CHAPTER 12

MOBILITY CAPITAL IMPROVEMENT PLAN

12. MOBILITY CAPITAL IMPROVEMENT PLAN

12.1 INTRODUCTION

To kickstart the MMP Implementation Plan, the MMP presented a program of candidate projects that the City should consider for funding and implementation through the project delivery process. The MMP prioritized projects based on their relevance to achieving MMP goals and objectives using the performance measures defined in the Comprehensive System Assessment. The project prioritization process selected projects from the program of projects for inclusion in the Mobility Capital Improvement Program based on each project's priority and readiness for implementation.

12.2 MOBILITY CAPITAL IMPROVEMENT PROGRAM

The City of Temple Capital Improvement Plan is a community planning and fiscal management tool used to coordinate the location, timing, and financing of capital improvements over a multi-year period. The City of Temple Capital Improvement Program focuses on large-scale, non-routine capital expenditures, generally exceeding $100,000, that would otherwise cause a significant impact on the operating budget. The Mobility Capital Improvement Program is a component of the overall Temple CIP.

The Mobility Capital Improvement Program (MCIP) provides recommendations for mobility related capital infrastructure investments, maintenance, and repair drawn from the MMP to support the City's mobility vision, goals, and objectives. It also includes preconstruction expenditures to support project delivery such as feasibility studies, preliminary engineering, and design work.

The MCIP helps the City's Planning, Public Works, and Finance departments coordinate the City's strategic planning, financial capacity, and physical development of mobility infrastructure.

12.2.1 PROJECT SELECTION

As part of the implementation plan development process, the MMP used the recommendations made in Chapter 10 to define a program of candidate projects that will improve the mobility network. Project identification started early in the MMP process based on input from the public, the steering committee, and other community stakeholders regarding unmet transportation needs, network gaps, connectivity issues, and locations experiencing safety or congestion issues.

The project identification process integrates information from other planning efforts, both completed and ongoing. Recommendations and priority projects were sourced from the Comprehensive Plan, Thoroughfare Plan, Neighborhood Planning Districts, and the Parks and Trails Master Plan, and other documents.

The project identification effort continued during the technical analysis phase of MMP development. The Comprehensive System Assessment helped to quantify and evaluate the issues identified by the public and previous plans and identified additional problem locations by reporting and quantifying future anticipated safety issues or level of service deficiencies. The system assessment also identified multimodal mobility challenges, access issues, and network gaps that the City should address to optimize the mobility system.

The Scenario Analysis provided recommended solutions to the mobility challenges identified through these various sources in the form of program, policy, and individual project recommendations that form the basis of the MMP program of projects. The next step in the process was to prioritize the candidate projects based on each projects ability to address the MMP goals and objectives based on the performance measures defined in the systems assessment and scenario analysis.

Figure 12.1: Types of Projects

Intersection Improvement Projects

Roadway and Corridor Projects

Active Transportation Projects

Complete Streets Projects

Operations & Maintenance Projects

Safety Projects

12.2.2 PROJECT PRIORITIZATION PROCESS

The MMP prioritization process used performance measures identified in the Comprehensive Systems Assessment and scenario-based planning analysis to develop the prioritized program of projects. The process scored intersection improvements and roadway capacity projects using crash rates for fatal and severe injury crashes, AM and PM peak levels of service, connectivity, and linkage to other projects, plans and programs.

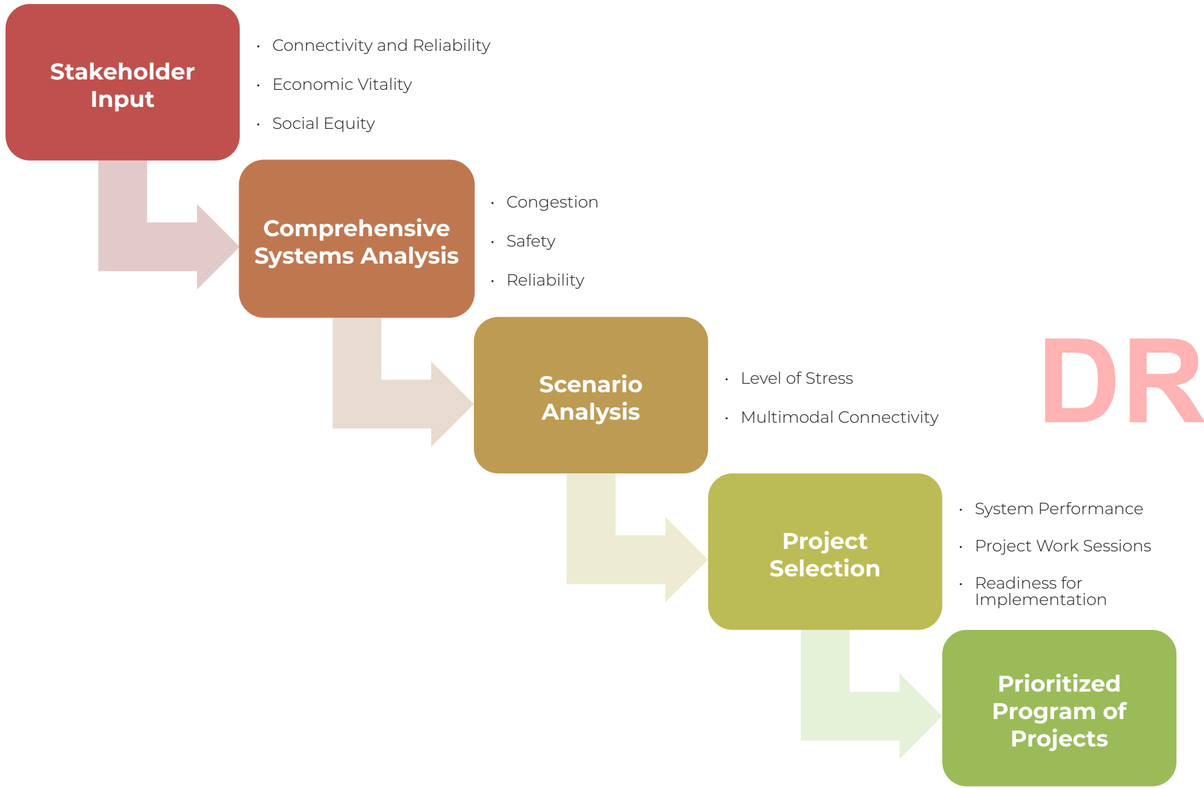
The prioritization process scored active transportation and complete-streets projects using pedestrian and bicycle crash rates, level of demand, level of stress scores, proximity to schools, network connectivity to existing active transportation infrastructure and activity centers, and linkage to other plans and programs.

The prioritization process also included work sessions with the City project team to score projects based on their impact on overall mobility, economic vitality, quality of place, and social equity based on reported findings of the previous analysis and input from community stakeholders, the public, and other parallel planning processes.

The first step in the prioritization process was to review the projects selected for inclusion in the MMP program of projects and rank each project based on the reported performance measures for that category of project. This stage of the screening process revealed the projects that addressed the most severe deficiencies and the projects that addressed deficiencies across multiple performance categories.

The process also reviewed whether the projects intersected or interacted in a way that warranted combining certain projects. For example, combining a recommend intersection project with a roadway project on the corridor containing the intersection, or combining sidewalk or bicycle improvements with a proposed roadway project to create a complete-streets concept for the corridor.

Figure 12.2: Project Selection and Prioritization Process



Following this first-round of project scoring, the prioritization process moved to a series of work sessions, from late May through mid-June, with the City project team and available subject matter experts to review projects based on the more qualitative performance measures. In addition to reported system performance, the discussion included each project's impacts on the City's economic vitality, quality of life and quality of place including how neighborhood residents and businesses perceived the project. The work sessions also included a discussion of the project's current state of readiness within the project delivery process, particularly if there was the potential for external grant funding.

The prioritization process also included a work session with the City Council on February 2, 2022, in which the council members reviewed the prioritized program of projects and provided observations on potential gaps or omissions based on the input from community residents or parallel planning processes. The prioritization process concluded with the development of the MCIP priority projects.

12.2.3 PROJECT READINESS FOR IMPLEMENTATION

Priority projects must go through an additional step before they appear in the MCIP. The MCIP is a relatively short-term strategic planning document covering about seven years. The current MCIP covers the fiscal years 2022 through 2028. Securing the funds to implement a project, particularly a large-scale project, may take several years. Often pre-implementation activities are necessary to provide sufficient project detail to estimate costs.

City staff must responsibly and intelligently program projects in order to minimize frustration created by unmet needs. Programming a project in the MCIP that is not far enough along in the project delivery pipeline for implementation is inefficient and detrimental to the overall MMP vision. A project programmed prematurely may , tie up available resources, while other projects that could have made a positive impact if implemented, instead remain unfunded and incomplete.

If project implementation cannot proceed within the seven-year window provided by the MCIP, then preconstruction activity such as preliminary engineering or environmental assessment may be the only element in the MCIP. In the case of large projects funded through external programs, even the preconstruction activity may not be feasible within the MCIP window. Under these circumstances, some high priority projects may not appear in the MCIP, while less important projects that are fully ready for implementation may be programmed for funding while work is done to bring the higher priority projects into readiness for implementation and secure funding. The following sections describe the MCIP projects, funding levels, funding sources, and likely project timing.

12.3 MOBILITY CAPITAL IMPROVEMENT PROGRAM PROJECT NARRATIVE

The MCIP contains projects from various mobility categories including roadway capacity and connectivity projects, intersection improvements, operations and maintenance projects, multimodal mobility/active transportation projects, and projects derived from parallel planning efforts.

12.3.1 CAPACITY AND CONNECTIVITY PROJECTS

Phases III & IV of the Kegley Roadway improvements. This project will extend from the end of Phase II to the intersection of Charter Oak Drive. Improvements include expanded pavement sections with a continuous left turn lane, pedestrian facilities, drainage conveyance, utilities, and an elevated bridge structure over Pepper Creek. Improvements will take this rural road and turn it into a minor arterial providing an alternate route for traffic from IH-35 to the west side of town.

Line 1 - Kegley Roadway Improvements, Phase III & IV at $9,750,000

The North 42nd Street reconstruction project. This project consists of roadway improvements to North 42nd Street from Lavendusky Drive to Hillcrest Road and Loop 363. Improvements include an expanded pavement section with continuous left-turn lane, pedestrian facilities, drainage conveyance, and water utilities.

The project is in the plan in response to both citizen requests for street improvements and planned development activity in the area. Design began in FY 2021.

Line 2 – 42nd Street Reconstruction at $4,950,000

Hartrick Bluff Road. The reconstruction of Hartrick Bluff Road from FM 93 to Waters Dairy Road was funded in FY 2021. Those improvements will take this rural road and turn it into a collector providing service to residential subdivisions along this corridor. With that project underway, and to better serve new development in recently annexed areas south of FM 93, staff is recommending 30% design of the next phase of Hartrick Bluff. This design will provide an evaluation of needed ROW and assess the impact of possible construction should the need for road improvements continue to accelerate in this area.

Line 3 – Hartrick Bluff Road (South of FM 93) at $600,000

Midway Drive. This roadway is a four-lane wide collector running from IH-35 to Hickory Drive and carries approximately 8,400 vehicles per day. It serves as a significant east-west connector and has received several overlays over time. However, maintaining a smooth road surface in this area continues to be a challenge due to difficult soil conditions. Reconstruction of the road will require additional excavation and select fill to reduce the potential vertical rise of the roadway and extend the life of the road surface. Staff is recommending 30% design begin in FY 2023 order to better evaluate rights-of-way and opinions of probable cost.

Line 4 – Midway Drive (IH-35 to Hickory Road) at $1,125,000

Designation of I-14. The TxDOT projected designation of Loop 363/SH 36 as I-14 may require City of Temple participation. City staff estimated that participation consists of one percent of the project cost. The one percent estimate is based on ten percent of right of way acquisition and utility relocation costs. Ongoing coordination with TxDOT will clarify Temple's financial participation and incorporate feedback received during the MMP process.

Line 5 – Designation of I-14, City Participation at $1,500,000

The Outer Loop. The loop will ultimately create a new major arterial loop around Temple, connecting regional employment centers to neighborhoods and interstate commerce. This loop strategically combines several existing roadways and thoroughfares, including Moores Mill Road, Old Howard Road, Hilliard Road, Research Parkway, and Old Waco Road. Several segments in west Temple have already been completed. Outer Loop North Phases I-III stretch from IH-35 to Airport Road and will provide direct connectivity along the new thoroughfare between freight companies and IH-35. From Outer Loop North, drivers benefit from a short trip to the Draughon-Miller Airport and direct connectivity to the proposed 750-lot Westfield mixed-use development and the recently completed 300+ acre Crossroads Athletic Park The nearest section of IH-35 carries 78,656 vehicle per day, and 15,020 vehicles travel daily on northwest Loop 363. Allowing the traffic to disperse onto the Outer Loop will significantly reduce congestion. Outer Loop West, Phase I (OL-W1) was submitted for funding through the Killeen-Temple Metropolitan Planning Organization (KTMPO) Call for Projects in 2018 and was awarded $8,300,000 in funding. With the City funding its grant match for construction in FY 2021, this section is scheduled for completion in FY 2023. Outer Loop West, Phase II (OL-W2) was approved for funding though the KTMPO Metropolitan Transportation Plan (MTP). An Environmental Assessment of the corridor is currently underway.

Line 6 - Outer Loop West, Phase II at $12,900,000

12.3.2 MMP INTEGRATION WITH OTHER PLANNING EFFORTS

Neighborhood Planning Districts

The City of Temple is dedicated to fostering cohesive, distinct, vibrant, safe, and attractive neighborhoods, where citizens take pride in where they live and are engaged with their community. The Love Where You Live Program identifies eighteen Neighborhood Planning Districts (NPD) that form the core of the community. Each district plan has a similar planning process that is intended to complement the City's Comprehensive Plan with a more focused effort at the neighborhood level. These plans look at the existing conditions and engage residents to derive genuine information and direction from each NPD. While using the best practices for planning, the results of each plan define specific recommendations that are unique to each planning area. The MMP project prioritization process included future mobility projects identified through the NPD planning effort into the project prioritization process and incorporated high scoring NPD projects into the MCIP.

Avenue D Connections and Alley. This project consists of roadway and pedestrian improvements for Avenue D from 14th Street to 18th Street, construction of a new roadway from Avenue D to Avenue E, alley improvements between Avenue C and Avenue D from 14th Street to 18th Street, and alley improvements between Avenue D and Avenue E from the new roadway adjacent to Jeff Hamilton Park to 18th Street within the Ferguson Park Neighborhood Planning District. The proposed project will include reconstruction of a two-lane roadway with curb and gutter, sidewalks along both sides of the street, landscaping, irrigation, lighting, alley driveway access, and sidewalks leading to the front doors of the residences. Currently, Avenue D is a narrow roadway with no pedestrian improvements. Relocating the driveways to the rear of the properties to be accessed from the alleys will provide a safe connective pedestrian corridor for the neighborhood residents. The addition of lighting will increase the overall safety for pedestrians and motorists and the landscaping will significantly improve the overall aesthetics of this roadway corridor.

Line 7 - Ave D Connections and Alley at $2,400,000

1st Street Sidewalks. This project consists of pedestrian improvements along 1st Street from Zenith Avenue to Shell Road within the Bellaire Neighborhood Planning District. The proposed project will include 5-foot sidewalks along both sides of 1st Street, lighting, street trees, landscaping, and bicycle lane markings. 1st Street has a special designation as both a neighborhood collector and a bicycle route. The addition of street markings and signage will help to improve vehicle awareness of the bicyclist's presence. This project will maintain the existing right-of-way to preserve landscape areas, street trees, and the overall pedestrian environment.

Line 8 - 1st Street Sidewalk, Zenith to Shell at $1,400,000

Henderson Parkway. This project consists of improvements to Henderson Parkway and Knob Creek Trail. The project consists of a new parkway and shared use path extending from Henderson Street to Avenue N within the Crestview Neighborhood Planning District. The proposed project will include two twelve-foot travel lanes, on-street parking, a sidewalk on the east side of the roadway and a 12-foot trail with lighting, signage, trash cans, and benches on the west side. This trail will enhance the overall quality of life for the Crestview Neighborhood residents by providing recreational opportunities and safe connectivity both within the neighborhood and to adjacent neighborhoods (including the 14th St. Trail in the Ferguson Park Neighborhood Planning District, while the parkway provides an alternative route to access the BNSF crossing at 24th Street.

Line 9 - Knob Creek Trail and Henderson Parkway $9,285,000

3rd Street Sidewalks. This project consists of pedestrian improvements along 3rd Street from the Cultural Activities Center to Downtown Temple within the Bellaire, Historic, and Central Neighborhood Planning Districts. The proposed project will include the construction of new sidewalks and repairs to existing ones along 3rd Street to beautify a primary corridor leading into Downtown Temple. Physical improvements, such as ADA ramps and sidewalks, will directly contribute to a higher quality of life by enabling active transportation modes such as walking and cycling.

Line 10 - 3rd Street Sidewalks, Convention Center to Downtown at $2,700,000

The Rail Line Linear Trail. This project consists of pedestrian improvements alongside the BNSF railway from Optimist Park to French Avenue within the Historic Neighborhood Planning District with a future expansion that will extend the trail to connect to downtown at Santa Fe Plaza. The proposed project includes construction of a 10-foot concrete trail, signage, and fencing between the railway and the trail. Working with the railroad company to develop a greenspace buffer, a trail along the railway in the Historic Neighborhood Planning District will create

a safe and functional recreational area that provides pedestrian connectivity from the existing park to key destinations within Temple.

Line 11 - Rail Line Linear Trail at $7,700,000

14th Street. This project consists of pedestrian improvements along 14th Street from Adams Avenue to Avenue H within the Ferguson Park Neighborhood Planning District. The proposed project will include the construction of a 12-foot trail, split rail fence, landscaping, and pedestrian lighting. There are currently no pedestrian improvements along this major corridor making it unsafe for pedestrians who utilize this roadway to reach key destinations. This trail will enhance the overall quality of life for the Ferguson Park Neighborhood residents by providing recreational opportunities and safe connectivity both within the neighborhood and to adjacent neighborhoods.

Line 12 - 14th Street Trail from Central Ave to Ave H at $5,200,000.

Parks - Sidewalks and Trail Connections

The Georgetown Railroad Trail Phase I. This multiphase project creates a ten-foot (10') wide, 4-mile long shared-use path along the right-of-way of the former railroad. This rails-to-trails project ranks as a Priority Trail in the City of Temple Trails Master Plan for its potential to connect key destinations and neighboring communities. The design will include safety lighting and signage at all street crossings to minimize risk to pedestrians and cyclists and encourage use by students. The trail will be easily accessible to residents living in Stonegate, Echo Village, Wyndham Hill, Sarah's Glenn, Alta Vista, Deerfield, Bentwood, and Legacy Ranch. The trail will connect Raye Allen Elementary School, South Temple Community Park, and ultimately reach the historic MK&T bridge over the Leon River. Phase I of the project starts near Raye Allen Elementary School 0.04 miles east of S. 5th St. and extends to S. 31st St (FM 1741). It is in the KTMPO TIP (KTMPO ID T40-13a) using a combination of funding sources, including Surface Transportation Program Funds (Category 7) and the Transportation Alternatives Program (Category 9), and Non-Traditional Funding (Category 3).

Line 14 – Georgetown Railroad Trail Phase I at $1,300,000

Georgetown Railroad Trail Phase II. This phase of the trail project extends from S. 31st St. (FM 1741) to the MKT Bridge over the Leon River. It includes the renovation of the Historic MKT Truss Bridge, constructed in 1882.

Line 15 - Georgetown Railroad Trail Phase II and MKT Bridge - $3,300,000

Pepper Creek Trail. Planning for the future Pepper Creek Trail Extension and FM 2305 Pedestrian Bridge rehabilitation began in FY 2021 in preparation for grant consideration. This trail will tie into the existing trail on the north side of the pedestrian bridge, allowing pedestrians to cross under FM 2305 and exit on the south side to a sidewalk connection near Kegley Road. In FY 2022, $650,000 was allocated to design, with an additional $2,700,000 for construction in the funding schedule for FY 2026.

Line 16 – Pepper Creek Trail Extension at $3,350,000

East Temple Sidewalks. Staff has developed a project based on conceptual alignments from the Ferguson Park and Crestview Neighborhood Plans. The proposed improvements will construct a six-foot sidewalk along the east side of S. 14th Street from E. Central Avenue to Henderson Street. The sidewalk will transition to a ten-foot shared-use path starting at Knob Street, generally following the drainage channel, and ending at S. 24th Street. The estimated construction cost for this project is $1M. Grant matching funds are in the MCIP in anticipation of receiving external funding through discretionary funding programs.

Line 17 – East Temple Sidewalks at $200,000

East Central Sidewalks. East Central Avenue is a well-traveled thoroughfare connecting IH-35 to downtown with a high school, a grocery store, and several neighborhoods all along the way. The sidewalk contains several gaps that need to be addressed to provide a safe route adjacent to this busy roadway.

Line 18 - East Central Sidewalks at $650,000

12.3.3 OPERATIONS AND MAINTENANCE

Once a project is in place and open to the public, it becomes an asset that requires ongoing attention in terms of operations and maintenance (O&M). The MCIP includes recurring funds to ensure adequate O&M budget to address the expansion and complexity of the multimodal mobility network. Staff should periodically review the operations and maintenance budget and adjust funding levels dedicated to signal operation and maintenance, signage installation and repair, and roadway and sidewalk pavement management.

Traffic Control and Signals

Signal Replacement and Upgrade Program. There are currently three intersections within the City of Temple that meet TXDOT warrant standards for a signal at the intersection: Orion at SH 317, Poison Oak at SH 317, and Hartrick Bluff at FM 93. Road improvements underway in FY 2021 for Hartrick Bluff include the required signal installation along with the road construction. The MCIP funding schedule includes installation of the Orion and Poison Oak signals in FY 2022 with a placeholder for future intersections. The MMP recommended increasing the recurring funding in response to rising costs and to provide financial capacity to address MMP proposed signal studies and corridor improvement studies. Among other locations, the MMP recommends coordination with TxDOT to study and improve the intersections and signals for Airport Road at N. 25th Street and Airport Road at N. 29th Street.

Line 19 – Signal Replacements, Upgrades, and Additions at $2,050,000

31st Street Signal Design/Optimization Study. To improve traffic capacity and reduce delays along 31st, the MMP recommends a Transportation Systems Management and Operations (TSMO) Optimization Study/Design project from Dodgen Loop/US 190 to W. Adams Avenue. Funds for this corridor optimization study and some limited early-action implementation is included for FY 2023 and FY 2024 at a cost of $1,400,000. The study proposes to include analysis of the intersections at Dodgen Loop/US 190, Avenue R, Avenue H, Avenue M, Avenue D, W Central Ave., and W Adams Ave. in the study.

Line 19A - 31st Street Signal Design/Optimization Study – $1,400,000

Pavement Preservation Program

The 2020 Pavement Management Report (PMR) reported an overall roadway system pavement condition index of seventy-five (75). The 2020 PMR recommended preservation, rehabilitation, or reconstruction of Temple roads, to achieve an overall Pavement Condition Index (PCI) of eighty (80), which represents a five point or seven percent increase in the overall condition of Temple streets and roadways.

Pavement Preservation. The MMP recommends an increase in the programmed funds in the MCIP from $2.5 million per year to $3.25 million per year, subject to operating budget constraints, to ensure that the system achieves the target PCI score, to mitigate the effect of rising costs, and to provide funding for maintaining MMP recommended roadway and sidewalk improvements. The program should also include a periodic update to the 2020 PMR.

Line 20 – Pavement Preservation and Reconstruction at $22,750,000.

12.3.4 COMPLETE STREETS PROGRAM

The MMP describes a vision for a mobility network based upon a set of policies and design standards that provide users of all ages and abilities with transportation infrastructure to move safely and comfortably through the space, regardless of mode. Complete streets principles encourage planners and engineers to consider all transportation modes and users of a roadway when designing streets, including bicyclists, transit riders, pedestrians, motorists, youth, elderly, differently-abled, and the able-bodied. The projects in this section strive to achieve that vision.

Martin Luther King Jr. Drive. Complete Streets Improvements to MLK will ensure that users of all ages and abilities can drive, walk, bike, and use transit comfortably on this minor arterial in the Downtown neighborhood. The MMP identified surplus capacity on this section of MLK. The project proposes to use this available capacity to add a ten foot (10') wide side path to the west side of the roadway, along with intersection enhancements, landscaping, illumination, and ADA compliant ramps and amenities.

Line 21 - MLK Complete Streets Improvements – $8,626,800

Market Loop and Cottonwood Street. Market Loop is one of the main roads through the South 31st Subdistrict of the TMED District, connecting the McLane Children's Hospital to the Marketplace shopping center and across 31st Street to the Temple Mall. The project sidewalk and safety improvements to Market Loop and Cottonwood St. will create a pedestrian realm, by adding sidewalk, street trees and screening the view of the back of adjacent buildings. Likewise, filling gaps in the sidewalk of Cottonwood Ln. will create a continuous accessible pedestrian way.

Line 22 - Market Loop / Cottonwood Street Sidewalk and Safety Improvements - $1,990,000

S. 25th Street. A Complete Streets upgrade to S. 25th St. from W. Avenue H. to W. Avenue E will improve safety and comfort for people walking, biking, driving, and using transit throughout this corridor. The existing four lane street has relatively low traffic, and the addition of on-street parking, sidewalks, lighting, benches, landscaping, and street trees can calm traffic and improve the pedestrian experience.

Line 23 Complete Streets upgrade of S. 25th from W. H Ave. to W. Ave. in the Midtown NPD - $3,700,000

1st Street Extension. This project will extend 1st St. from its current terminus at US 190 to 5th Street/Waters Dairy Rd. The arterial roadway will consist of two twelve-foot (12') travel lanes in each direction, a landscaped median with five-foot (5') sidewalks on both sides of the roadway.

Line 24 - 1st Street Extension from US 190 to 5th St./Waters Dairy Rd. - $576,400

W. Adams Ave. This corridor is critical for the All Ages and Abilities bicycle improvements because of the corridor's unique ability to provide east/west access across several significant barriers such as BNSF rail corridor, I-35, and SH 363. The addition of a bicycle improvements including striping, signage, and vertical barriers along W. Adams Ave. from Kegley Rd. to 3rd Street will create a dedicated space for bicyclists to travel more comfortably along this key corridor. $614,000 is allocated in FY 2024 for design and a phasing plan.

Line 25 - Bicycle improvements along West Adams Avenue. from Kegley Rd. to 3rd St. - $614,000

Barnhardt Road Improvements. This project will upgrade the existing Barnhardt Rd. from Old 95 to SH 95 from a twenty-foot (20') wide rural roadway into a complete streets cross section including a median, two twelve-foot (12') travel lanes, sidewalks, and cross walks. This project is a partnership in collaboration with the Temple Independent School District to improve access to a future school site.

Line 26 - Barnhardt Road from Old 95 to 95 - $6,600,000

12.3.5 SAFETY PROGRAMS AND PROJECTS

As Temple and the surrounding area continue to grow, balancing the enhancement of safety and efficiently maintaining mobility will become more complex. All the priority projects included in the MCIP provide a level of safety benefit. The projects in this section, however, have a primary safety focus to address points of conflict or mitigate the increasingly more complex interactions of different modes of travel.

Safe Routes to Schools Sidewalk Network Program - Promoting walking and biking to school through infrastructure improvements provides a health benefit to the Temple community and promotes active living for the younger generation during their everyday routine. Safe Routes to School (SRTS) promotes safe, convenient, and fun travel options for children and families to bicycle to school and other destinations. The MMP Comprehensive System Assessment reviewed sidewalk density within a ¼ mile walking distance (walkshed) of twenty-two (22) public schools in Temple. The evaluation process prioritized locations with low sidewalk density for future improvements or renovation of existing sidewalks. The Sidewalk Network Program allocates funds for ongoing planning of sidewalk additions and improvements to enhance neighborhood walkability and improve connectivity between neighborhoods and schools. The Sidewalk Network Program promotes project readiness in anticipation of grant applications for SRTS, Transportation Alternatives (TA) or Safe Streets and Roads for All (SS4A) funding.

Line 27 - Safe Routes to Schools Sidewalk Network Program - $1,200,000

Safety Realignment and Innovative Intersection Identification. This categorical line item provides planning, design, and implementation funds for use in framing solutions and implementing improvements at locations with network geometry that creates driving challenges or requires vehicle movements that promote turning conflicts. Examples include:

- Locations where roadways intersect at oblique angles diminishing sight lines and making it harder to judge the spacing and speed of crossing traffic.
- Locations where offset intersection approaches require left turns across oncoming traffic.
- Roadways that have unnecessary sharp turns.
- Problem intersections that defy conventional solutions and would benefit from the safety advantages provided by a roundabout or other innovative intersection strategy.

Funds in this line item will help to identify and address these safety issues. Locations identified as having alignment or discontinuity issues during the MMP network field review include Shell at Young, Hickory at Stratford, and Knob Creek at FM 3117. These locations are a sample of the system, and the City should continue to identify additional locations that exhibit similar alignment discontinuity. The City should also use funds from this line-item help avoid these types of alignment issues in planning and design of future roadways and consider the use of roundabouts and innovative intersection strategies as the City implements the Thoroughfare Plan roadways.

Line 28 - Safety Realignments / Innovative Intersections - $2,000,000

Right of Way (ROW) Preservation / Acquisition – This contingency line item provides funds for the City to address shortfalls in ROW acquisition for programmed projects in the light of rapidly increasing real estate costs. This approach helps the City to avoid project delays and disruptive impacts on the operating budget due to unanticipated additional costs. Once prices stabilize and more accurate project ROW cost estimates can be prepared, the City can use these funds to preserve ROW for future planned thoroughfare corridors.

Line 29 - ROW Acquisition / Preservation - $3,600,000

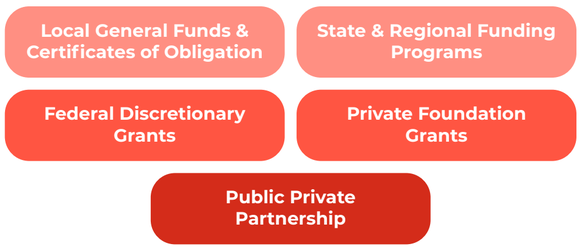
12.4 MOBILITY CAPITAL IMPROVEMENT FUNDING SCHEDULE

The MCIP funding schedule provides a list of the MCIP priority projects programmed for some or all the steps in the project delivery process, with an estimated cost, and an anticipated year of expenditure. The expenditure schedule is an MMP recommended program for the MCIP. When approved, the actual City fiscal document may be quite different based on fiscal constraints and available budget.

12.4.1 FUNDING AND REVENUE SOURCES

Mobility funding comes from a variety of sources. Typical sources of funding include local, state, and federal funding programs as well as private sector/non-governmental sources. When funding for a project is from non-local sources, the amounts shown in the funding schedule generally represent the required local matching share to secure the grant program funding. The MMP Implementation Plan (Chapter 11) provides additional detail about specific sponsored funding programs and discretionary grants available to the City for mobility improvements.

Figure 12.3: MCIP Potential Revenue Sources



12.4.2 CONCEPTUAL PROJECT COST ESTIMATES

The MCIP project costs are program level costs based on professional 'opinions of probable cost' (OPCs) developed by local engineers familiar with the Temple area and past and current trends in unit costs for the various components of project delivery. The engineers performing the work used available information resources such as datasets on average low bid unit prices for the area, recent bids and bid trends for Temple area projects, and informed professional judgment.

The OPCs also take into consideration the scope and scale of the project and the components of the project such as roadway or sidewalk cross-section and the incorporation of bridges or other elevated structures.

The OPC provides a projected program level cost for pre-construction and construction stages of intersection, roadway, and active transportation infrastructure projects shown in the MCIP. The City may need to revise costs as the project progresses through the project delivery process and the City gains additional understanding of project complexity, challenges, and constraints during preconstruction planning and engineering activities. Table 12.1 presents the MMP recommended MCIP Funding Schedule.

TABLE 12.1: MOBILITY CAPITAL IMPROVEMENT FUNDING SCHEDULE

MOBILITY PROJECTS	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	TOTAL
Capacity & Connectivity	**Symbol Key:**		Design		Right of Way		Construction		
1. Kegley Roadway Improvements, Phase 3 & 4	$9,750,000								$9,750,000
2. 42nd Street Reconstruction		$4,950,000							$4,950,000
3. Hartrick Bluff (South of FM 93) (30% Design)	$600,000								$600,000
4. Midway Drive (IH-35 to Hickory Road) (30% Design)		$1,125,000							$1,125,000
5. Designation of I-14, City Participation ^			$1,500,000						$1,500,000
6. Outer Loop West, Phase II ^				$12,900,000					$12,900,000
Neighborhood Planning Districts									
7. Avenue D Connections and Alley (Ferguson Park District)		$2,400,000							$2,400,000
8. 1st Street Sidewalk, Zenith to Shell (Bellaire District)	$1,400,000								$1,400,000
9. Henderson Parkway Improvements		$9,285,000							$9,285,000
10. 3rd Street Sidewalks; CAC Downtown (Belair/Historic/Central)		$2,700,000							$2,700,000
11. Rail Line Linear Trail (Central and Historic District)		$7,700,000							$7,700,000
12. 14th Street Trail - from Adams Ave. to Avenue H (Ferguson Park District)			$5,200,000						$5,200,000
13. Contingency	$315,000				$650,000				$965,000

TABLE 12.1: MOBILITY CAPITAL IMPROVEMENT FUNDING SCHEDULE CONTINUED

MOBILITY PROJECTS	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	TOTAL
Parks, Sidewalks, & Trail Connections		**Symbol Key:**		⚙ Design		📋 Right of Way		🚧 Construction	
14. Georgetown Railroad Trail Phase I (KTMPO)^		$1,300,000 ⚙🚧							$1,300,000
15. Georgetown Railroad Trail Phase II and MKT Bridge				$3,300,000 ⚙🚧					$3,300,000
16. Pepper Creek Trail Extension^	$650,000 ⚙				$2,700,000 🚧				$3,350,000
17. East Temple Sidewalks (TxDOT-TA)^		$200,000 ⚙🚧							$200,000
18. East Central Sidewalks^	$300,000 ⚙🚧	$350,000 ⚙🚧							$650,000
Operations & Maintenance									
19. Signal Replacement, Upgrades, and Additions	$3500,000 ⚙🚧	$450,000 ⚙🚧	$250,000 ⚙🚧	$250,000 ⚙🚧	$250,000 ⚙🚧	$250,000 ⚙🚧	$250,000 ⚙🚧	$250,000 ⚙🚧	$2,050,000
19A. 31st Street Signal Design/ Optimization Study		$450,000 ⚙🚧	$900,000 ⚙🚧						$1,350,000
20. Pavement Preservation and Reconstruction	$2,500,000 🚧	$3,250,000 🚧	$3,250,000 🚧	$3,250,000 🚧	$3,250,000 🚧	$3,250,000 🚧	$3,250,000 🚧	$3,250,000 🚧	$22,000,000
Complete Streets Projects									
21. MLK Complete Streets Improvements			$718,900 ⚙	$718,900 ⚙	$7,189,000 🚧				$8,626,800
22. Market Loop / Cottonwood Street Sidewalk and Safety Improvements		$300,000 ⚙	$1,690,000 🚧						$1,990,000
23. S. 25th from W. H Avenue to W. Avenue E (Completee Streets Upgrade) (Midtown NPD)				$700,000 ⚙	$3,000,000 ⚙🚧				$3,700,000
24. Ist Street Extension from US 190 to 5th Street/Waters Dairy Road					$52,400 ⚙	$524,000 ⚙🚧			$576,400
25. Bicycle improvements along West Adams from Kegley Road to 3rd Street			$614,000 ⚙						$614,000
26. Barnhardt Road from Old 95 to 95		$600,000 ⚙	$6,000,000 🚧						$6,600,000

TABLE 12.1: MOBILITY CAPITAL IMPROVEMENT FUNDING SCHEDULE CONTINUED

MOBILITY PROJECTS	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	TOTAL
Safety Projects		**Symbol Key:**		⚙ Design		📋 Right of Way		🚧 Construction	
27. Safe Routes to Schools Sidewalk Network		$200,000 ⚙	$200,000 ⚙	$200,000 ⚙	$200,000 ⚙	$200,000 ⚙	$200,000 ⚙	$200,000 ⚙	$1,200,000
28. Safety Realignments / Innovative Intersections			$4200,000 ⚙	$800,000 ⚙🚧	$800,000 ⚙🚧C				$2,000,000
29. ROW Preservation / Acquisition		$600,000 📋	$600,000 📋	$600,000 📋	$600,000 📋	$600,000 📋	$600,000 📋	$600,000 📋	$3,600,000
Total Funded by COs for Mobility	$15,865,000	$35,860,000	$21,322,900	$22,718,900	$18,691,400	$4,824,000	$4,300,000	$4,300,000	$123,582,200

^ Potential Grant Match if Awarded

The MCIP priority projects and funding schedule documented in this chapter are recommendations based on the planning and analysis conducted during MMP development. The project budgets are dependent upon the availability of both City funds and funding from external sources such as federal, state, regional, and/or non-governmental grants. When approved, the actual City fiscal document may be quite different based on the outcome of grant applications, available operating budget, and other fiscal constraints. The program level project cost estimates will also change as the projects move through the steps in the project delivery process and the City gains more details on the challenges and opportunities presented by each project.

The MCIP is not a static document, but a strategic financial planning tool that the staff should review, update, and revise each fiscal year based on information gained and lessons learned from the previous year's budget cycle.

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