpass	Overlook Underpass	\$120,000	Low	Long	Superior, Boulder Co.	Safety, regional connectivity	Y	Y	Y	Total cost: \$1,800,000; Local share: \$120,000
	GS5	Underpass	South Boulder Rd at SH42 Regional Trail	\$8,000,000	Medium	Long	-	Safety, regional connectivity	N	N	Y	
	GS6	Underpass	South Boulder Rd @ Via Appia	\$6,000,000	High	Medium	-	Safety	N	Y	Y	Consider in Cottonwood Park Plan 2020
	GS7	Underpass	Dillon Rd @ S 88th St	\$5,000,000	Low	Long	-	Traffic flow, school access	N	N	Y	Correlated with Dillon Road traffic/capacity improvements
	GS8	Underpass	Dillon Rd east of McCaslin Blvd	\$8,000,000	Medium	Long	-	Business access, enhanced connectivity	N	N	Y	
	GS9	Underpass	Near Tape Dr @ Northwest Pkwy	\$10,000,000	Low	Long	Developer	Safety, trail connectivity	N	Y	Y	High priority if developer partners for construction and cost
GS10	Underpass	Bullhead Gulch	\$6,000,000	Low	Low	-	Safety, trail connectivity	N	N	N		
At-Grade Crossings	SBR1-5	All SBR Improvements	South Boulder Rd @ Via Appia	\$429,983	High	Short	-	Safety - primary corridor	Y	Y	Y	\$1,433,276 total cost, \$1,003,293 TIP
	AG1	Shortened Crossing Distance	Willow Dr @ Kennedy Ave	\$20,000	Medium	Short	-	Safety, school access	Y	Y	Y	Upgrade beacon and advanced warning signage and striping
	AG2	Shortened Crossing Distance	W Tamarisk St @ Kennedy Ave	\$10,000	Medium	Short	-	Safety, school access	Y	Y	Y	Add Beacon (E,S)
	AG3	Neckdowns or enhanced crossing	Power Line Trail @ Tamarisk St	\$10,000	Medium	Short	-	Safety - trail crossing, school access	Y	Y	Y	Coal Creek Elementary (E and S)
	AG4	Neckdowns or enhanced crossing	Power Line Trail @ Willow Dr	\$10,000	Medium	Short	-	Safety - trail crossing, school access	Y	Y	Y	Louisville Elementary School, additional markings (N, S)
	AG5	Neckdowns or enhanced crossing	Coyote Run @ Washington Ave	\$25,000	Medium	Short	-	Safety - trail crossing, school access	Y	Y	Y	Coal Creek Elementary (S)
	AG6	Enhanced Crossing Markings	Coyote Run @ Kennedy Ave	\$2,500	High	Short	-	Safety - trail crossing, school access	Y	Y	Y	
	AG7	Flashing Beacon Crosswalk	Sagebrush Way @ Via Appia	\$25,000	High	Short	-	Safety - trail crossing, primary corridor	Y	Y	Y	
	AG8	Enhanced Crossing Markings	Willow Dr @ Washington Ave	\$1,500	Medium	Short	-	Safety, school access	Y	Y	Y	
	AG9	Upgrade Beacon	Power Line Trail @ Via Appia	\$20,000	High	Short	-	Safety - trail crossing, primary corridor	Y	Y	Y	(E)
	AG10	Enhanced Crossing Markings	Coyote Run @ Via Appia	\$5,000	Medium	Short	-	Safety - trail crossing, primary corridor	Y	Y	Y	Bike connection for Empire Rd shoulders, future open space trail and sports complex
	AG11	Enhanced Crossing	Power Line Trail @ Polk Ave	\$10,000	Medium	Short	-	Safety - trail crossing, school access	Y	Y	Y	Concrete Curb with Colored Concrete or Landscaping Inside Median. Consider Bike Pass-through
	AG12	Improve signage/striping	Polk Ave @ W Dahlia Ct	\$1,000	Medium	Short	-	Safety, school access	Y	Y	Y	
	AG13	Enhanced Crossing Markings	Polk Ave @ Madison Ave	\$400	Medium	Short	-	Safety, school access	Y	Y	Y	Coal Creek Elementary
	AG14	Beacon and Enhanced Crossing Markings	Dahlia St @ Ridge Pl	\$50,000	Medium	Medium	-	Safety, network connectivity	Y	Y	Y	Coal Creek Elementary
	AG15	Flashing Beacon Crosswalk	Bella Vista Dr near Aspen Way	\$25,000	Medium	Short	-	Safety	Y	Y	Y	More direct alignment, improved curb cuts
AG16	Raised Crossing with Refuge	Main St @ Louisville MS	\$20,000	Medium	Short	-	Safety, school access	Y	Y	Y	Fireside Elementary School	

Project	Description	Location	Cost	Priority	Timeframe	Partner/Coordination	Benefit(s)	S1	S2	S3	Notes	
At-Grade Crossings	AG17	Shortened Crossing Distance	Hutchinson St @ Jefferson Ave	\$1,000	Medium	Short	-	Safety, school access	Y	Y	Y	Trail Detection, Trail advance warning sign on hill
	AG18	Enhanced Crossing Markings	SH 42 @ Pine St	\$1,600	High	Short	-	Safety - primary corridor	Y	Y	Y	
	AG19	Enhanced Crossing	Dillon Rd @ McCaslin Blvd	\$50,000	High	Medium	-	Safety - primary corridor	Y	Y	Y	
	AG20	Enhanced Crossing	Centennial Pkwy @ McCaslin Blvd	\$50,000	High	Medium	-	Safety - primary corridor	Y	Y	Y	
	AG21	Enhanced Crossing	W Century Dr @ McCaslin Blvd	\$50,000	High	Medium	-	Safety - primary corridor	Y	Y	Y	
	AG22	Enhanced Crossing	Vista Ln @ Mulberry St	\$10,000	High	Short	-	Safety, school access	Y	Y	Y	
	AG23	Formalize Painted Bump Outs	City-Wide	\$100,000	High	Short	-	Safety	Y	Y	Y	
	AG24	Reconfigure Intersection	Via Appia @ Pine St	\$100,000	High	Short	-	Safety	Y	Y	Y	
	AG25	Shortened Crossing Distance	Via Appia @ Tyler Ave	\$40,000	High	Short	-	Safety	Y	Y	Y	
	AG26	Shortened Crossing Distance	Pine St @ Polk Ave	\$40,000	Low	Long	-	Safety	N	N	Y	
	AG27	Shortened Crossing Distance	Pine St @ Hoover Ave	\$40,000	Low	Long	-	Safety	N	N	Y	
	AG28	Shortened Crossing Distance	Pine St @ Tyler Ave	\$40,000	Low	Long	-	Safety	N	N	Y	
Transit Connectivity	TR1	Proposed Transit Network	Citywide	\$250,000	High	Short	Businesses, Via/RTD	Job and business access	Y	Y	Y	
	TR2	EcoPass & Other Incentives	Neighborhood or Business Incentives for Employees	\$20,000	Medium	Short	RTD	Access to transit	Y	Y	Y	
	TR3	Access Improvements to McCaslin Station	Multimodal Connections, Improve Bus Route for Possible Circulator	\$200,000	High	Short	RTD, businesses	Multimodal access to transit, safety	Y	Y	Y	
	TR4	Bus Stop Improvements	Shelter, Bike Racks, Trash Cans, Benches ADA Upgrades	\$300,000	High	Ongoing	RTD, businesses	Safety, transit accessibility	Y	Y	Y	
	TR5	NW Rail Peak Hour Service	Beginning of rail service for peak hour only TBD location	\$1,000,000	High	Medium	RTD	Regional access	N	Y	Y	Represents investment in higher capacity transit service. Due to nature of project funding could be used to support BRT or other similar type of service.
	TR6	NW Rail Station Area Planning	Downtown and CTC	\$50,000	Medium	Short	RTD	Transit access, community character	Y	Y	Y	