GREAT FALLS AREA LONG RANGE TRANSPORTATION PLAN 2024

APPENDIX H:

Recommendations and Funding

Appendix H-1: Project Prioritization

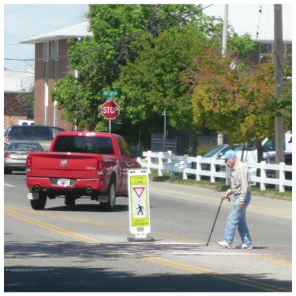
Appendix H-2: Planning Level Cost Estimates

Prepared for:

Great Falls MPO

GREAT FALLS AREA LONG RANGE TRANSPORTATION PLAN 2024

August 19, 2024



Recommendations and Funding

TECHNICAL MEMORANDUM

DRAFT

Prepared by:

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CIVIL ENGINEERING / PLANNING / SURVEYING

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

Recommendations and Funding

1.0 INTRODUCTION

This memorandum presents a variety of recommended improvements for the Great Falls area transportation system aimed at addressing current and anticipated future needs. Recommendations contained in prior planning documents, including the 2018 *Great Falls Long Range Transportation Plan* and the 2022 *North Great Falls Sub-Area Transportation Study*, were reviewed and updated to reflect their current status and the changing needs and desires of the Great Falls community. A combination of public outreach, project solicitation from partnering agencies, travel demand modeling, traffic engineering analysis, and policy choices to support the identified goals and objectives were utilized to guide the identification of recommendations. In most cases, the recommended projects are needed to bring roadways up to current standards, address existing operational or safety concerns, or meet anticipated traffic demands for the year 2045.

2.0 RECOMMENDATIONS

As a Metropolitan Planning Organization (MPO), Great Falls is required to develop an LRTP that has a prioritized, fiscally constrained menu of projects. Projects are categorized into categories based on status and availability of funding. Recommendations categorized as “committed” are those with dedicated funding as identified in either the MPO’s *Transportation Improvement Program* (TIP), through local funds, transit funds, private funds, or other sources and are planned to be completed in a four-year time frame (2025-2028). “Annual programs” are programs that receive an annual allocation of funding but do not have specific projects assigned to them, these programs occur yearly through the planning horizon (2025-2045). Projects categorized as “recommended”, are recommended to be completed within the planning horizon (year 2045) but may need further analysis or identification of available funding before becoming committed. “Illustrative” projects are currently unfunded recommendations that are supported by a sponsoring agency but are not prioritized for implementation over the planning horizon.

Also included are non-motorized recommendations which address needs for accommodating pedestrians and bicyclists in the Great Falls Area, and to provide mode choice for transportation users. Although estimated costs are given for the non-motorized recommendations, neither a funding source nor a year of expenditure are assigned to the projects. It is expected that the non-motorized projects be completed in conjunction with other facility recommendations or as funding becomes available.

2.1. PROJECT STATUS (2018 LRTP RECOMMENDATIONS)

Since completion of the 2018 LRTP, the City of Great Falls, Cascade County, and MDT have completed various projects in the LRTP study area. Some of the projects were already committed at the time of the 2018 LRTP and have since been completed. Others were recommended in the plan and have progressed towards project completion in recent years. The projects which have been completed or are currently in progress will be removed from the recommendations for the 2024 LRTP. **Table 2.1** presents the status of the past facility recommendations.

Table 2.1: 2018 Facility Recommendations - Current Status

ID	Name	Description	Project Status
COMMITTED PROJECTS			
C1	Fox Farm Road - East Fiesta to Dick Road	Reconstruct to rural arterial roadway standards	**COMPLETE**
C2	Bridge Preservation - Great Falls 2014	Overlay bridge decks over the railroad on I-315 between Fox Farm and 10th Ave S	**COMPLETE**
C3	14th St SW Signals - GF	Retime signals at three locations (16th Ave SW, 14th St SW & Ramp, and Marketplace Dr)	**COMPLETE**
C4	NW Bypass Signals - Great Falls	Retime signals at two locations (6th St NW and 9th St NW)	**COMPLETE**
C5	Transit Operating Expense	General transit operating expenses	**COMPLETE**
C6	Transit Capital purchase	Acquire vehicles and related equipment	**COMPLETE**
C7	Great Falls - North	Reconstruct and widen US-87 with passing and turn lanes	**COMPLETE**
C8	Great Falls South - Urban	Pavement preservation- overlay (Lower River Rd, 55th Ave S and 13th St S)	**COMPLETE**
C9	3rd St NW - Great Falls	New signal upgrades with flashing yellow left turns and ADA ramps (3rd St SW / Smelter Ave)	**COMPLETE**
C10	SF 169 Cascade Cnty SFTY Imprv	Countywide safety improvements to address road departure crashes at two locations Lower River Rd/13th St S	**COMPLETE**
C11	Park Dr/4th Ave N Ped Xing- GTF Bike/Ped	Bicycle and pedestrian crossing	**COMPLETE**
C12	2nd Ave N Signals - GF	Signal upgrades at four locations, (3rd St, 4th St, 5th St, and 6th St)	**COMPLETE**
C13	SF139 - 6th St / NW Bypass Sfty	Offset of left turn lanes and upgrade signals and ADA ramps	**COMPLETE**
C14	SF169 I-15 HT Cable Rail	High tension median barrier rail b/w Vaughn and Central Ave W	**COMPLETE**
C15	Ulm- Great Falls	Pavement Preservation on Ulm Frontage Road from Ulm to Gore Hill Interchange	**COMPLETE**
C16	Fox Farm Road - West (I-315)	Pavement Preservation on I-315 from Fox Farm to I-15	**COMPLETE**
C17	Stuckey Road	Pave gravel road, improve to rural standards within City Limits	**COMPLETE**
RECOMMENDED PROJECTS			
R1	River Drive N – 15th St N to 25th St N	Reconstruct to three-lane arterial and improvements to 25th St N intersection	**NOT COMPLETE** Not Included
R2	Fox Farm Intersection Improvements	Install dual eastbound left-turn lanes	**NOT COMPLETE** Included as **R-20**
R3	Signal Modifications/Upgrades/Roundabout Control	Upgrade all signal heads in the City	**COMPLETE**
R4	Central Avenue W – 3rd St NW to 1st Ave N	Restriping and intersection modifications	**NOT COMPLETE** Modified & Included as **O-5**
R5	26th Street S – 24th Ave S to 33rd Ave S	(a) Flatten fill slopes on 26th St S and (b) install 2-way stop control at intersection of 26th St S and 33rd Ave S & modify approach grade	**PARTIALLY COMPLETE** Modified & Included as **R-29**

ID	Name	Description	Project Status
R6	Central Avenue / 9th Street Intersection	Extend eastbound left-turn lane	**NOT COMPLETE** Not Included
R7	25th Street S – 10th Ave S to 11th Ave S	Modify to one-way in southbound direction	**NOT COMPLETE** Included as **R-21**
R8	25th Avenue NE – Old Havre Hwy to 15th St N	Several improvements to improve safety and operations	**PARTIALLY COMPLETE** Modified & Included as **R-18**
R9	Emerson Junction Feasibility Study	Secure local project sponsor to fund an operational analysis/feasibility study of the interchange	**NOT COMPLETE** Included as **O-6**
R10	Gore Hill Interchange with Southbound Auxiliary Lane	Install additional traffic control at interchange and construct southbound auxiliary lane	**IN PROGRESS** Included as **C-11**
R11	Fox Farm Road – Alder Dr to Park Garden Rd	Restripe to four-lane facility	**NOT COMPLETE** Included as **R-19**
R12	Giant Springs Road – Hatchery to Rainbow Dam	Overlay with new asphalt and widen	**COMPLETE**
R13	9th Street NW – NW Bypass to Central Ave W	Reconstruct to collector	**IN PROGRESS** Included as **C-8**
R14	Watson Coulee Road – NW Bypass to Vaughn Rd	Reconstruct to collector	**IN PROGRESS** Included as **C-12**
ILLUSTRATIVE PROJECTS			
I1	40th Avenue S – Upper River Rd to 13th St	Overlay with new asphalt	**COMPLETE**
I2	Franklin Avenue – Lower River Rd to 13th St	Overlay with new asphalt	**COMPLETE**
I3	Wilson Butte Road – Eden Rd to LRTP boundary	Overlay with new asphalt	**COMPLETE**
I4	Upper River Road – 19th Ave S to 40th Ave S	Overlay with new asphalt	**COMPLETE**
I5	33rd Avenue S / 13th Street S Intersection	Modify intersection	**NOT COMPLETE** Modified & Included as **I-22**
I6	36th Avenue NE Traffic Calming	Traffic calming on route including curb bulb-outs at: 2nd Street NE; 4th Street NE; 7th Street NE; and 9th Street NE	**NOT COMPLETE** Modified & Included as **R-4**
I7	25th Avenue NE / 8th Street NE Intersection	Four-way stop control	**NOT COMPLETE** Modified & Included as **O-1**
I8	11th Ave S Traffic Calming	Traffic calming on route	**NOT COMPLETE** Included as **R-15**
I9	11th Avenue S / 32nd Street S Intersection	Monitor intersection for 4-way stop control	**NOT COMPLETE** Included as **O-3**

ID	Name	Description	Project Status
I10	Speed Studies	Periodic speed studies	**ONGOING** Modified & Included as **O-4**
I11	Signal Warrant Analysis	Periodically check for signal warrants at Fox Farm/Park Garden Rd; Fox Farm/18th Ave SW/Cherry Dr; Central Ave/Vaughn Rd, 6th St SW/4th Ave; River Dr/3rd Ave S; 38th St/Central Ave	**ONGOING** Modified & Included as **O-3**
I12	38th Street N – 10th Ave N to River Dr N	Reconstruct to collector	**NOT COMPLETE** Modified & Included as **I-3**
I13	Flood Road – Park Garden Rd to Dick Rd	Reconstruct to collector	**NOT COMPLETE** Included as **I-23**
I14	6th Street NW – Smelter Ave to 36th Ave NE	Reconstruct to collector	**NOT COMPLETE** Modified & Included as **I-1**
I15	River Drive – 3rd Ave S to 1st Ave N	Reconstruct to minor arterial and other improvements	**NOT COMPLETE** Included as **I-11**
I16	Park Drive – 8th Ave N to 2nd Ave N	Reconstruct to collector	**NOT COMPLETE** Modified & Included as **R-17**
I17	Central Avenue W – 20th St NW to 29th St NW	Reconstruct to collector	**NOT COMPLETE** Modified & Included as **I-19**
I18	21st Avenue S	Construct to two-lane collector	**COMPLETE**
I19	67th Street N – Giant Springs Rd to 18th Ave N	Reconstruct to match Giant Springs Rd	**NOT COMPLETE** Included as **I-16**
I20	Sun River Road – Urban Boundary to 14th St SW	Overlay with new asphalt	**COMPLETE**
I21	Upper River Road – Overlook Dr to 19th Ave S	Reconstruct to collector	**NOT COMPLETE** Included as **I-20**
I22	17th Avenue S – 7th St S to 13th St S	Reconstruct to collector	**NOT COMPLETE** Included as **I-8**
I23	36th Avenue NE – 1st St NE to 6th St NW	Extend roadway (collector standard)	**NOT COMPLETE** Modified & Included as **I-5**
I24	15th Avenue S – 30th St S to 32nd St S	Extend roadway (collector standard)	**NOT COMPLETE** Included as **R-25**

ID	Name	Description	Project Status
I25	43rd Avenue NE – Bootlegger Trail to 6th St NW	Construct new roadway to minor arterial	**NOT COMPLETE** Modified & Included as **I-10**
I26	43rd Avenue NE – Bootlegger Trail and US 87	Construct new roadway to minor arterial	**NOT COMPLETE** Included as **I-9**
I27	North / South Connectors	Extend north-south routes to complete gridded network	**NOT COMPLETE** Removed as a standalone project, recommended as part of visionary network
I28	25th Street N – River Dr to 2nd Ave N	Reconstruct to minor arterial and other improvements	**NOT COMPLETE** Included as **R-24**
I29	10th Avenue S – 26th St S to 32nd St S	Widen to 6-lane principal arterial	**NOT COMPLETE** Modified & Included as **R-26**
I30	Downtown Traffic Flow Conversion	Reduce by one vehicle lane to accommodate bicycle facilities (1st Ave S, 2nd Ave S, 5th St N, 5th St S, 6th St N, 6th St S)	**NOT COMPLETE** Modified & Included as **O-2**
I31	20th Street S – 17th Ave S to 24th Ave S	Extend roadway (collector standard)	**PARTIALLY COMPLETE** Modified & Included as **I-17**
I32	23th St S – 21st Ave S to 24th Ave S	Extend roadway (collector standard)	**COMPLETE**
I33	Wilson Butte Road / 55th Avenue S / Eden Road / Lower River Road	Reconstruct intersection to roundabout	**NOT COMPLETE** Included as **I-24**
I34	26th Street N – 8th Ave N to 2nd Ave N	Reconstruct to minor arterial and other improvements	**NOT COMPLETE** Included as **I-4**
I35	Vaughn Road – Interstate 15 to Central Ave W	Reconstruct to principal arterial	**NOT COMPLETE** Modified & Included as **I-6** and **I-7**
I36	River Drive N – 25th St N to 38th St N	Reconstruct to three-lane arterial	**NOT COMPLETE** Included as **I-12**
I37	US 87 – Old Havre Hwy / 33rd Ave NE to Bootlegger Trail	Reconstruct/reconfigure	**NOT COMPLETE** Not included, project is being pursued by MDT under *Central Montana Regional Study*

2.1.1. Completed Non-Motorized Improvements

Due to the extensive list of non-motorized recommendations provided in the 2018 LRTP, only the non-motorized projects that have been completed, are in progress, or are no longer applicable are summarized in **Table 2.2** below. All other non-motorized projects from the 2018 LRTP, including spot improvements, sidewalks, shared use paths, bike lanes, and bike boulevards, have not been completed.

ID	Name	Description	Project Status
SPOT IMPROVEMENTS			
SPOT-7	3rd Ave S & 46th St S	Provide crosswalks on northern and eastern legs of intersection; provide sidewalk along 46th Street South to curb line.	**PARTIALLY COMPLETE**
SPOT-25	**Fox Farm Rd & 33rd Ave S**	Improve south of development, in addition to providing bike lanes where most people live. The undeveloped section of this road is where most open house and survey suggestions were identified (of those within this neighborhood) and it is also where a fatal crash occurred.	**COMPLETE**
SPOT-26	**4th Ave S & 19th St S**	Make this an obvious part of a bicycle route rather than just bollards sticking out of the concrete. Ensure adequate bicycle passage clearance and include pavement markings and wayfinding signage.	**NOT APPLICABLE** School reconstruction project revised roadway configuration
SPOT-27	**4th Ave S & 20th St S**	Make this an obvious part of a bicycle route rather than just bollards sticking out of the concrete. Ensure adequate bicycle passage clearance and include pavement markings and wayfinding signage.	**NOT APPLICABLE** School reconstruction project revised roadway configuration
SIDEWALKS			
SW-3	**25th St N** *9th Ave N to Pasta Place*	CTEP project to provide a pedestrian bridge over the railroad tracks. Sidewalks are needed to provide a walking connection to the stadium.	**COMPLETE**
SHARED USE PATHS			
SUP-4	**Charles Russell Park Trail** *29th St S to 33rd St S*	Part of 2013 CTEP process.	**COMPLETE**
SUP-7	**Country Club Blvd** *6th St SW to Existing Country Club Blvd/Bridge Path*	Add sidepath on north side of Country Club Blvd in accordance with project Bike 1C-Sun River Connector from the 2009 LRTP Update. This project was submitted for TA funding in 2013.	**COMPLETE**
SUP-8	**Overlook Drive** *River's Edge Trail to 10th Ave S*	Bike-1D from the 2009 LRTP Update. This project was submitted for TA funding in 2013	**COMPLETE**
SUP-17	**10th St Bridge Rehabilitation** *River Dr N to N River Rd*	If the 10th Street Bridge is ever rehabilitated.	**COMPLETE**
SUP-19	**River Drive South Trail** *1st Ave N to 3rd Ave S*	Will stay on the riverbank under the RR bridge, between River Drive South and the river. Results in no “at-grade” road crossings.	**IN PROGRESS** Included as **C-9**

2.2. Facility Improvements

There are four distinct categories of roadway improvement projects as outlined below. These categories are consistent with past long range transportation planning efforts completed in the Great Falls community. All facility improvement projects are shown in **Figure 2.1** at the end of this section.

- **Committed**: Committed projects are those with dedicated funding via the TIP, private sources (new development), transit formula funds, local funds, and/or projects with dedicated funding via a completed environmental document. These projects are generally expected to be implemented within a four-year time frame (2025-2028).
- **Annual Programs:** Includes programs that receive an annual allocation of funding but do not have specific projects assigned to them, these programs will occur yearly through the 20-year planning horizon.
- **Recommended**: Projects recommended to be completed through the planning horizon (year 2045) but may require further analysis before being committed to implementation via inclusion in the TIP.
- **Illustrative (Unfunded)**: Projects or project concepts supported by a sponsoring agency but are not currently prioritized for implementation with anticipated funding between 2024 and 2045.
- **Other:** Planning-level studies that are needed to diagnose safety or operational issues and identify feasible improvements to remedy those issues. The outcomes of these studies could become future LRTP recommendations. Studies using planning funds are not included in fiscal constraint component of the plan.

In addition to the projects listed in the following sections, there are several projects that are currently in progress and are expected to be completed in 2024. A brief summary of projects occurring within the study area in 2024 is provided below.

- **SF 189 PVMT Markings D3:** Install inlaid pavement markings on 10th Ave S
- **Durable Striping:** High-visibility pavement markings at various locations around Great Falls
- **GF - Urban Pavement Preservation:** Pavement preservation on River Dr, Park Dr, 6th St N, and 3rd Ave S
- **River's Edge Trail Path Preservation:** Maintenance/repair River's Edge Trail
- **Downtown ADA Upgrades:** ADA curb ramp upgrades on Central Ave between Park Dr and 6th St S
- **Sun River Road – Urban Boundary to 14th St SW:** Pavement preservation
- **JCT S-227 & S-228:** Crack sealing project on MT 200 from 57th St to Stockett Rd
- **RR XING - River Drive Great Falls:** Replace existing crossing surface at the River Drive railroad crossing

2.2.1. Committed Projects

The definition of a committed project is one that has been approved by the Great Falls Policy Coordinating Committee (PCC) and has obligated funding. Projects known to be completed within the next four years (2025 to 2028) are included in this section. Note that known pavement preservation activities are included in this list, even though they are typically addressed through a general “Pavement Preservation” category in the Transportation Improvement Program (TIP) and are typically not described as specific projects. Future projects will likely be included as either specific projects or as part of the overall “Pavement Preservation” or “Operation and Maintenance” categories.

Table 2.2: Committed Projects (2025-2028)

ID	Project	Description	Estimated Cost*
C1	SF 209 Great Falls Dist. Signs	Intersection safety improvements (signs, delineation, chevrons, etc.) at 12 locations w/in GF District. 2 locations w/in MPO boundary -- Fields Rd from RP 0.8-1.5 (0.7-miles) and Gibson Flats Rd from RP 0.6-1.1 (0.5-miles)	$140,500
C2	6th Street NW/Fox Farm Rd - GF	Pavement preservation on Fox Farm Rd (10th Ave S to Alder Dr) and 6th St NW (Central Ave W to NW Bypass)	$907,400
C3	6th Street SW - Great Falls	Pavement Preservation from Fox Farm Rd to Central Ave (RP 0.0 - 1.3)	$11,200,000
C4	57th Street - Great Falls	Pavement Preservation from 2nd Ave N to 10th Ave S (RP 7.49 - 8.20)	$1,975,500
C5	Black Eagle NHS Routes - GF	Scrub seal on River Dr (15th to 38th), Overlay on Old Havre HWY (Smelter Ave to HWY 87) and HWY 87 (end of PCC to GTF North)	$3,557,900
C6	Central-Vaughn Rd to 9th St NW	Pavement preservation Central Ave W (RP 0.23 - 0.792)	$1,128,900
C7	GF District ADA Upgrades	Various ADA improvements on 14th St (8th Ave N to 9th Ave S), 15th St (9th Ave S to 8th Ave N), and 1st Ave N (Park Drive to 8th St N)	$3,000,000
C8	9th St NW - Great Falls	Reconstruction between Central Ave and NW Bypass (RP 0 and 0.57)	$5,370,700
C9	River's Edge Trail Connector	Bike/Ped shared use path connector along River Drive (3rd Ave S to 1st Ave N) with RRFBs at River Drive at-grade crossings (water park & 3rd Ave S)	$4,270,500
C10	SF 189 Turn Lane 34th Vaughn Rd	Turn lane on Vaughn Rd at 34th St NW intersection	$40,4400
C11	Gore Hill Interchange - GTF	Reconstruction of existing I-15 interchange with auxiliary travel lane	$31,469,900
C12	Watson Coulee Road - Great Falls	Reconstruction between RP 0 and 0.24	$6,368,000
C13	Great Falls - Northwest	Pavement preservation & scrub seal on I-15 (RP 278.5 to 285.918)	$2,541,300
C14	Great Falls Area Bridge Decks	Bridge rehabilitation project on 6 structures in Cascade County. The Sun River Rd/I-15 Overpass and 10th Ave S/Missouri River Bridge are the only structures within the LRTP boundary that are included in the project.	$18,632,200
C15	14th/15th St - Great Falls	Pavement preservation on 14th and 15th Streets	$1,849,900
C16	Slide Repairs - Great Falls Area	Drainage improvements and slope stabilization/restoration on I-15 RP 278.5 to 278.8	$624,400
C17	Off System Sidewalks-GF	Improve sidewalk/ADA upgrades in NW quadrant of GF (Riverview area)	$4,324,800
		TOTAL COMMITTED PROJECTS	**$97,766,300**

**Estimated cost based on current funding obligations contained in the DRAFT 2024-2028 Great Falls TIP*

COMMITTED PLANNING PROJECTS

From a fiscal constraint perspective, LRTPs typically do not include planning-level studies as committed projects due to nuances in how funds are allocated and tracked. However, MDT is planning to conduct a significant planning effort that may identify substantial projects impacting the Great Falls transportation system. The *Central Montana Regional Study* is being conducted in response to two major projects occurring in the central region of Montana: US Air Force's Sentinel Project and construction of VACOM Manufacturing's new US-based headquarters

in Lewistown. The study is scheduled to kick off in 2024 and will include six distinct deliverables as summarized below. The majority of these subarea analyses occur, at least in part, within the Great Falls area.

- **Access Management Plan:** Development of access management plans for 57th Street in Great Falls between 2nd Ave N and the US 87/89 intersection and for US 87/89 between 57th Street and S-228.
- **Old Havre Hwy & US-87 Analysis:** Study of Old Havre Hwy/US 87 between 25th Ave NE and Great Bear Ave in Great Falls. The study will analyze geometrics, operational and safety concerns, speeds, and potential traffic growth/impacts from the Sentinel project.
- **US-87 - Armington Junction through Otter Creek Canyon Corridor Analysis:** Feasibility study for US 87 between Armington Junction and Otter Creek Canyon, including analysis of potential roadway widening for passing lanes. This subarea analysis will be outside the MPO boundary.
- **Great Falls Subarea Analysis:** Comprehensive analysis of the impacts of the Sentinel Project on the Great Falls Area transportation systems and identification of opportunities for MDT to leverage the investments made by the Air Force to maintain and improve the transportation system for the benefit of the traveling public.
- **Lewistown Subarea Analysis:** Impact analysis of the Sentinel and VACOM projects on the Lewistown area transportation system. This subarea analysis will be outside the MPO boundary.
- **Missile Field Construction Impacts Analysis:** Impact analysis of the Sentinel project on the transportation in smaller central Montana communities throughout the Air Force's ICBM missile fields in Montana. This subarea analysis will likely be conducted outside the MPO boundary.

2.2.2. Annual Programs

Annual allocations for various programs are included in the Great Falls TIP. These programs are included to account for typical annual expenditures that are generally less costly and more routine than stand-alone projects. Estimates of annual funding allocations are included in **Table 2.3**. Funding for these programs is not guaranteed and is determined annually on a case-by-case basis. Specific projects have yet to be identified for these programs. These programs are intended to identify funding needs for routine annual projects and are not intended to be allocated for the LRTP recommendations.

Table 2.3: Annual Programs (2025-2045)

ID	Project	Description	Estimated Annual Allocation
P1	Durable Pavement Markings Program	Install markings on Urban routes per City, County, and MDT	$50,000
P2	MDT Preventative Maintenance	Maintenance - striping, durable pavement markings, pavement preservation	$1,582,100
P3	Urban Pavement Preservation	Perform chip seals, overlays and related maintenance activities on Urban Routes	$500,000
P4	Traffic Mitigation	Complete signalization projects that help mitigate traffic congestion	$250,000
P5	ADA Compliance	Complete projects that help make the transportation system compliant with the Americans with Disabilities Act	$250,000
P6	Transportation Alternatives Projects	Complete sidewalk infall, non-motorized transportation projects, and other eligible Transportation Alternatives projects	$500,000

ID	Project	Description	Estimated Annual Allocation
P7	Transit Operating Expense	General transit operating expenses	$5,076,600
P8	Transit Capital Purchase	Acquire vehicles and related equipment	$251,700
P9	MDT-nominated HSIP Safety Projects	Safety improvement projects	$200,000
P10	City of Great Falls 2024-2029 CIP Projects	ADA upgrades, sidewalk projects, pavement preservation projects	$3,750,000
		ANTICIPATED ANNUAL ALLOCATION	**$12,410,400**

2.2.3. Recommended Projects

During the preparation of the 2024 LRTP, a number of recommended projects, in addition to those not yet completed from the 2018 LRTP, were developed to address identified areas of concern. Through public and stakeholder outreach and partner agency coordination, a project prioritization process was developed and conducted to identify the projects that should be prioritized for funding within the LRTP planning horizon (2045). The process involved scoring each project according to how well it supports the LRTP goals and objectives and according to the level of public and agency support for the project. The LRTP goals are summarized below.

- Goal 1: Preserve and maintain the existing transportation system.
- Goal 2: Improve the accessibility and connectivity of an equitable multimodal transportation system for all users.
- Goal 3: Improve the reliability of the transportation system for the efficient movement of people and goods.
- Goal 4: Provide a safe, secure, and resilient transportation system.
- Goal 5: Promote consistency between transportation improvements, land use, growth, and development to enhance the economic vitality of the community.
- Goal 6: Provide a transportation system that improves quality of life, conserves natural and cultural resources, and protects and enhances the environment.
- Goal 7: Develop and deliver transportation projects in a manner that reduces project costs, promotes jobs and the economy, and eliminates delays.

Each project was scored by the planning team according to each of these seven goals on a scale of -1 (conflicts with goal) to 2 (highly supports goal). Then, a local support multiplier, ranging from 1 to 3, was assigned based on the level of support gathered from public and stakeholder outreach and input from the MPO, City of Great Falls, Cascade County, and MDT. The highest scoring projects were then prioritized for available funding over the full planning horizon. In some cases, lower scoring projects with smaller lower costs, were able to be prioritized within the planning horizon based on anticipated funding. Lower scoring projects and larger, more costly projects that could not expect to be funded given current funding amounts are described in **Section 2.2.4 (Illustrative Projects)**. Other projects that are expected to be funded primarily with planning funds, which are not included in the fiscal constraint component of the plan, are listed in **Section 2.2.5 (Other Projects).** The prioritization process was solely used to prioritize projects into Recommended and Illustrative projects based on funding availability. Due to differences in project types, projects in each respective category are not listed in any order of priority. Projects should be implemented as funding allows, not in any particular order. Results from the scoring process are provided in **Appendix A.**

Project cost estimates for the recommended projects are planning-level estimates. They are given in anticipated year-of-expenditure dollars (using a yearly inflation factor of 3%) based on anticipated funding timeframes (2029 – 2033, 2034 – 2039, or 2040 – 2045) and include all project development phases. A current cost estimate should be prepared for any project considered for advancement, including an examination of site-specific conditions and subsequent development of more detailed project scope. The identified projects are anticipated to be funded beyond 2028 and within the planning horizon (2045). Planning-level cost estimates are provided in **Appendix B.**

Proposed funding sources for the recommended projects are also listed. These funding sources are the most likely, given anticipated funding and the scope of the project. Other sources may be available to fund these projects and costs may be distributed among additional or other sources as needed to fulfill funding obligations.

R-1: City Sidewalk Infill Projects

Infill sidewalks gaps at various locations across the city with emphasis on the areas around schools and parks as well as connectivity to major arterials. Anticipated locations include blocks north and south of 10th Avenue South along 2nd Street South and 3rd Street South, and the blocks north and south of Central Avenue West.

- **Estimated Cost:** $3,600,000
- **Anticipated Funding Timeframe:** 2029 - 2033
- **Possible Funding Source:** TA, CITY

R-2. Central Ave / 38th St Intersection Improvements

A Traffic Impact Study was recently completed for an apartment complex located at the north-east quadrant of the intersection of 2nd Avenue North and 38th Street North. The study found that the Central Avenue North and 38th Street North intersection would experience unacceptable delays as a result of increased traffic growth from construction of the complex. Accordingly, the study recommends evaluation of intersection improvements such as installation of a traffic signal or single lane roundabout. A detailed engineering analysis, with a benefit/cost analysis, should be completed prior to any improvements being implemented.

- **Estimated Cost:** $6,000,000
- **Anticipated Funding Timeframe:** 2029 - 2033
- **Proposed Funding Source:** STPU, CMAQ

R-3: 1st & 2nd Avenues South – 9th St S to 15th St S

It is recommended that the pavement on 1st Avenue South and 2nd Avenue South between 9th Street South and 15th Street South be overlaid with new asphalt. During the pavement preservation project bike lanes could also be included on both arterials as recommended in the visionary non-motorized network.

- **Estimated Cost:** $4,500,000
- **Anticipated Funding Timeframe:** 2029 - 2033
- **Proposed Funding Source:** CITY

R-4. 36th Avenue NE Traffic Calming

This recommendation is a combination of the improvements noted in the 2018 LRTP and the 2022 *North Great Falls Sub-Area Transportation Study*. Until a future project north of Great Falls can be completed to establish a grid street network in the newly developing areas, 36th Avenue NE will continue to encounter the effects of increasing traffic, higher travel speeds, and peak travel demands. Due to the wide width of the roadway and the aforementioned concerns, traffic calming along the route is recommended. The purpose of the traffic calming is to slow travel speeds by giving the appearance of "pinch-points", and to increase the visibility of pedestrians in the area. Curb bulb-outs placed at the major north-south routes that intersect 36th Avenue NE should be considered, and an evaluation of stop sign control warrants should periodically be made. The likely candidates for curb bulb-outs on 36th Avenue NE include the following intersections: 2nd Street NE; 4th Street NE; 7th Street NE; and 9th Street NE. Corridor lighting as well as a bike boulevard with sharrows and bike route signing are also recommended within this corridor.

- **Estimated Cost:** $880,000
- **Anticipated Funding Timeframe:** 2029 - 2033
- **Proposed Funding Source:** CITY

R-5: 10th Ave S / 54th St S

The 10th Avenue South / 54th Street South intersection was ranked in the top 5 percent of intersection safety scores with a total of 22 crashes occurring at the intersection in the five-year crash analysis period. All of those crashes occurred since Walmart opened and about 25 percent of the crashes involved northbound left-turning vehicles. Intersection safety improvements, such as limiting turning movements to right-in/right-out only via raised center medians, are recommended.

- **Estimated Cost:** $77,000
- **Anticipated Funding Timeframe:** 2029 - 2033
- **Proposed Funding Source:** HSIP

R-6: 2nd Ave N / 38th St N

A Traffic Impact Study was recently completed for an apartment complex located at the north-east quadrant of the intersection of 2nd Avenue North and 38th Street North. The study found that the 2nd Avenue North and 38th Street North intersection would experience unacceptable delays as a result of increased traffic growth from construction of the complex. Accordingly, the study recommends installation of dedicated northbound and southbound left-turn lanes on 38th Street North with signal modifications as necessary.

- **Estimated Cost:** $710,000
- **Anticipated Funding Timeframe:** 2029 - 2033
- **Proposed Funding Source:** STPU, CMAQ, PRIVATE

R-7: 10th Avenue South Signal Improvements (20th St S & 23rd St S)

MDT recently completed a Signal Timing Study at two major intersections on 10th Avenue South (20th Street South and 23rd Street South). The study recommended reconstructing the intersections to include dedicated left-turn bays. Modifications to the signal timing would also be required to provide dedicated left-turn phasing at the intersection.

- **Estimated Cost:** $3,000,000
- **Anticipated Funding Timeframe:** 2029 - 2033
- **Proposed Funding Source:** NH, CMAQ
-

R-8. River Dr N / 25th St N Intersection Improvements

This project was originally identified in the 2016 *River Drive Corridor Study* and was carried forward as a recommendation for the 2018 LRTP. The previous LRTP recommendation included reconstruction of the River Drive North segment between 15th Street and 25th Street North to include one travel lane in each direction, center left-turn lane (where appropriate), and non-motorized accommodations in addition to reconstruction of the River Drive North / 25th Street North intersection. However, changed community priorities and environmental constraints have lessened the desire for a three-lane arterial through this constrained section of River Drive. Accordingly, this recommendation now focuses solely on the reconstruction of the intersection with 25th Street North. The intersection is currently operating at a failing LOS during the peak hours and is expected to continue experiencing degraded LOS. The intersection also has a history of crash trends and a moderately high safety score (30.1) due to high frequencies of crashes with moderate severities. A traffic signal and single lane roundabout are potential options to be explored further for improving the intersection. Improvements should consider accommodations for large trucks which frequently pass through the intersection.

- **Estimated Cost:** $6,700,000
- **Anticipated Funding Timeframe:** 2029 - 2033
- **Proposed Funding Source:** NH, MACI

R-9: Flood Road Curve Warning

Approximately between Red Barn Road and River Bend Drive, Flood Road is a narrow, winding roadway. The roadway segment ranked in the top 2.5% of safety scores as the result of four fixed object, run off the road crashes along the curves (1 fatality). To improve safety, it is recommended to install enhanced curve warning signage such as flashing LED curve ahead signs and/or flashing LED chevrons to alert drivers to the changed roadway condition.

- **Estimated Cost:** $9,000
- **Anticipated Funding Timeframe:** 2029 - 2033
- **Proposed Funding Source:** CITY, HSIP

R-10: Lower Sun River Road Curve Warning

West of Sun View Lane, Sun River Road follows a series of horizontal curves. The roadway segment received the highest crash rate safety scores as the result of six run off the road crashes related to the curves (5 fixed object, 1 rollover). To improve safety, it is recommended to install enhanced curve warning signage such as curve ahead signs and a series of chevrons along the curves.

- **Estimated Cost:** $4,000
- **Anticipated Funding Timeframe:** 2029 - 2033
- **Proposed Funding Source:** CITY, HSIP

R-11: Skyline Drive NW/NE Corridor Improvements

This project was recommended in the 2022 *North Great Falls Sub-Area Transportation Study*. As development occurs in the north Great Falls area, Skyline Drive is encountering the effects of increasing traffic, higher travel speeds, and peak travel demands. Intersection crash rates, particularly those involving injuries, are high along Skyline Drive due to a higher number of right-angle crashes. Additionally, the corridor follows the spine of a ridge, resulting in steep approach grades with limited sight distance on the side street approaches. Due to the aforementioned concerns, traffic calming measures and increased traffic control are recommended along the route. Consideration of curb bulb-outs and an evaluation of stop sign control warrants are recommended at the 5th Street NE and 2nd Street NE intersections. Corridor lighting as well as a bike boulevard with sharrows and bike route signing are also recommended within this corridor.

- **Estimated Cost:** $1,500,000
- **Anticipated Funding Timeframe:** 2029 - 2033
- **Proposed Funding Source:** CITY

R-12: Smelter Ave / 6th St NW

The Smelter Avenue and 6th Street NW intersection is currently configured as a two-way stop-controlled intersection with stop signs on the north and south legs (6th Street NW). Over the five-year crash analysis period, 15 crashes occurred at the intersection. The crashes primarily involved distracted/inattentive driving, failure to yield, and drivers running the stop signs. To address these safety concerns, it is recommended that an intersection traffic study be performed to identify priority movements through the intersection and determine whether the two-way stop control should be switched, or if all-way stop control may be needed. Advance warning signs could also be considered to alert drivers to the approaching intersection.

- **Estimated Cost:** $25,000
- **Anticipated Funding Timeframe:** 2029 - 2033
- **Proposed Funding Source:** CITY

R-13: Skyline Dr NE / 9th St NE / 32nd Ave NE

Skyline Drive bisects the gridded network at this intersection creating a large, awkward, and ill-defined ‘double intersection’. Neighbors cite speeding issues through the intersection and past pavement markings are worn/not visible. In the short-term, pavement markings, pin down curb, and signage could be used to better define the intersection. A modern roundabout could be considered as part of future, long-term

improvements (see **O-1**). Restricting turning movements on adjoining legs could also help improve operations and safety through the intersection.

- **Estimated Cost:** $32,000
- **Anticipated Funding Timeframe:** 2029 - 2033
- **Proposed Funding Source:** CITY

R-14. 11th Avenue S Traffic Calming

It is recommended to provide aggressive traffic calming on 11th Avenue South, between 26th Street South and 32nd Street South, to heighten pedestrian visibility and slow traffic down. Traffic calming may include a combination of curb bulb-outs, enhanced pedestrian crossings, and/or raised speed tables at the major intersections. 11th Avenue South is also recommended as a bike boulevard with sharrows and signing.

- **Estimated Cost:** $640,000
- **Anticipated Funding Timeframe:** 2029 - 2033
- **Proposed Funding Source:** CITY

R-15: North Great Falls Geometric Intersection Improvements

These intersection improvement projects were recommended in the 2022 *North Great Falls Sub-Area Transportation Study*. The Division Road / 30th Avenue NE and Division Road / Skyline Drive intersections are large, misaligned, and minimal traffic control. The intersection skews and steep roadway grades contribute to poor sight distance and high downhill travel speeds. Modified traffic control and improved intersection geometrics are recommended to improve safety at these intersections. In the short-term, stop signs could be installed on the south approach for the Skyline Drive intersection and in place of the yield sign on the east approach of 30th Avenue NE. In the longer term, these intersections would benefit from the installation of mini-roundabouts or other traffic control/geometric improvements to reduce the intersection width. To minimize costs, striping and pin down curbing could be used. The cost estimate used for fiscal constraint purposes is reflective of the smaller scale improvements as an initial implementation step to determine the viability and need for longer-term, more permanent improvements.

Similar safety concerns exist at the 33rd Avenue NE / 7th Street NE. Depending on the success of improvements at the Division Road intersections, similar improvements could also be installed at the 33rd Avenue NE / 7th Street NE intersection.

- **Estimated Cost:** $31,000
- **Anticipated Funding Timeframe:** 2029 - 2033
- **Proposed Funding Source:** CITY

R-16. Park Drive – 8th Ave N to 2nd Ave N

This narrow roadway parallels Gibson Park and there are concerns for safe pedestrian crossing across Park Drive. To bring the roadway up to current standards, it is recommended that the curb lines be reconstructed, and sidewalk be repaired along its length. This segment of Park Drive is designated as an urban minor arterial, however, due to the volume of pedestrian traffic in the area, a context sensitive design should be pursued. Potential pedestrian improvements should be included in the project, including additional marked crosswalks across Park Drive

and possible curb bulbouts to reduce crossing distances and better connect the neighborhoods to Gibson Park. Particular focus should also be given to the intersection of Park Drive/6th Street North/8th Avenue North for a more standard intersection design that may better define the use in the intersection. In addition to the standard treatments, a modern "roundabout" should be evaluated at this location. Ample right-of-way appears to be available to accommodate a roundabout configuration.

- **Estimated Cost:** $9,200,000
- **Anticipated Funding Timeframe:** 2034 – 2039
- **Proposed Funding Source:** STPU, CMAQ, MACI

R-17. 25th Avenue NE – Old Havre Hwy to 15th St N

A past MDT Traffic Control Study recommended several improvements along 25th Avenue NE to improve safety and operational characteristics at the intersection. Most of the safety recommendations have been completed, though additional recommended improvements remain. Primarily, the corridor is currently a five-lane typical section but is recommended to be restriped as a three-lane roadway with a widened sidewalk/shared use path on the north side with standard sidewalks on the south side. Additional intersection operational improvements at the Old Havre Highway and 15th Street North intersections may also be needed especially after the three-lane section is complete.

- **Estimated Cost:** $3,300,000
- **Anticipated Funding Timeframe:** 2034 – 2039
- **Proposed Funding Source:** STPU, CRP, NH

R-18. Fox Farm Road – Alder Dr to Park Garden Rd

It is recommended to re-stripe this roadway to a four-lane facility to accommodate existing traffic volumes, as well as projected future traffic volumes. It is recommended to remove on-street parking within this stretch of roadway. A parking lot to serve the adjacent Meadowlark Elementary School and Montana Park could be built west of the road to mitigate loss of on-street parking, if desired. Consider modifications to school circulation patterns to encourage alternate routes to the school (i.e. Flood Road) to improve congestion and safety. Additional corridor safety improvements such as pedestrian crossings, speed control, access management, or improvements to school pick-up/drop-off facilities could also be considered. Better definition of the widened sidewalk on Fox Farm Road between Alder Drive and 18th Avenue SW, in addition to an improved non-motorized crossing and bike lanes between 18th Avenue SW and Park Garden Road are recommended within the corridor.

- **Estimated Cost:** $820,000
- **Anticipated Funding Timeframe:** 2034 – 2039
- **Proposed Funding Source:** STPU

R-19. Fox Farm Intersection Improvements

This project was identified in the 2015 *I-15 Corridor Planning Study* and was carried forward as a recommendation for the 2018 LRTP. The Fox Farm intersection refers to the four-way, signalized intersection of 10th Avenue South and Fox Farm Road. The intersection currently operates at LOS D during peak hours and is projected to experience a failing LOS in future years. Since the 2018 LRTP was completed, the

eastbound left-turn bay was lengthened by approximately 600 feet to increase vehicle storage. While lengthening the turn bay improved storage for left-turning vehicles, the overall delay of the intersection remains high.

The northbound approach leg consists of a shared left-turn/through, dedicated through, and dedicated right-turn lane. Because of this configuration, the existing signal timing is split-phased in the northbound and southbound directions. Split-phased signal timing can result in inefficiencies for traffic movements. Ultimately, it would be desirable to provide a dedicated northbound left-turn lane so that the signal timing could be modified to increase efficiency. However, existing development constrains the width of the northbound approach leg.

In the interim, the delay of the intersection could be reduced by installing dual left-turn lanes along the eastbound approach leg. This configuration could be achieved by narrowing (or removing) the existing median separating the left-turn and through lanes on the eastbound approach leg.

- **Estimated Cost:** $250,000
- **Anticipated Funding Timeframe:** 2034 – 2039
- **Proposed Funding Source:** CMAQ

R-20. 25th Street S – 10th Ave S to 11th Ave S

Modify this one-block segment of 25th Street South to one-way in the southbound direction. The benefit of this is that traffic will be removed from the congested turning movements on 10th Avenue South, between 25th and 26th Streets. By modifying the one-block segment, the lane use on 25th Street South, just north of 10th Avenue South, can be modified to a southbound right-turn lane, a combination thru/left-turn lane, and a designated left turn lane. This will likely remove pressure on the eastbound right-turning movement at 10th Avenue South / 26th Street South, and free up more signal time for northbound traffic on 26th Street South. Before proceeding with this project as envisioned, a detailed traffic engineering study will be necessary to document operational benefits, costs, and other potential impacts.

- **Estimated Cost:** $45,000
- **Anticipated Funding Timeframe:** 2034 – 2039
- **Proposed Funding Source:** CMAQ

R-21: 15th Street Bridge Improvements

The 15th Street Bridge is in need of improvements to address deteriorating conditions and age. The bridge is 52 years old and has known structural issues and width constraints. The structure carries high traffic volumes and is a key arterial crossing of the Missouri River in the Great Falls area. The bridge is a candidate for rehabilitation and preservation or possible replacement. For planning purposes, the full cost of replacement was considered for the fiscal constraint component of the LRTP to help facilitate the reconstruction of the River Drive / 15th Street intersection (**R-27**). The MPO will continue to work with MDT to determine the best course of action for keeping this bridge in a state of good repair and open to the public.

- **Estimated Cost:** $70,900,000
- **Anticipated Funding Timeframe:** 2040 – 2045
- **Proposed Funding Source:** NH, NHFP, BR

R-22: Warden Bridge Improvements

The Eastbound Warden Bridge (10th Avenue South) is in need of improvements to address deteriorating conditions and age. The bridge is 62 years old and has known structural issues. Like the 15th Street Bridge, this structure carries high traffic volumes and is a critical Missouri River crossing. The bridge is a candidate for rehabilitation and preservation or possible replacement. For planning purposes, the full cost of replacement has been considered for the fiscal constraint component of the LRTP. The MPO will continue to work with MDT to determine the best course of action for keeping this bridge in a state of good repair and open to the public.

- **Estimated Cost:** $54,300,000
- **Anticipated Funding Timeframe:** 2040 – 2045
- **Proposed Funding Source:** NH, NHFP, BR

R-23. 25th Street N – River Dr to 2nd Ave N

Reconstruct to a minor arterial street standard. The roadway currently exhibits a mixture of urban and rural road characteristics – i.e. curb and gutter, sidewalk, lighting, etc. It is desirable to reconstruct the road to an urban minor arterial to accommodate increasing traffic, provide better non-motorized facilities and connectivity, and plan for the varied uses in the area (Centene Park, Pasta Montana, General Mills, etc.). Bike lanes are recommended in this segment between 8th Avenue North and 2nd Avenue North.

A TA project was recently completed to construct an adjacent pedestrian bridge over the railroad tracks. It is anticipated that the railroad overpass in this segment could remain in place during reconstruction. The intersection of 25th Street North and River Drive North should be reconstructed with consideration for either traffic signalization or a modern roundabout, as described in **R-9**.

- **Estimated Cost:** $13,400,000
- **Anticipated Funding Timeframe:** 2040 – 2045
- **Proposed Funding Source:** STPU, HSIP, CITY

R-24. 15th Avenue S – 30th St S to 32nd St S

Extend 15th Avenue South from its current termini (near the theoretical extension of 31st Street South) eastward to connect to 14th Avenue South, at 32nd Street South. This segment should be built to a collector standard to match existing roadway geometrics. A bike boulevard is recommended along 15th Avenue South from 26th Street S to 39th Street South.

- **Estimated Cost:** $1,600,000
- **Anticipated Funding Timeframe:** 2040 – 2045
- **Proposed Funding Source:** CITY

R-25. 10th Avenue S – 26th St S to 32nd St S

There are both existing and future capacity concerns on this roadway due to increasing traffic volumes. It is recommended to widen 10th Avenue South to a six-lane principal arterial standard between 26th Street South and 39th Street South, including sidewalks (8 feet adjacent to principal arterials). Expansion to a six-lane facility will match the roadway section west of 26th Street South.

- **Estimated Cost:** $22,000,000

- **Anticipated Funding Timeframe:** 2040 – 2045
- **Proposed Funding Source:** NH, NHFP

R-26: 15th Street NE / River Drive N

This intersection operates near capacity with lengthy delays. Additional turn bays, travel lanes, and modified signal phasing could help improve capacity and intersection operations, however, intersection improvements are constrained by the width of the 15th Street bridge. If the bridge is ever replaced (see **R-22**), reconstruct the intersection to add a dedicated left-turn bay on the southbound leg and a second through lane on the westbound leg. For the purposes of fiscal constraint, the cost estimate for this project assumes that the 15th Street bridge will be replaced with a wider bridge, allowing for reconstruction of this intersection.

- **Estimated Cost:** $2,300,000
- **Anticipated Funding Timeframe:** 2040 – 2045
- **Proposed Funding Source:** NH, CMAQ

R-27: 24th Avenue S – 3 A St S to Terminus

Pave the portion of 24th Avenue South between 3 A Street South and its eastern terminus to match the paved section to the west. Continuation of the local roadway standard is applicable for this roadway.

- **Estimated Cost:** $550,000
- **Anticipated Funding Timeframe:** 2040 – 2045
- **Proposed Funding Source:** CITY

TOTAL RECOMMENDED PROJECTS (2025 – 2045) = $206,373,000

2.2.4. Illustrative (Unfunded) Projects

High construction costs paired with constrained funding sources means system deficiencies and needs are often not fundable in the foreseeable future. However, funding opportunities often arise over time from unexpected sources, such as competitive grant programs or private funding sources. To be prepared to take advantage of such opportunities, the following list of projects is provided, with no identified funding source or schedule for construction/implementation. While the project costs have been estimated (**Appendix B**), they are presented in a 2045 year-of-expenditure, using a 3% yearly inflation rate. Such projects are included for illustration purposes only and are not considered to be applicable components of the fiscal constraint requirements of the LRTP. However, it is likely that some of them will become funded at some point during the 20-year planning horizon even though no funding source is currently identified.

I-1. 6th Street NW – Smelter Ave to Vinyard Rd

This roadway is currently very narrow and lacks shoulders. Poor sight distance is noted in some locations along the roadway. Reconstruct to a minor arterial standard with urban roadway features (such as curb & gutter, lighting, sidewalks, etc.). Consider extension north of Skyline Drive to Vinyard Road to accommodate new development in this area of the city. Bike lanes are recommended between Smelter Avenue and 36th Avenue NE.

- **Estimated Cost:** $25,800,000
- **Possible Funding Source:** CITY

I-2: 2nd Avenue N – 38th St N to 57th St N

This segment of 2nd Avenue North is located on the edge of the city boundary and is therefore designed to rural standards (i.e., lacks curb and gutter, sidewalks, etc.). The segment scored in the top 2.5 percent of segment safety scores. Out of the 6 segment-based crashes that occurred in the corridor over the five-year crash analysis period, one pedestrian fatality and several wild animal crashes occurred. As development occurs in the corridor and the area is annexed into the city, it is recommended that curb, gutter, and sidewalks be installed along the segment.

- **Estimated Cost:** $10,600,000
- **Possible Funding Source:** CITY, PRIVATE

I-3. 38th Street N/S – 10th Ave N to River Dr N

Narrow width and increased traffic, as well as truck traffic, suggests this segment would function better as an urban arterial. It is the only segment on the 38th Street North corridor that is not constructed to an urban standard. It is recommended that this roadway be reconstructed to an urban minor arterial standard with bike lanes.

- **Estimated Cost:** $6,400,000
- **Possible Funding Source:** STPU

I-4: Lower River Road Reconstruction

Reconstruct Lower River Road including bank stabilization and river wall improvements along the banks of the Missouri River.

- **Estimated Cost:** $5,600,000
- **Possible Funding Source:** STPU, COUNTY

I-5. 26th Street N – 8th Ave N to 2nd Ave N

Noted concerns on this roadway include limited capacity; narrow roadway facility; and lack of consistent pedestrian facilities. The roadway also exhibits a mixture of urban and rural road characteristics – i.e. curb and gutter, sidewalk, lighting – but is fully within the urban area. It is desirable to reconstruct the road to an urban minor arterial to accommodate increasing traffic, provide better non-motorized facilities and connectivity, and plan for the varied uses in the area. Bike lanes are recommended along this segment.

- **Estimated Cost:** $8,200,000
- **Possible Funding Source:** STPU

I-6. 36th Avenue NE – 1st St NE to 6th St NW

Extend 36th Avenue NE from its present termini (~350 feet west of 1st Street NE) to the intersection with 6th Street NW. Completion of this segment will allow traffic to better distribute throughout the surrounding neighborhoods. This link can only be accomplished with the help of willing landowners upon which the route would be considered. This segment should be built to an urban collector standard and match existing roadway geometrics. A bike boulevard is recommended along the length of 36th Avenue NE.

- **Estimated Cost:** $7,800,000
- **Possible Funding Source:** CITY, PRIVATE

I-7. Vaughn Frontage Road – LRTP Boundary to I-15

Reconstruct Vaughn Frontage Road to a rural, minor arterial standard between the I-15 westbound ramps and the approximate LRTP boundary. A three-lane typical section is envisioned. The narrow roadway currently experiences a volume-to-capacity (V/C) ratio of 0.69 with a projected V/C of 0.86. Due to the surrounding industrial land uses in the corridor, there is also a moderate presence of heavy truck traffic. The influence of a potential "full movement" interchange (see **O-6**) may necessitate evaluating both projects (i.e. **I-6** and **I-7**) in tandem to determine potential impacts and project limits.

- **Estimated Cost:** $12,400,000
- **Possible Funding Source:** STPX

I-8. Vaughn Road – I-15 to Central Ave W

Reconstruct Vaughn Road to an urban, principal arterial street standard between Central Avenue West and the I-15 westbound ramps. A three-lane typical section is envisioned. Similar to the Vaughn Frontage Road, the narrow roadway is approaching capacity and has a moderate presence of heavy truck traffic. The influence of a potential "full movement" interchange (see **O-6**) may necessitate evaluating both projects (i.e. **I-6** and **I-7**) in tandem to determine potential impacts and project limits.

- **Estimated Cost:** $47,400,000
- **Possible Funding Source:** NH, STPU

I-9. 17th Avenue S – 7th St S to 13th St S

This facility has limited capacity and does not fit within the context of the community. It is recommended that this roadway be reconstructed to collector street standards. Note that 17th Ave S from 9th St S to 13th St S is an urban route and a local route from 7th St S to 9th St S. Bike lanes are recommended along the length of this segment.

- **Estimated Cost:** $7,600,000
- **Possible Funding Source:** STPU, CITY

I-10. 43rd Avenue NE – Bootlegger Trail and US 87

Construct a new roadway segment along the theoretical alignment of 43rd Avenue NE, between Bootlegger Trail (western termini) and US 87 (eastern termini). This route should be built to a minor arterial standard with limited access control and can only be accomplished with the help of willing landowners upon which the route would be considered.

- **Estimated Cost:** $5,900,000
- **Possible Funding Source:** CITY, PRIVATE

I-11. 43rd Avenue NE – Bootlegger Trail to 6th St NW/Vinyard Rd

Construct a new roadway along the theoretical alignment of 43rd Avenue NE, between Bootlegger Trail (eastern termini) and 6th Street NW (western termini). For connectivity purposes, it is recommended that the western end of the route extend northward to facilitate a connection to 6th Street NW at Vinyard Road. This route should be built to a minor arterial standard with limited access control and can only be accomplished with the help of willing landowners upon which the route would be considered. This could occur during individual property development phases, or all at once. As development leap frogs to the north of Great Falls, a new east-west collector route will be necessary to distribute traffic from local, neighborhood roads to area arterials.

- **Estimated Cost:** $38,100,000
- **Possible Funding Source:** CITY, PRIVATE

I-12. River Drive – 3rd Ave S to 1st Ave N

This roadway is narrow with several curves and is approaching capacity under existing conditions. It is recommended to reconstruct this segment to urban minor arterial standards in conjunction with intersection improvements at the intersection of 1st Avenue North and River Drive. Perform signal warrant analysis at the intersection of River Drive and 3rd Avenue South periodically as development infill occurs (see **O-3**). This corridor is extremely important to the users of the River's Edge Trail and to connecting downtown with the riverfront and hotels on the riverfront with downtown. It has also been suggested in the past that the access to the Broadwater Bay Park, across from the Applebee's Restaurant, be closed to improve traffic flow in the area. Also, access control along the corridor should be reviewed periodically, as more development occurs to the south of 3rd Avenue South.

- **Estimated Cost:** $10,400,000
- **Possible Funding Source:** STPU

I-13. River Drive N – 25th St N to 38th St N

This segment of River Drive North consists of limited access points, higher speeds, and lower traffic volumes than the adjacent segment to the west. Reconstruction is envisioned to consist of one travel lane in each direction with a center left-turn lane (where appropriate). Reconstruction would improve safety and operations by removing turning vehicles from the traffic stream and improving roadway geometrics.

- **Estimated Cost:** $26,800,000
- **Possible Funding Source:** NH

I-14: 3rd Avenue S – East of 57th St

This facility lacks curb, gutter, and sidewalks. Upgrade to urban local standards as adjacent development occurs.

- **Estimated Cost:** $7,500,000
- **Possible Funding Source:** CITY, PRIVATE

I-15: 9th Street NW/Smelter Avenue NW – Ave E NW to 6th St NW

This facility lacks shoulders and does not fit within the context of the community. Existing curb, gutter, and sidewalks terminate at Avenue E NW. Reconstruct to an urban collector street standard.

- **Estimated Cost:** $3,000,000
- **Possible Funding Source:** CITY, PRIVATE

I-16: Skyline Drive NW – 6th St NW to Improved Section

Upgrade the portion of Skyline Drive NW east of 6th Street NW to match the remainder of the improved corridor. Continuation of the urban, collector typical section with curb, gutter, and sidewalks is applicable for this roadway. A bike boulevard is also recommended along this section. These upgrades should occur in coordination with development along the corridor.

- **Estimated Cost:** $2,300,000
- **Possible Funding Source:** CITY, PRIVATE

I-17: 26th Street S – 24th Ave S to 33rd Ave S

This project includes two projects within the County that are grouped together due to their proximity. Funding for completion of these projects rests with Cascade County solely. These projects are as follows:

26th Street S - 24th Ave S to 33rd Ave S): This roadway exhibits rural roadway characteristics and has an extremely abrupt shoulder edge in many spots along this corridor. At a minimum, it is recommended to rebuild the shoulders in spot areas to flatten the fill slopes to benefit roadway safety and potential “run-off-the-road” vehicles. This project primarily relates to the east side of the roadway. Full reconstruction to include shoulders and flattened fill slopes is recommended if funding allows.

26th Street South and 33rd Avenue South: Since completion of the 2018 LRTP, stop control was installed at this intersection on the north and south legs (26th Street South). However, sight distance at the intersection is still limited and modifications to the approach grade on all legs are recommended to improve safety.

- **Estimated Cost:** $570,000
- **Anticipated Funding Timeframe:** 2040 – 2045
- **Proposed Funding Source:** COUNTY

I-18. 67th Street N – Giant Springs Rd to 18th Ave N

Reconstruct portion of 67th Street North to paved roadway to match Giant Springs Road to the west. Continuation of the rural, local roadway section is applicable for this roadway. A shared use path is also recommended along this section to connect the River's Edge Trail to the existing and planned bicycle network.

- **Estimated Cost:** $6,150,000
- **Possible Funding Source:** CITY

I-19. 20th Street S – 18th Alley S to 20th Ave S

Complete the extension of 20th Street South from its current terminus at the alley between 17th Avenue South and 18th Avenue South to 20th Avenue South. Build to a collector standard to match existing roadway geometrics of adjoining sections of 20th Street South. This can only be accomplished with the help of willing landowners upon which the route would be considered. This extension would require the acquisition of a private parcel with several outbuildings in the vicinity of 18th Avenue South.

- **Estimated Cost:** $3,000,000
- **Possible Funding Source:** CITY

I-20: 52nd Street N – 7th Ave N to 10th Ave N

Pave the portion of 52nd Street North between 7th Avenue North and 10th Avenue North to match the paved section to the south. Continuation of the urban, local roadway section with curb, gutter, and sidewalks is applicable for this roadway. A bike boulevard is also recommended along this section.

- **Estimated Cost:** $3,800,000
- **Possible Funding Source:** CITY

I-21. Central Avenue W – 20th St NW to 27th St NW

This facility lacks shoulders and does not fit within the context of the community. Existing curb, gutter, and sidewalks terminate at 20th St SW just west of the Central Ave W / I-15 interchange. It is recommended that this roadway be reconstructed to urban collector street standards.

- **Estimated Cost:** $11,400,000
- **Possible Funding Source:** STPU

I-22. Upper River Road – Overlook Dr to 19th Ave S

This facility lacks shoulders and does not fit within the context of the community. Existing curb, gutter, and pedestrian facilities terminate at Overlook Drive. Reconstruct to an urban collector street standard.

- **Estimated Cost:** $11,500,000
- **Possible Funding Source:** CITY

I-23: 13th Avenue S – 57th St to Terminus

Extend 13th Avenue South from its eastern terminus to 57th Street South. This route should be built to urban, local street standards as right-of-way is acquired when development occurs. This connection can only be accomplished with the help of willing landowners upon which the route would be considered and could occur during individual property development phases, or all at once. As development continues to occur in the southeast part of Great Falls, a new east-west collector route will be necessary to distribute traffic from local, neighborhood roads to major arterials.

- **Estimated Cost:** $9,800,000
- **Possible Funding Source:** CITY, PRIVATE

I-24. 13th Street S – 31st Ave S to 40th Ave S

13th Street South is a minor arterial on the urban highway system. To match the roadway designation, it is recommended to reconstruct the corridor to urban minor arterial standards from the end of the current urban section (31st Avenue South) to 40th Avenue South. A recent fatality at the intersection of 13th Street South and 40th Avenue South, outside the LRTP crash investigation timeframe, has also prompted the desire for safety improvements at the intersection. Potential improvements could include realignment of the 40th Avenue South approach leg and advanced warning signage.

- **Estimated Cost:** $11,300,000
- **Possible Funding Source:** STPU

I-25. Flood Road – Park Garden Rd to Dick Rd

This roadway has limited capacity, is very narrow, and is expected to see traffic increases. It is recommended that this roadway be reconstructed to a collector street standard.

- **Estimated Cost:** $20,800,000
- **Possible Funding Source:** COUNTY, CITY

I-26. Wilson Butte Road / 55th Avenue S / Eden Road / Lower River Road

It is recommended that this intersection be reconfigured with a modern roundabout to better define geometrics and control turning movements through the intersection.

- **Estimated Cost:** $4,500,000
- **Possible Funding Source:** STPU, STPX

I-27. River Drive (15th St to 25th St)

This project was identified in the 2016 *River Drive Corridor Study*. This segment of River Drive North consists of multiple access points, businesses and a residential development on the south side of the roadway, and the River's Edge Trail on the north side. This area is constrained by terrain to the north and by the businesses to the south. Currently, parking occurs within the River Drive North right-of-way in undesignated areas though there are no parking leases in place between land owners and MDT which would allow parking within the right-of-way. An evaluation of parking provisions should occur during project development.

Reconstruction of this segment is envisioned to consist of one travel lane in each direction, center left-turn lane (where appropriate), and non-motorized accommodations. Reconstruction would serve to improve safety and operations by removing turning vehicles from the traffic stream, improving roadway geometrics, and accommodating non-motorized users. The opportunity to expand the roadway is limited by terrain constraints west of 25th Street North. Near the business district, steep slopes exist to the north; near the Big Stack Mobile Home Court, steep slopes exist on both sides of the roadway.

- **Estimated Cost:** $21,400,000
- **Possible Funding Source:** NH, MACI

TOTAL ILLUSTRATIVE PROJECTS (Beyond 2045) = $330,020,000

2.2.5. Other Projects

As noted previously, LRTPs typically do not include planning-level studies as fiscally constrained projects due to nuances in how funds are allocated and tracked. Consequently, all of the recommended planning and feasibility studies have been categorized as "Other" projects and are not considered in the fiscal constraint component of the plan. Planning studies are often needed to help diagnose issues and develop solutions. Many times, the operational and safety issues at certain locations are very complex and require much more investigation than can be done within the constraints of a regional planning process such as the LRTP.

Additionally, the city should conduct periodic studies to monitor the status of problem areas to determine if changes are warranted. These types of studies include intersection operational studies and speed studies in areas where there are known issues, but conditions do not currently meet warrants for changes. As the area grows and develops, warrants may be met over time and these intersections/corridors should continue to be monitored.

Seven planning-level studies have been recommended to investigate problem areas in greater detail to confirm warrants and identify solutions that will be feasible to implement and supported by the community. These projects are expected to be funded with general city funds or federal planning funds over the 20-year planning horizon of the LRTP. Estimated planning costs are presented in 2024 dollars with no inflationary factors applied.

O-1: 8th Street NE/9th Street NE – Smelter Ave to 36th Ave NE

This segment of 8th Street NE/9th Street NE scored in the top 2.5 percent of safety scores in the Great Falls area. A total of 6 bicycle and pedestrian crashes also occurred in the segment. The corridor passes by Walmart, North Middle School and Riverside/Sacajawea Park and is along an established transit route. The route is used locally as a cut-through route to avoid Old Havre Highway for residential access. Towards the southern end of the segment, volumes are beginning to approach the available capacity of the roadway contributing to congestion concerns and poor intersection LOS. The 2018 LRTP noted poor levels of service at the 8th Street NE / 25th Ave NE intersection and recommended four-way stop control at the intersection to better meter traffic, provide gaps in traffic for safety turning movements, and help facilitate pedestrian crossings. A bike boulevard is also recommended along the segment.

To best address corridor safety and operational problems, a planning study is recommended. Potential improvements to consider include:

- Install on-street bicycle facilities along corridor.
- Reduce intersection crossing distances (curb bulb outs).
- Intersection control improvements at 8th Street NE/25th Avenue NE.
- Intersection improvements at Skyline Dr NE / 9th St NE / 32nd Ave NE (see **R-14**)
- Consider enhanced pedestrian crossings (RRFBs), subject to pedestrian crossing study.

Estimated Cost: $100,000 - $125,000

O-2. Downtown Traffic Flow and Parking Study

The 2013 *Downtown Access, Circulation and Streetscape Plan* recommended modifications to downtown streets to reduce vehicle travel lanes in order to accommodate new on-street bicycle facilities. Existing streets in the downtown area provide traffic capacity in excess of that needed to adequately accommodate existing and forecasted traffic volumes and can easily be reduced to accommodate non-motorists. Prior

network modifications included reducing the typical section on the following roadways by one vehicle lane in coordination with installation of bike lanes:

- 1st Avenue South (between Park Drive and 10th Street South)
- 2nd Avenue South (between Park Drive and 7th Street South)
- 5th Street North/South (between 2nd Avenue North and 6th Avenue South)
- 6th Street North/South (between 2nd Avenue North and 5th Avenue South)

While these modifications are still relevant, changed community conditions since the 2013 plan necessitate a more holistic analysis of the downtown transportation network. A more detailed investigation into traffic flow within the downtown could be explored to understand the network impacts of converting downtown one-way streets to two-way streets. Additionally, pedestrian accommodations (such as bulbouts), and improved transit access could be incorporated into future improvements.

A Parking Utilization Study is also recommended to understand downtown parking needs and opportunities. For example, the availability and utility of angled versus parallel parking versus parking lots could be explored. Additionally, the linkage between overnight parking restrictions, downtown nightlife, and impaired driving could also be considered.

Estimated Cost: $250,000 - $300,000

O-3. Intersection Control Study

A number of intersections should be periodically monitored for increased traffic control to improve traffic operations and safety as development and projects occur around the community. Higher forms of intersection control to be considered may include all-way stop control, signalization, or roundabouts, as conditions warrant. These intersections include: 11th Avenue S / 32nd Street S; 3rd Street NW /17th Avenue NE; 10th Avenue S / 18th Street; 8th Avenue N / 38th Street N / Highwood Drive; 15th Avenue S / 26th Street S; 10th Avenue S / 29th Street S; 14th Street SW / 13th Avenue SW; 6th Street SW / 4th Avenue; and River Drive / 3rd Avenue S.

Estimated Cost: $15,000 - $35,000 per location

O-4. Speed Study

Several segments of roads may be ideal candidates for periodic speed studies. These include 57th Street in front of Loy Elementary School, 2nd Street NE near Early Learning Family Center, US 89 east of 57th Street, US 87 from Bootlegger Trail to the end of the urban boundary, 10th Avenue S between 38th Street and 44th Street.

Estimated Cost: $7,500 - $25,000 per location

O-5. Central Avenue W – 20th St SW to 1st Ave N

This recommendation has been carried forward from the 2018 LRTP, with slight modifications. Primarily, the western project corridor limits have been extended from 3rd Street Northwest to 20th Street Northwest to encompass the entire Central Avenue corridor, including the I-15 overpass. Additionally, the recommendation has been changed to a corridor study to investigate the feasibility of potential improvements. Existing traffic volumes on the corridor range from 12,000 at the west end to over 25,000 at the east end. This corridor is also an existing truck route and is therefore heavily used by trucks. Intersections along the corridor operate at LOS C and D under existing conditions with

worsening LOS as traffic volumes increase. Additionally, four intersections within this corridor were ranked in the top 2.5 percent of intersection on the high injury network: Central Avenue West / 14th Street Northwest (safety score = 43), Central Avenue West / 6th Street Northwest (safety score = 39), Central Avenue West / 3rd Street Northwest (safety score = 74), and Central Avenue West / 1st Avenue North / River Drive (safety score = 45).

Possible improvements to consider within the corridor and corresponding intersections may include re-striping, access modifications, and intersection improvements. Potential improvements are listed below, however a detailed engineering analysis, with feasible recommendations, should be completed prior to any improvements being implemented. Potential improvements include the following:

Access Modifications: Raised center medians could be installed in the segment between Vaughn Road and 3rd Street Northwest to help improve safety by limiting the number of full access turning movements.

I-15 Overpass: Consider revising the lane configuration on the overpass to accommodate pedestrian and bicycle traffic across the interstate.

Bridge Structure: The existing bridge over the Missouri River is currently striped as a four-lane facility with very wide travel lanes. The bridge is sufficient in width to re-stripe to add two more lanes – making the facility a six-lane roadway. It is recommended that this be completed to accommodate the recommendations below at the adjoining intersections.

Central Avenue W / 3rd Street NW Intersection: This intersection will require some re-configuration on the south leg to improve operations. It is recommended that the south leg be re-striped to allow for a left turn lane, a combination through and right turn lane, and an exclusive right turn lane. Retroreflective backplates and overhead lane configuration signs could be installed to improve safety.

1st Avenue N / River Drive Intersection: This intersection will require modification on the north leg (i.e. River Drive). On the southbound leg, it is desirable to widen to the west slightly and provide for an exclusive right turn lane, a shared right turn / through lane, and an exclusive left turn lane.

1st Avenue N (River Dr to Park Dr): Re-stripe this segment of roadway to a six-lane principal arterial standard. The available width on the north side of the median is 35 feet. On the south side of the median, there is 33 feet (which is striped as 3 lanes at 11 feet each). The north side of the median should be re-striped at 12 feet, 11 feet, and 12 feet. This measure would improve traffic flow characteristics during the PM peak for vehicles using the intersection of 1st Avenue North / Park Drive.

Park Drive (2nd Ave N to 1st Ave N): Re-stripe this segment of roadway to provide for a two-lane roadway on Park Drive, south of 2nd Avenue North. Also provide a right turn only lane and a combined thru / right turn lane on the north leg of the intersection of 1st Avenue North and Park Drive. A designated left turn lane will also be required on the north leg, with applicable geometric modifications to the south leg to align the respective turning movements. Consider a modern roundabout at the intersection of 2nd Avenue North / Park Drive.

Estimated Cost: $250,000 - $300,000

O-6. Emerson Junction Feasibility Study

Secure a local project sponsor to fund an operational analysis/feasibility study investigating the potential for a full access interchange at Emerson Junction. The study should be conducted by a qualified traffic engineer, of the Emerson Junction Interchange which considers state and federal regulations including the *Interstate System Access Informational Guide* and Montana Transportation Commission Policy.

Estimated Cost: $325,000 - $350,000

O-7: Smelter Ave / 3rd St NW (4th St NE – 5th St NE)

At 5th Street NE, Smelter Avenue continues west as a three-lane arterial while the four-lane arterial curves southwest and continues as 3rd Street NW. This irregular configuration makes a triangle with 4th Street NE causing congestion, confusion, and general safety concerns. Furthermore, the Smelter Avenue and 4th Street NE intersection is currently configured as a two-way stop-controlled intersection with stop signs on the north and south legs (4th Street NE). The centerlines of the north and south legs are offset by approximately 65 feet, creating a jogged intersection. Over the five-year crash analysis period, several crashes occurred at these intersections, primarily involving distracted/inattentive driving and failure to yield right of way. To address these safety concerns, it is recommended that an engineering study be conducted to identify improvements. Potential improvements to investigate for feasibility may include realignment of the minor approaches, reduced curb radii, right-in/right-out access from the minor approaches, or closure of the south leg of 4th Street NE to reduce conflicting turning movements.

Estimated Cost: $200,000 - $250,000

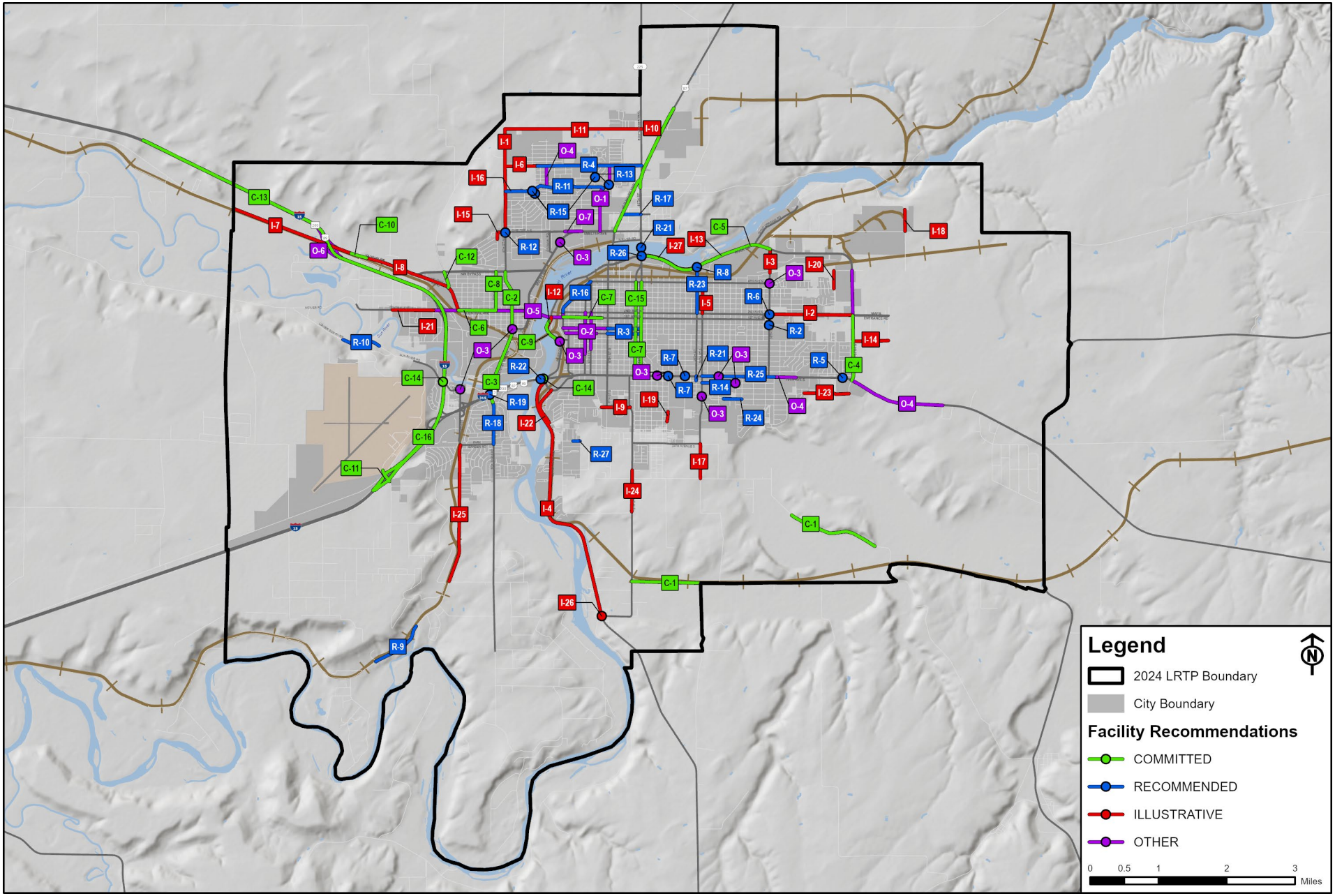

Figure 2.1: Facility Recommendations

2.3. Non-Motorized Improvements

This section presents recommendations for improving walking and bicycling in the Great Falls area based on analysis of deficiencies, crash data, public and stakeholder input, and overall opportunities and constraints in the Great Falls area. The recommendations are intended to encourage the use of sustainable transportation modes and active living by residents and visitors and accommodate a variety of ability levels with particular emphasis on establishing a well-connected pedestrian and bicycle network that is comfortable and accessible to a wider range of the population. Some improvements are specific to either pedestrians or bicycles, while others may benefit multiple transportation modes. The identified recommendations are intended to address previously identified non-motorized connectivity gaps and are meant to complement the major street network.

Estimated costs for the non-motorized recommendations are given as a range to account for differences in potential material types or complexities of implementation. It is expected that the non-motorized projects be completed in conjunction with other facility recommendations, in conjunction with future development, or as stand-alone projects as funding becomes available. Funding for the recommended non-motorized improvements will likely come from primarily local and private funding sources. For non-motorized facilities located on state facilities, some federal and state funding sources may apply. These sources include the Transportation Alternatives (TA) program, National Highway System [Non-Interstate] (NH), and Surface Transportation Block Grant Program (STP) funds, among others. At this time, no funding sources have been committed and there is no schedule for construction/implementation of the recommended projects. It is likely that many projects will become funded at some point during the planning horizon even though a current source may not be known.

Note that any non-motorized network change constructed within MDT right of way is subject to all existing MDT policies including, but not limited to, *POL 8.03.001 Shared Use Paths In MDT R/W.* The policy defines how MDT addresses requests for construction of shared use paths within MDT right-of-way including ownership, maintenance responsibility, purpose, use, and cost, among other considerations. Additionally, in cases with limited ability to increase the width of the roadway due to the built environment cautionary measures should be taken when carrying out the recommendations.

2.3.1. Shared Use Paths

Shared use paths are typically asphalt paved paths that restrict use to non-motorized travel modes. Both pedestrians and bicyclists may use these paths. Given the mixed environment, it is recommended that the paths are a minimum of 10-feet in width. These paths generally, but are not required to, run parallel to existing motorized transportation facilities. **Table 2.4** lists the shared use paths identified to provide non-motorized connections within Great Falls and planning-level cost estimates. Projects are not listed in any particular order with respect to priority. Recommended shared use path projects are shown in **Figure 2.2**.

Table 2.4: Shared Use Path Recommendations

ID	Name	Description	Length (mi)	Estimated Cost	
				LOW	HIGH
SUP-1	**West Hill Park** (1st W Hill Dr to Airport Dr)	Formalize existing goat trails from West Hill neighborhood to Airport Drive scenic viewpoint.	0.52	$377,800	$580,100

ID	Name	Description	Length (mi)	Estimated Cost	
				LOW	HIGH
SUP-2	**Warden Park** (SUP Terminus to 5th St S)	Connect Warden Park trail system to city bike network along south edge of the Great Falls Public Schools Foundation Administration Complex.	0.20	$144,400	$221,800
SUP-3	**Park Dr N/6th St N** (7th Ave N to River's Edge Trail)	Access ramps from 6th Street N to River's Edge Trail (elevated above roadway). Provide connection to Gibson Park trails.	0.13	$93,100	$143,000
SUP-4	**25th Ave N** (8th St NE to 19th St NE)	Connect North Great Falls area to Black Eagle. "Road diet" recommended between Old Havre Highway and 15th St/US 87.	0.81	$592,300	$909,300
SUP-5	**Black Eagle Ball Field & Park** (15th St NE to River Rd)	Formalize exiting trail through Black Eagle Ball Field & Park.	0.39	$284,000	$436,100
SUP-6	**BNSF Rail Trail** (16th St NE to 22nd St NE)	Connect existing path to Black Eagle around Black Eagle Ball Field and Park using former BNSF rail right-of-way.	0.28	$201,500	$309,300
SUP-7	**10th Ave N** (38th St N to 57th St N)	Connects existing path and downtown system to Air Force Base.	1.20	$875,100	$1,343,500
SUP-8	**57th St S** (2nd Ave N to 38th St N)	Provides a more comfortable route for non-motorists between River's Edge Trail and Malmstrom Air Force Base.	2.04	$1,486,300	$2,281,900
SUP-9	**57th St S** (2nd Ave N to 10th Ave S)	Provides a comfortable route from Malmstrom Air Force Base and amenities on 10th Ave S.	0.95	$693,200	$1,064,300
SUP-10	**Giant Springs Rd** (River's Edge Trail to 18th Ave N)	Connected RET to bike network. If Giant Springs Road is reconstructed, consider constructing both at the same time.	0.47	$345,500	$530,400
SUP-11	**University of Great Falls** (Admin Complex to Providence Hall)	Provides an east-west bike route in a section of the city that lacks connectivity.	0.07	$48,600	$74,600
SUP-12	**17th Ave S** (23rd St S to 29th St S)	Complete as land develops. Secure easements with plats. May be optimized as one project, or in batches.	0.52	$381,000	$584,900
SUP-13	**Lions Park** (27th St S to 29th St S)	Connects 9th Ave South bike route. Route through Lions Park, if possible with new Aquatic Center, or route bikes along perimeter of park via a bike boulevard following 27th St S / 8th Ave S / 29th St S.	0.16	$119,800	$183,900
SUP-14	**Clara Park** (Ella Ave to 47th St S)	Formalize existing goat trail.	0.18	$134,000	$205,700
SUP-15	**1st Ave SW** (12th St SW to Central Ave W)	Construct a shared use path connecting the bike boulevard on 1st Ave SW to the widened sidewalk on Central Ave over I-15 and the railroad tracks. Alternatively, if 1st Ave SW is ever reconstructed, consider continuing the bike boulevard along the reconstructed segment.	1.23	$895,000	$1,374,100
SUP-16	**Westgate Development Master Plan Pathway**	Construct a shared use path through the Calumet property as described in the Westgate Development Master Plan.	0.14	$100,100	$153,700
SUP-17	**52nd St S** (4th Ave N to 10th Ave N)	Complete when gravel road north of 7th Ave N is reconstructed.	0.26	$191,900	$294,700
		TOTAL	**9.55**	**$6,963,600**	**$10,691,300**

2.3.2. Widened Sidewalks

Widened sidewalks function in a similar manner to shared use paths and provide a separated facility for pedestrians and bicyclists. However, most widened sidewalks are located directly adjacent to the roadway, while there is typically greater separation between the roadway and shared use paths. Existing widened sidewalks range from 8 to 10 feet in width while future widened sidewalks are recommended to be a minimum of 10 feet in width. To be compliant with City Code, dedicated signage indicating the intended use for both bicyclists and pedestrians should be installed along the route. **Table 2.5** lists the recommended widened sidewalk connections and planning-level cost estimates. Projects are not listed in any particular order with respect to priority. Recommended projects are shown in **Figure 2.2**.

Table 2.5: Widened Sidewalk Recommendations

ID	Name	Description	Length (mi)	Estimated Cost	
				LOW	HIGH
WIDE-1	**14th St SW** (Flood Rd to 13th Ave S)	Replaces bike boulevard recommendation from 2018 LRTP due to high volumes on roadway.	0.75	$677,000	$979,600
WIDE-2	**6th St NW** (4th Ave SW to Central Ave W)	Completes gap in existing widened sidewalk on 6th St NW.	0.27	$240,400	$347,900
WIDE-3	**6th St NW** (NW Bypass to Smelter Ave NW)	If road is ever reconstructed, install widened sidewalk on east side to connect to existing widened sidewalk south of NW Bypass and to future connection along Smelter Ave NW. Bike lanes also recommended along this segment.	1.83	$1,645,700	$2,381,400
WIDE-4	**3rd St SW** (RET to 1st St SW)	Facilitates at-grade connection from existing/proposed bike network to RET.	0.10	$92,200	$133,400
WIDE-5	**1st St SW** (3rd St SW to Bay Dr)	Facilitates at-grade connection from existing/proposed bike network to RET.	0.09	$76,800	$111,200
WIDE-6	**Bay Dr** (1st St SW to RET/Garden Home Park)	No sidewalks on Bay Dr currently. Development proposal in progress. Facilitates connection to RET.	0.15	$130,800	$189,200
WIDE-7	**16th Ave NW** (6th St NW to 5th St NW)	Facilitates connection from 6th St NW bike lanes to CM Russel School parking lot and bus stops.	0.09	$82,300	$119,000
WIDE-8	**Smelter Ave NE** (6th St NW to Riverview Blvd)	Continue widened sidewalks on north side of roadway. Completes sidewalk gaps along several parcels in this segment.	0.31	$276,400	$400,000
WIDE-9	**3rd St NW** (17th Ave NE to 6th St NE)	Facilitate connection from River's Edge Trail to Smelter Ave widened sidewalks.	0.35	$318,300	$460,600
WIDE-10	**Smelter Ave NE** (6th St NE to 10th St N)	Continue widened sidewalks on Smelter Drive to facilitate connection to RET.	0.48	$433,800	$627,700
WIDE-11	**10th St N** (N River Rd to Smelter Ave NE)	Provide connection from River's Edge Trail to Smelter Ave widened sidewalks.	0.17	$152,400	$220,600
WIDE-12	**13th St S** (10th Ave S to 13th Ave S)	Provides connection to existing widened sidewalk on 13th Street S.	0.22	$200,900	$290,700

ID	Name	Description	Length (mi)	Estimated Cost	
				LOW	HIGH
WIDE-13	**13th St S** (21st Ave S to 24th Ave S)	Provides connection from existing widened sidewalk on 13th Street S to shared use path on 24th Avenue S.	0.22	$195,400	$282,700
WIDE-14	**26th St S** (Bobcat Way to 21st Ave S)	Completes gap in existing widened sidewalk adjacent to Central High School.	0.21	$189,800	$274,700
WIDE-15	**3rd Ave S** (38th St N to 57th St S)	Several gaps in existing sidewalks on north side of roadway. Complete gaps and replace existing sidewalks with 10' wide sidewalks to provide a more comfortable route for children at Lewis & Clark Elementary, East Middle School, and Chief Joseph Elementary School.	1.22	$1,097,600	$1,588,300
WIDE-16	**38th St N** (7th Ave N to 10th Ave N)	Complete gap in sidewalks on east side of roadway using widened sidewalk to extend existing shared use path (on west side of roadway). Consider crossing treatment at 10th Ave N.	0.23	$206,400	$298,700
WIDE-17	**Central Ave W** (20th St SW to Vaughn Rd)	Install widened sidewalk along the bridge crossing I-15 and the railroad tracks. The Central Ave/Vaughn Rd intersection may need to be reconfigured and the median on the bridge may need to be modified.	1.12	$1,009,200	$1,460,300
WIDE-18	**3rd Ave S** (Railroad to 2nd St S)	Extend widened sidewalk to connect to bike lanes on 2nd St S.	0.09	$79,100	$114,400
WIDE-19	**Park Garden Rd** (Flood Rd to Treasure State Dr)	Continue widened sidewalk along north side of Park Garden Road, connecting to bike route through the neighborhood. Provides connectivity to Market Place and Meadowlark Elementary School.	0.08	$70,600	$102,100
		TOTAL	7.99	$7,175,100	$10,382,500

2.3.3. Bicycle Boulevards

Shared lane markings, or sharrows, are stenciled markings installed as an on-street facility where bicycles share the travel lanes with motor vehicles. Typically, these facilities occur on local roadways or on roadways with low traffic volumes and speeds. Streets with low motor vehicle volumes and speeds that are prioritized for bicycle travel are known as 'Bicycle Boulevards'. Such streets ideally have speeds of less than 25 mph and volumes of less than 3,000 vehicles per day. Treatments could include reconfiguring or providing stop signs to favor bicyclists, pavement markings, wayfinding signage, and intersection treatments. The level of treatment varies between facilities and is dictated by traffic conditions and safety. Traffic calming should only be applied to bicycle boulevards where traffic speeds or volumes are deemed excessive, or where the neighborhood supports or requests such treatments. **Table 2.6** depicts recommended routes for shared lane markings.

Table 2.6: Bike Boulevard Recommendations

ID	Name	Description	Length (mi)	Estimated Cost	
				LOW	HIGH
BB-1	**Market Place Connector** (Flood Rd to Fox Farm Rd)	New east-west bike route traversing the neighborhood. Starting at Fox Farm, the route extends west on 18th Ave SW, south on 11th St SW, west on 24th	0.86	$14,500	$18,100

ID	Name	Description	Length (mi)	Estimated Cost	
				LOW	HIGH
		Ave SW, south on 12A St SW, west on 25th Ave SW, and south on 13A St SW connecting to Park Garden Rd.			
BB-2	**Sun River Rd/13th Ave SW** (4th W Hill Dr to 14th St SW)	Sign and stripe as bike boulevard for the short term to facilitate east-west connection to west side of I-15. Consider bike lanes in the long-term if the roadway is every reconstructed and if more development occurs on the west side.	0.42	$7,000	$8,800
BB-3	**13th Ave SW** (14th St SW to Widened Sidewalk Terminus)	Shared lane markings to facilitate east-west connection to west side of I-15.	0.36	$6,100	$7,600
BB-4	**20th St SW** (Central Ave W to 5th Ave SW)	Part of east-west bike route connecting across I-15.	0.47	$7,900	$9,900
BB-5	**5th Ave SW** (20th St SW to 14th St SW)	Part of east-west bike route connecting across I-15.	0.43	$7,200	$9,000
BB-6	**14th St SW** (5th Ave SW to American Ave)	Part of east-west bike route connecting across I-15.	0.17	$2,900	$3,600
BB-7	**American Ave** (14th St SW to 6th St SW)	Part of east-west bike route connecting across I-15.	0.72	$12,100	$15,100
BB-8	**10th Ave SW** (6th St SW to RET/Garden Home Park)	Street is already signed as a bike route, shared lane markings would help emphasize bicycle presence. Connects to RET.	0.84	$14,100	$17,600
BB-9	**4th Ave SW** (6th St SW to 4th St SW)	Connects existing bike boulevard/bike lane combo to the rest of the bike network.	0.16	$2,700	$3,400
BB-10	**1st Ave SW** (3rd St SW to 12th St SW)	East-west alternative to Central Ave W, connects to facilities crossing I-15.	0.95	$16,100	$20,100
BB-11	**5th Ave NW** (Watson Coulee Rd to 6th St NW)	East-west bike route connecting to ExpoPark.	0.91	$15,300	$19,100
BB-12	**17th Ave NE** (3rd St NW to RET)	Connection to River's Edge Trail for north Great Falls are neighborhoods.	0.23	$3,900	$4,900
BB-13	**Division Rd** (Smelter Ave NW to Skyline Dr NW)	Modified recommendation from past LRTPs. Due to gradients, routing up Division Road to Skyline Dr is more desirable than using Riverview Dr/2nd St NE.	0.73	$12,400	$15,500
BB-14	**Riverview Dr W** (6th St NW to 8th St NE)	Low volume route suitable for shared lane markings.	1.46	$24,700	$30,900
BB-15	**Skyline Dr NW** (6th St NW to 8th St NE)	Collector route should be signed and striped to emphasize bicycle presence. Could be installed in conjunction with traffic calming project along route.	1.47	$24,800	$31,000

ID	Name	Description	Length (mi)	Estimated Cost	
				LOW	HIGH
BB-16	**36th Ave NE** (6th St NW to 9th St NE)	Road is 44 feet wide and could support bike lanes, but due to the character of the street, shared lane markings are recommended. If 36th Ave NE extends to 6th St NW the sharrows should be added during construction. Could be installed in conjunction with traffic calming project on 36th Ave NE.	2.46	$41,700	$52,100
BB-17	**23rd/25th Ave NE** (Division Rd to 4th St NE)	Part of an east-west connection between Jaycee Park, North Middle School, and Black Eagle routing along 23rd Ave NE, 4th St NE, and 25th Ave NE.	0.92	$15,600	$19,500
BB-18	**6th St NE/Sacajawea Dr** (Smelter Ave NE to 8th St NE)	Provides connection to Sacajawea Elementary School. This will likely not be a very comfortable route regardless due to gradient and the narrowness of the unimproved road. If the road is ever reconstructed, consider bike lanes, or at least an uphill bike lane.	0.80	$13,500	$16,900
BB-19	**8th St NE/9th St NE** (Smelter Ave NE to 36th Ave NE)	Provides connection to North Middle School and North Great Falls area neighborhoods. Corridor safety study recommended.	1.06	$17,900	$22,400
BB-20	**2nd St NE** (Skyline Dr NE to 42nd Ave NE)	Enhances connectivity through developing neighborhoods.	1.04	$17,600	$22,000
BB-21	**19th St NE** (Chicago Ave/25th Ave NE to Black Eagle Ball & Field Park)	North-South spine bike route for Black Eagle. Leads to the River's Edge Trail. Wayfinding signs are important.	0.29	$4,900	$6,100
BB-22	**12th Ave N/19th St N** (15th St N to River Dr N)	Connection from bike lanes on 15th/14th Streets to River's Edge Trail.	0.39	$6,600	$8,300
BB-23	**7th Ave N** (5th St N to 52nd St N)	Low volume route provides full east-west connection across Great Falls.	3.64	$61,600	$77,000
BB-24	**4th Ave N** (Park Dr N to 52nd St N)	Street is already signed as a bike route, shared lane markings would help emphasize bicycle presence. Extend the route to 52nd St N connecting to many additional parks/trails.	3.90	$66,000	$82,500
BB-25	**2nd Ave S** (15th St S to 38th St S)	Continues east from downtown bike lanes.	1.87	$31,700	$39,600
BB-26	**5th Ave S/43rd St S** (2nd St S to 3rd Ave S)	Alternative to 4th Ave S recommendation in 2018 LRTP. Shifted to 5th Ave S to provide a continuous east-west route since Great Falls High School reconstruction blocked through traffic on 4th Ave S (18th St S to 20th St S).	3.44	$58,200	$72,800
BB-27	**9th Ave S** (2nd St S to 27th St S)	Shared lane markings as alternative to 10th Ave S.	2.04	$34,500	$43,100
BB-28	**9th Ave S/Ella Ave** (27th St S to Ella Dr)	Shared lane markings as alternative to 10th Ave S.	1.27	$21,500	$26,900
BB-29	**46th St S** (Ella Dr to 4th Ave N)	Bike Route connecting 4th Ave North to 9th Ave South.	0.98	$16,600	$20,800

ID	Name	Description	Length (mi)	Estimated Cost	
				LOW	HIGH
BB-30	**9th Ave S** (47th St S to 52nd St S)	Shared lane markings as alternative to 10th Ave S.	0.38	$6,300	$7,900
BB-31	**7th Ave S** (46th St S to 52nd St S)	East-west connection between north-south bike routes.	0.34	$5,800	$7,300
BB-32	**52nd St S** (9th Ave S to 3rd Ave S)	Recommended in past LRTPs.	0.46	$7,800	$9,800
BB-33	**52nd St S** (4th Ave N to 10th Ave N)	Complete when gravel road north of 7th Ave N is reconstructed.	0.48	$8,100	$10,100
BB-34	**36th St S/Fairway Dr** (10th Ave S to 38th St N)	Bicycle boulevard on a quieter street. Possible opportunity to implement enhancements (neighborhood greenway/filtered permeability). Will need wayfinding on the north side of the route (Fairway Dr) to reach the shared use path.	1.65	$27,900	$34,900
BB-35	**32nd St S** (Central Ave to 8th Ave N)	Extension of bike lanes south of Central Ave. Traffic volumes drop considerably north of Central Ave, shared lane markings would be adequate.	0.61	$10,300	$12,900
BB-36	**29th St S** (10th Ave S to 8th Ave N)	Provides another north-south connection in densely populated area of Great Falls.	1.37	$23,100	$28,900
BB-37	**23rd St S** (10th Ave S to 8th Ave N)	Provides another north-south connection in densely populated area of Great Falls.	1.37	$23,100	$28,900
BB-38	**20th St** (10th Ave S to 8th Ave N)	Possible bike boulevard. Traffic diversions already exist.	1.37	$23,100	$28,900
BB-39	**13th St S** (10th Ave S to 8th Ave N)	Provides another north-south connection in densely populated area of Great Falls.	1.37	$23,100	$28,900
BB-40	**10th St S** (10th Ave S to 8th Ave N)	Install shared lane markings on 10th St S and remove shared lane markings on 9th St S. Parallel route with lower volumes.	1.37	$23,100	$28,900
BB-41	**2nd St S** (1st Ave S to 4th Ave N)	Shared Lane markings on 2nd Street South from recommended bike lanes on 2nd St to Riverfront Park. Turn lanes and parking mean bike lanes may not be realistic for this stretch. Parking on one side, or the center turn lanes could be removed to provide a continuous bike lane if desired.	0.38	$6,400	$8,000
BB-42	**13th Ave S** (Warden Park to 20th St S)	Alternative east-west route south of 10th Ave S.	1.56	$26,300	$32,900
BB-43	**19th Ave S/2nd St S/17th Ave S** (Upper River Rd to 4th St S)	Recommended in past LRTPs.	0.58	$9,800	$12,300
BB-44	**17th Ave S** (13th St S to 20th St S)	Connecting bike routes at each end and Sunnyside Elementary School.	0.55	$9,300	$11,600

ID	Name	Description	Length (mi)	Estimated Cost	
				LOW	HIGH
BB-45	**20th St S** (17th Ave S to 10th Ave S)	Replaces bike lane recommendation from 2018 LRTP in the interest of keeping parking along the route.	0.52	$8,700	$10,900
BB-46	**University of Great Falls West** (20th St S to Administration Complex)	Shared lane markings along existing driveway.	0.10	$1,700	$2,100
BB-47	**University of Great Falls East** (Providence Hall to 23rd St S)	Shared lane markings along existing driveway.	0.09	$1,500	$1,900
BB-48	**16th Ave S** (20th St S to 23rd St S)	Replaces bike lane recommendation from 2018 LRTP in the interest of keeping parking along the route.	0.24	$4,100	$5,100
BB-49	**23rd St S** (24th Ave S to 10th Ave S)	Replaces bike lane recommendation from 2018 LRTP in the interest of keeping parking along the route. Extends to 24th Ave S shared use path.	0.99	$16,700	$20,900
BB-50	**13th Ave S** (23rd St S to 26th St S)	Replaces bike boulevard recommendation along 12th Ave S as recommended in 2018 LRTP. Facilitates connection at existing RRFB.	0.24	$4,100	$5,100
BB-51	**15th Ave S/14th Ave S** (26th St S to 39th St S)	East-west route through medical complex. Requires connection from 30th St S to 32nd St S to be completed.	1.06	$18,000	$22,500
BB-52	**11th Ave S** (26th St S to 39th St S)	Replaces bike lane recommendation from 2018 LRTP in the interest of keeping parking along the route. Consider incorporating in conjunction with recommended traffic calming project between 26th St S and 32nds St S.	1.06	$17,900	$22,400
BB-53	**39th St S** (10th Ave S to 14th Ave S)	North-south connector between 14th Ave S and 11th Ave S routes.	0.33	$5,500	$6,900
		TOTAL	**52.71**	**$891,300**	**$1,114,600**

2.3.4. Bike Lanes

A bike lane provides a dedicated lane for one-way bicycle travel on a street or highway. In most cases, it is recommended that bike lanes be installed on both sides of two-way streets to allow for bi-directional travel. Buffered bicycle lanes provide additional width to 'buffer' the bike lane, on the side of the adjacent travel lane and/or parking lane. They provide a more comfortable experience for bicyclists, but they also are an effective tool to discourage motorists from driving or parking in the bike lane that would otherwise be excessively wide.

The minimum width for a bike lane is four feet for roadways without curb and gutter and/or on-street parking. For all other roadways, the recommended bike lane width is five feet. Bicycle lanes are not intended to be used as a pedestrian facility. As such, it is common to see bike lanes parallel to pedestrian facilities. Bike lanes should also be constructed in both directions along the listed route. Depending on the characteristics of the roadway of which the bicycle lanes are part of, they may not be suitable or desirable for all users. Additional care must be given to intersection treatments for bicycle lanes due to the possible conflict points between bicyclists and motorists.

Many of the identified projects will be completed in conjunction with other roadway reconstruction or retrofit projects, while others may be achieved as part of maintenance activities (striping and signage only). In some cases, dedicated bicycle facilities can be provided within the existing roadway width by converting an underutilized travel lane or parking lane to a bike lane. **Table 2.7** lists routes that are recommended for bike lanes or buffered bike lanes. The type of project that is ultimately chosen is at the discretion of the planning staff.

Table 2.7: Bike Lane Recommendations

ID	Name	Description	Length (mi)	Estimated Cost	
				LOW	HIGH
BL-1	**Fox Farm Rd** (18th Ave SW to E Fiesta)	Road is 50 feet curb-to curb, ADT is about 7,000 at north end and declines as the route continues south. Bike lanes can be added while maintaining existing parallel parking, 8.5-foot parking lanes, 5-foot bike lanes, and 12-foot travel lanes. As a second option, parking could be eliminated on the east side of the street where all houses on this section have either existing side street parking or are not oriented to Fox Farm Road. In this option, the road would have an 8-foot parking lane on the west, a 2-foot buffer, a 5-foot parking lane, two 12-foot travel lanes, a 10-foot center turn lane (TWLTL) and a 5-foot bike lane. Note, a 4-lane facility (achieved through restriping) is also recommended and would preclude the inclusion of bike lanes and parking.	1.01	$10,900	$13,600
BL-2	**6th St NW** (Northwest Bypass to Smelter Ave NW)	The road appears to have been re-built in recent years with new sidewalks and curb and gutter. Shared lane markings have been installed but are not sufficient for traffic volumes. The street is too narrow to provide bicycle lanes and parking. However, parking seems to be very underutilized. Options are to prohibit parking completely, providing for 9-foot bike lanes (no change to the existing striping would be required other than adding pavement markings and signage), or to prohibit parking on one side of the street, relocate the centerline and provide 5-foot bike lanes in both directions. In this second option the street would have one 8-foot parking lane, 5-foot bike lanes and two 12-foot travel lanes. With such low parking utilization, the street does already operate similarly to if it had bike lanes.	0.56	$6,100	$7,600
BL-3	**6th St NW** (Smelter Ave NW to 36th Ave NE)	Install only if 36th Ave NE connects through. This will likely not be a very comfortable route regardless due to gradient and the narrowness of the unimproved road. If the road is ever reconstructed, consider bike lanes, or at least an uphill bike lane.	0.96	$10,400	$13,000
BL-4	**Smelter Ave NW** (6th St NW to 3rd St NW)	Smelter Ave has vital importance for non-motorized connectivity for adjacent neighborhoods. This project reiterates the recommendation for bike lanes from past plans and is recommended in conjunction with widened sidewalks to offer options for those who would rather ride on the street. The street is wide enough for bike lanes with a 52-foot cross section where it has been improved. Parking would need to be prohibited at the extreme western extent for a short interval.	1.00	$10,800	$13,500
BL-5	**2nd St S** (10th Ave S to 1st Ave S)	The street is approximately 47 feet wide which would translate to 8-foot parking lanes, 5-foot bike lanes, 10.5-foot travel lanes, OR 7.5-foot parking lanes, 5-foot bike lanes and 11-foot travel lanes. This project would replace the existing shared lane markings on 2nd St S. At extreme south end, ramp southbound bike lane up	0.73	$7,900	$9,900

ID	Name	Description	Length (mi)	Estimated Cost	
				LOW	HIGH
		on to sidewalk and either connect to trail along north side of 10th Ave S or cross bikes to the NE corner to connect with the Overlook Drive Path.			
BL-6	**4th St S** (13th Ave S to 17th Ave S)	Street is approximately 38 feet wide, with surface parking lots along the street. Recommend 6-foot bike lanes be added. No striping changes needed otherwise.	0.22	$2,400	$3,000
BL-7	**5th St S** (10th Ave S to 13th Ave S)	Street is approximately 28-30 feet wide, with surface parking lots along the street. Recommend 5-foot bike lanes with 10-foot lanes be added. No striping changes needed otherwise. Connects to signal at 10th Ave S and bike lanes extending north along 5th St S.	0.24	$2,600	$3,300
BL-8	**5th St S** (10th Ave S to 7th Ave N)	Recommendation taken from the *Downtown Great Falls Access Circulation and Connectivity Study*, a buffered bike lane was the preferred alternative. Travel volumes are relatively low. A buffered bike lane could be maintained until half a block south of 9th Ave S where the street would revert to existing for intersection capacity. 5-foot one-way bike lane will have a 3-foot travel lane buffer, a 2-foot parking side buffer. Alternatively, on-street parking could be prohibited as most residences front side streets and businesses have off-street lots.	1.29	$13,900	$17,400
BL-9	**6th St N** (10th Ave S to 8th Ave N)	Parallel northbound route to 5th St S southbound bike lanes with similar implementation considerations.	1.37	$14,800	$18,500
BL-10	**14th St S** (10th Ave S to 15th St N)	This street currently experiences moderate traffic volumes with two Southbound travel lanes and a 9-foot parking lane. Speed limit is 30mph making shared lane markings less desirable. Parking is somewhat utilized, however most homes/businesses have ample parking in off-street areas or with frontage on side-streets. Bicycle warning signs are posted along the corridor. Due to the limited stop signs and signalized crossings, this is an attractive, fast, and direct through route for bicyclists. The recommended facility type is a buffered bicycle lane achieved through reduced parking or travel lanes (9-foot bicycle area with a 6-foot-wide bike lane and 3-foot buffer). Alternatively, if travel lanes were reduced to 10 feet and the parking lane reduced to 7 feet, a 5-foot bike lane could be provided, however all of these dimensions are at the absolute minimum of current engineering practices.	1.67	$18,000	$22,500
BL-11	**15th St N** (10th Ave S to 12th Ave N)	Parallel northbound route to 14th St S southbound bike lanes with similar implementation considerations.	1.65	$17,800	$22,300
BL-12	**25th St S** (10th Ave S to 8th Ave N)	This street currently experiences moderate traffic volumes with two Southbound travel lanes and a 9-foot parking lane. Speed limit is 30mph making shared lane markings less desirable. Parking is somewhat utilized, however most homes/businesses have ample parking in off-street areas or with frontage on side-streets. Bicycle warning signs are posted along the corridor. Due to the limited stop signs and signalized crossings, this is an attractive, fast, and direct through route for bicyclists. The recommended facility type is a buffered bicycle lane achieved through reduced parking or travel lanes (9-foot bicycle area with a 6-foot-wide bike lane and 3-foot buffer). Alternatively, if travel lanes were reduced to 10	1.37	$14,800	$18,500

ID	Name	Description	Length (mi)	Estimated Cost	
				LOW	HIGH
		feet and the parking lane reduced to 7 feet, a 5-foot bike lane could be provided, however all of these dimensions are at the absolute minimum of current engineering practices. Consider widening with a future reconstruction project to accommodate desired configuration.			
BL-13	**26th St S** (10th Ave S to 8th Ave N)	Parallel northbound route to 25th St S southbound bike lanes with similar implementation considerations. Consider widening with a future reconstruction project to accommodate desired configuration.	1.24	$14,800	$18,500
BL-14	**32nd St S** (Central Ave to Charles Russell Park)	North-South spine bike route extending from medical center. Replaces bike boulevard recommendation from previous LRTPs.	1.24	$13,400	$16,800
BL-15	**38th St S** (10th Ave S to River Dr N)	For the northern portion (10th Ave N to River Dr N), the pavement width is about 27 feet and would need to be widened at some point in the future during a resurfacing or reconstruction project. For southern portion (10th Ave S to 10th Ave N) the road is approximately 34 feet in width making each side of the road about 17 feet which is not a comfortable dimension for on-street parking and parking does not appear to be utilized along 38th St S. Suggest 11-foot driving lanes and 6-foot bike lanes along entire length (34-foot typical section).	1.87	$20,200	$25,300
BL-16	**52nd St N** (River Dr N to 18th Ave N)	Connection between existing bike lanes on River Dr N and 18th Ave N.	0.32	$3,500	$4,400
BL-17	**8th Ave N** (Park Dr to 38th St N)	Street is already signed as a bike route, bike lanes would help emphasize bicycle presence, particularly westbound where downhill grades may influence high speeds.	2.62	$28,200	$35,300
BL-18	**1st Ave S** (2nd St S to 15th St S)	Recommendation taken from the *Downtown Great Falls Access Circulation and Connectivity Study*, a buffered bike lane was the preferred alternative. With low volumes, two one-way lanes are excessive. A single travel lane could still provide adequate capacity. Recommend buffered bike lane aligning with wider section to the west. Provide travel lane and parking lane side buffers (5-foot one-way bike lane will have a 3-foot travel lane buffer, a 2-foot parking side buffer).	1.06	$11,500	$14,400
BL-19	**2nd Ave S** (2nd St S to 15th St S)	Parallel eastbound route to 1st Ave S westbound bike lanes with similar implementation considerations.	1.06	$11,500	$14,400
BL-20	**17th Ave S** (4th St S to 13th St S)	Bike lanes can be striped along this entire stretch with no changes to configuration. This route connects several major destinations. No on-street parking is currently available except for one stretch where the street has been widened. Consider implementing with recommended reconstruction project between 7th St S and 13th St S.	0.74	$8,000	$10,000
		TOTAL	**22.36**	**$241,500**	**$302,200**

2.3.5. Sidewalks

There are still many locations within Great Falls where the existing pedestrian facilities lack connectivity. Completing the sidewalk network gaps will allow more predictable trips for pedestrians and will improve the overall connectivity of the Great Falls area. Recommended sidewalk improvements, listed in **Table 2.8**, are primarily focused on the major street network and connections to high priority pedestrian destinations such as schools, parks, shopping centers, and residential areas. Other priority connections or improvements not on the major street network are listed if they were contained in previous planning documents or if there was significant public comment received.

Table 2.8: Sidewalk Recommendations

ID	Name	Description	Length (mi)	Estimated Cost	
				LOW	HIGH
SW-1	**4th St S** *13th Ave S to 12th Ave S*	Close gap in sidewalk.	0.02	$9,000	$13,000
SW-2	**4th St S** *10th Ave S to 12th Ave S*	Sidewalk gap on parcel of land between Pro Lube and Holiday Inn. This could be completed with new development in the future.	0.02	$9,000	$13,000
SW-3	**23rd Ave NE** *Division Road to 4th St NE*	Provides a sidewalk connection to Jaycee Park (pool) and helps get people from their cars to the front door. Also connects to new crosswalk.	0.19	$85,300	$123,400
SW-4	**6th St N** *River's Edge Trail to 8th Ave N*	There is a need for a connection to River's Edge Trail from the neighborhoods. There are ample goat trails in this area showing established use. The road could be converted to one lane through the bridges with a directional yield scenario.	0.05	$22,400	$32,500
SW-5	**17th Ave NE** *River's Edge Trail to 3rd St NW*	Connect existing sidewalk to River's Edge Trailhead.	0.15	$67,300	$97,400
SW-6	**16th Ave NW / 1st St NW** *16th Ave NW to 17th Ave NW*	Fill gap in existing sidewalk on 16th Ave NW and 1st St NW. This will connect businesses in the area.	0.07	$31,400	$45,500
SW-7	**Division Rd** *Herbalife Parking Lot to Smelter Ave NE*	Sidewalk is unlikely to be added with new development.	0.16	$71,800	$103,900
SW-8	**8th Street NE and Sacajawea Dr** *South of Baseball Field to West of Baseball Field*	Fill in sidewalk gap around the baseball field. Only 8th Street NE is on the major street network, but the entire length of sidewalk could be a Transportation Alternatives project.	0.14	$62,800	$90,900
SW-9	**NW Bypass** *9th St NW to 6th St NW*	Retrofit needed to close sidewalk gap.	0.06	$26,900	$39,000
SW-10	**9th St NE** *32nd Ave NE to 33rd Ave NE*	Close gap in sidewalk.	0.01	$4,500	$6,500
SW-11	**36th Ave NE** *5th St NE to 6th St NE*	Construct sidewalk around park perimeter on 36th Ave NE. Fills gap and provides a greater hard edge to the park.	0.09	$40,400	$58,400

ID	Name	Description	Length (mi)	Estimated Cost	
				LOW	HIGH
SW-12	**15th St N** *Railroad to River Drive*	Large gaps on the east side of the street.	0.08	$35,900	$52,000
SW-13	**15th St N** *8th Ave N to 10th Ave N*	Close gap in sidewalk as this path may eventually access River's Edge trail. Large goat trails are already present.	0.1	$44,900	$64,900
SW-14	**14th St N** *8th Ave N to 12th Ave N*	Large gaps on west side of roadway.	0.21	$94,200	$136,400
SW-15	**NW Bypass** *Stuckey Road to 9th St NW*	Install sidewalks on both sides of roadway, there are currently no sidewalks on this route.	0.74	$332,100	$480,600
SW-16	**3rd Ave S** *46th St S to 51st St S*	Most of these lots are developed and may not be redeveloped. Sidewalks should be retrofitted.	0.22	$98,700	$142,900
SW-17	**4th St S** *15th Ave S to 13th Ave S*	Gap in sidewalk exists over 3 parcels, two of which are already developed.	0.05	$22,400	$32,500
SW-18	**4th St S** *16th Ave S to 17th Ave S*	Sidewalk gap along one side of residential lot.	0.01	$4,500	$6,500
SW-19	**4th St S** *17th Ave S to 18th Ave S*	Sidewalk gap along one side of residential lot.	0.02	$9,000	$13,000
SW-20	**13th Ave S** *5th St S to 7th St S*	Sidewalk gaps exist and about half of corridor is already developed. This is low priority as the south side of the road already has sidewalks.	0.15	$67,300	$97,400
SW-21	**7th St S** *10th Ave S to 13th Ave S*	Sidewalk gaps exists over developed parcels on both sides of the street. Will need some access control.	0.09	$40,400	$58,400
SW-22	**13th Ave S** *7th St S to 9th St S*	Discontinuity in sidewalk in front of ERA American Horizon. Modifications should be made to make this continuous for pedestrians.	0.03	$13,500	$19,500
SW-23	**5th Ave NW** *9th St NW to 6th St NW*	Complete sidewalks on both sides of the street.	0.17	$76,300	$110,400
SW-24	**Skyline Dr** *2nd St NE to 5th St NE*	Close gaps in front of vacant lots. This section is not on the major street network but was recommended in the North Great Falls Sub Area Study.	0.05	$22,200	$32,100
SW-25	**2nd St NE** *35th Ave NE to Riverview Dr NE*	Close gaps in front of vacant lots. Adjacent to Early Learning Family Center. Recommended in North Great Falls Sub Area Study.	0.40	$179,200	$259,300
SW-26	**Skyline Park** *33rd Ave NE and 6th St NE*	Construct sidewalk around park perimeter on 33rd Ave NE and 6th St NE. With SW-11, provides sidewalk around entire perimeter of Skyline Park. This section is not on the major street network but was recommended in the North Great Falls Sub Area Study.	0.27	$119,400	$172,800
SW-27	**7th Ave S** *3rd St S to 4th St S*	Reconstruct sidewalk around Carter Park. Not on major street work.	0.01	$3,400	$4,900
		TOTAL	**3.55**	**$1,594,200**	**$2,307,100**

2.3.6. Spot Improvements

Non-motorized improvements that are recommended at specific locations rather than along a corridor are known as spot improvements. These could include crossing improvements, traffic control modifications, streetscaping, or other small connections. Bicycle and pedestrian facilities may be also able to be accommodated once a roadway's shoulders are widened or improved. This type of improvement is typically found in non-urban settings but can occur within urban areas as well. Although not included as a specific recommendation, the City of Great Falls requires that all new construction of roadways classified as collectors, minor arterials, and principal arterials must include a minimum of five-foot-wide shoulders to accommodate bicyclists.

Non-motorized spot improvements address specific concerns or challenges found within the study area. These projects are intended to address safety concerns in the existing non-motorized network or to improve existing facilities that may not be performing as desired. Spot improvements and their associated planning-level cost estimates are presented in **Table 2.9** and are also shown in **Figure 2.2**. Like the other non-motorized improvements, inflationary costs are not included in the cost estimates and no funding sources have been identified for these recommended improvements. Projects are not listed in any particular order with respect to priority.

Table 2.9: Spot Improvement Recommendations

ID	Name	Improvement Type	Description	Estimated Cost
SPOT-1	NW Bypass & 3rd St NW	Crosswalks	"T" intersection (i.e. three-legs). Crosswalks are faded on the west and north leg of intersection and non-existent on the south leg. Because of high traffic volumes, ladder crossings (high-visibility) are recommended in order to maintain appearance of crosswalks and designated pedestrian space. Consider adding 'pork chop' islands on both directions on the NW Bypass legs to reduce pedestrian crossing distance.	$16,800
SPOT-2	Ave B NW & 9th St NW	Crosswalks	Near school.	$3,900
SPOT-3	23rd Ave NE & Jaycee Park	Crosswalks	Access to/from playground and pool. Some parking spaces may need to be removed in order to accommodate a safe crosswalk.	$2,100
SPOT-4	23rd Ave NE & 4th St NE	Crosswalks	Add crosswalks on all sides of intersection.	$3,900
SPOT-5	2nd Ave N & 7th St N	Crosswalks	Crosswalks, traffic calming, and increased speed limit enforcement will benefit high pedestrian traffic (especially during school year) that is produced by Whittier and the Community Rec Center.	$1,700
SPOT-6	2nd Ave N & 8th St N	Crosswalks	Crosswalks, traffic calming, and increased speed limit enforcement will benefit high pedestrian traffic (especially during school year) that is produced by Whittier and the Community Rec Center.	$1,700
SPOT-7	3rd Ave S & 46th St S	Crosswalks	Provide crosswalks on northern and eastern legs of intersection.	$4,700
SPOT-8	4th Ave S & 9th St S	Crosswalks	Near recorded pedestrian crashes on 9th St; mark crossings with yield signs and lines.	$5,600
SPOT-9	5th Ave S & 9th St S	Crosswalks	Near recorded pedestrian crashes on 9th St; mark crossings with yield signs and lines.	$5,600

ID	Name	Improvement Type	Description	Estimated Cost
SPOT-10	8th Ave S & 9th St S	Crosswalks	Near recorded pedestrian crashes on 9th St; mark crossings with yield signs and lines.	$5,600
SPOT-11	1st Ave N & Park Dr	Intersection Improvement	Accessing Gibson Park is difficult from downtown. Improve crossing by prioritizing pedestrian traffic on porkchops, and by improving signal timing (leading pedestrian interval).	$9,500
SPOT-12	2nd Ave S / Park Drive 2nd Ave S to 1st Ave S	Streetscape	Sidewalk is lacking in this area, though there is plenty of paved surface. Cars are parking where pedestrians would be walking. Suggest creating a new streetscape with pullouts for parking and a defined sidewalk that has curb separation.	$19,100
SPOT-13	Fox Farm Rd & 18th Ave S	Intersection Signalization Improvement	Possible RRFB. Bike transition from widened SW to bike lanes	$29,700
SPOT-14	Fox Farm Rd Country Club Blvd to 18th Ave SW	Sidewalk Improvements	Improve the widened sidewalk. Current condition makes it look like bad landscaping, not a path.	$87,600
SPOT-15	RET to Expo Park	Trail Connection & Crosswalk	A non-motorized crossing across 3rd St NW would help enhance connectivity between RET and Expo Park. A sidewalk or shared use path connection may also be needed, depending on where the crossing is installed. Consider a two-stage crossing and/or enhanced pedestrian signal to enhance safety and visibility of the crossing. A crossing study would be needed to determine the appropriate placement and configuration.	$23,500
SPOT-16	Smelter Ave / 2nd St NW / Riverview Blvd	Crosswalks	This intersection was identified as a top 2.5% safety score intersection. A right angle crash causing fatal and serious injuries occurred at this intersection due to speeding and failure to yield. Intersection is offset and near a school. Perform a pedestrian crossing study and consider an enhanced pedestrian signal, intersection realignment, or curb bulbouts.	$49,200
SPOT-17	Smelter Ave / Riverview Elementary School	Crosswalks	Improve crosswalk with curb bulbouts and possible RRFB (crossing study needed).	$49,200
SPOT-18	3rd St NW / 17th Ave NE	Crosswalks	Possible location for a ped crossing, probably a PHB. This location is a long way from the nearest signalized crossing of 3rd St NW but connects to River's Edge Trail.	$132,200
SPOT-19	N River Rd & River's Edge Trail	Crosswalks	Install marked crosswalk for RET crossing across N River Rd.	$2,000
SPOT-20	N River Rd / 15th St	Intersection Improvements	This intersection has pedestrian push buttons blocked by guardrail and no pedestrian signals. Retrofit the signal to install ADA-compliant pedestrian signals and improve sidewalk connections at the intersection.	$33,400
SPOT-21	19th St N / River Dr N	Crosswalks	The River's Edge Trail meets River Drive at 19th Street but there is no crosswalk or other connecting facilities. Perform a pedestrian crossing study to evaluate the need	$20,700

ID	Name	Improvement Type	Description	Estimated Cost
			for an enhanced signal (PHB/RRFB). This connection would help facilitate access from the River's Edge Trail to Downtown.	
SPOT-22	Park Dr / 6th St N / 8th Ave N	Trail Connection	Bike connection from Park Dr to the River's Edge Trail with access ramps from 6th St N to the River's Edge Trail overpass.	$89,600
SPOT-23	1st Ave S / Park Dr	Crosswalks	Improvements at this intersection were recommended in the *Great Falls Downtown Access & Circulation Plan*. This intersection is confusing and difficult to navigate as a pedestrian. Consider an all-way stop or more visible crosswalks with wayfinding sign.	$9,400
SPOT-24	10th Ave S / Overlook Dr	Intersection Improvements	A well-defined bike route is needed at this intersection. It is recommended to ramp the southbound bike lane up on to sidewalk and either connect to the trail along north side of 10th Ave S or cross bikes to the NE corner and connect with the Overlook Drive Path. Wayfinding signs are important.	$1,500
SPOT-25	5th Ave S / 19th St S	Intersection Improvements	This intersection was identified as a top 2.5% safety score intersection with 13 recorded crashes during the analysis period. This intersection is adjacent to a school. Conduct a pedestrian safety study to understand potential safety concerns. Consider curb bulbouts, high visibility (flashing) stop signs, and marked crosswalks.	$5,800
SPOT-26	Central Ave 38th St N to 42nd St S	Crosswalks	The segment borders a school and two lanes with parking and several crosswalks. Conduct a pedestrian safety study to understand potential safety improvement opportunities. Consider curb bulbouts, enhanced pedestrian signals, curb ramp upgrades, etc.	$60,000
SPOT-27	2nd St S / 3rd Ave S	Crosswalks	Consider pedestrian crossing improvements at the intersection. 3rd Ave is extremely wide for pedestrians to cross, however, MDT is not amendable to reducing the curb radii at this intersection. Consider improving the signing and striping of the crosswalk(s) at this intersection and potentially restricting parking to enhance visibility.	$3,400
SPOT-28	Bike Boulevard Signing	Signing	Project to update signage along existing bike boulevards/routes/lanes to ensure compliance with the MUTCD.	$39,500
SPOT-29	Rivers Edge Trail - Water Park to 3rd Ave S	Remove Bike Route	With construction of a new shared use path along River Drive, this segment of the RET through the Great Falls Police Department parking lot is no longer needed.	N/A
SPOT-30	9th St - River Dr to 13th Ave S	Remove Bike Route	The traffic volumes on this route are too high for shared lane markings. Remove pavement markings and signage.	$2,500
SPOT-31	15th St / 25th Ave NE	Crosswalks	There is an existing crosswalk on the north leg of this intersection but it is a high volume, high speed route. Conduct a pedestrian crossing study to determine the need for an enhanced pedestrian signal (PHB/RRFB) to improve pedestrian safety and visibility. Consider completing in conjunction with adjacent shared use path projects.	$19,200
			TOTAL	**$1,546,500**

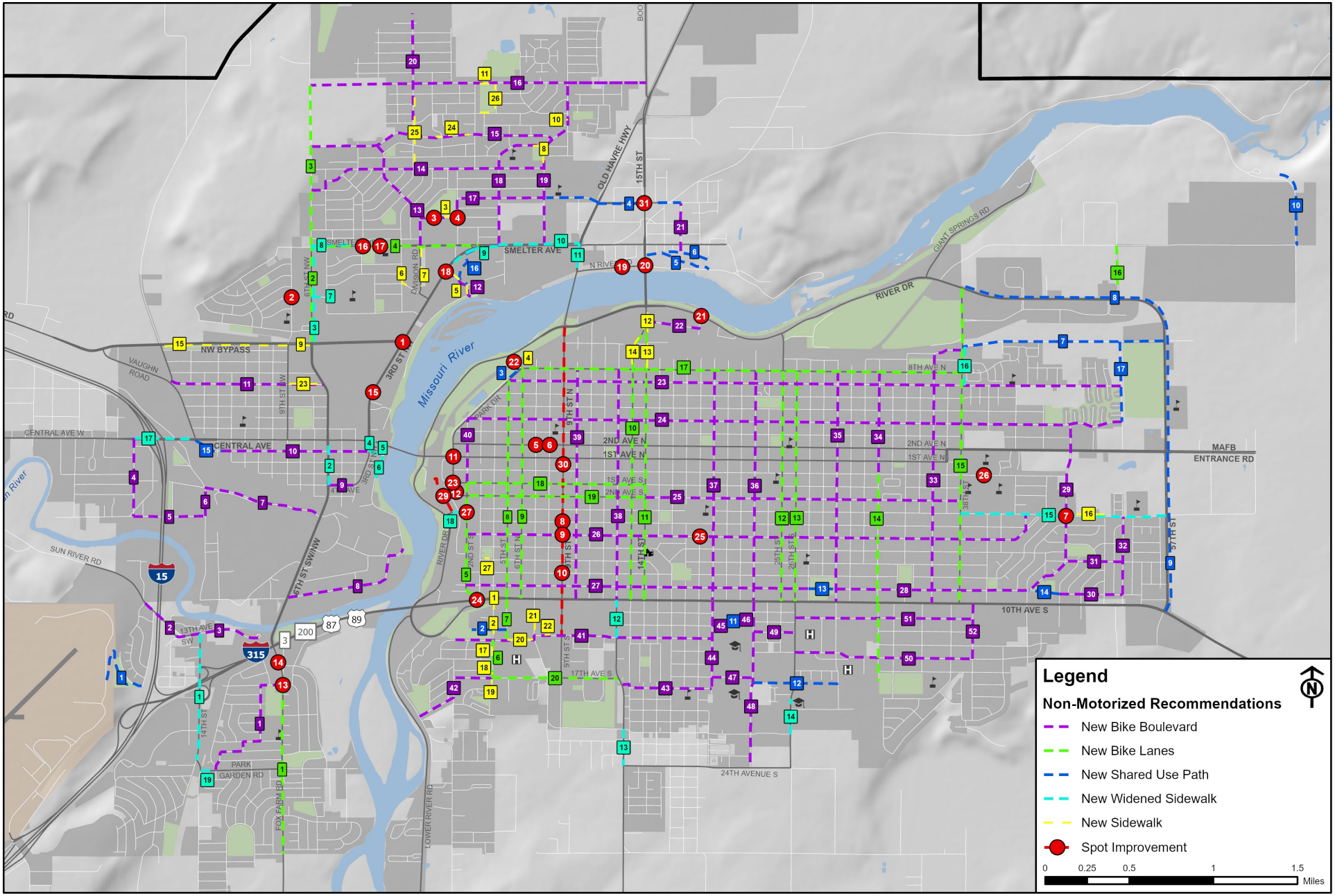

Figure 2.2: Recommended Non-Motorized Improvements

2.4. Transit Improvements

Public transportation services in the Great Falls area include scheduled, fixed-route passenger bus service and demand-responsive bus/van service providing door-to-door service for the elderly and those unable to use the fixed-route service. Public transit in the Great Falls Area has historically been used by residents that are dependent on transit due to a lack of access to other transportation modes, such as a personal vehicle. With one-hour gaps between buses, loop routes that add time and inconvenience to bus travel, and lack of support facilities such as connecting sidewalks, bus pads, and stop amenities, service is minimal and inconvenient for most travelers.

The LRTP envisions an integrated multimodal transportation system that meets sustainable growth expectations, supports economic vitality, and improves quality of life. To achieve this vision, transit must play a much greater role in providing travel choice within the Great Falls Area. This includes increased service frequency, longer service hours, and expanded coverage.

2.4.1. Planned Committed Improvements

Due to extensive funding limitations, there are few “committed” projects on the horizon concerning transit. Transit District personnel have reiterated that due to limited funds, they are essentially in a survival mode. Although the previous TDP identified a number of improvements, none were implemented due to funding constraints. An updated TDP is anticipated to be released later in 2024, or in early 2025 and will include a revised list of improvements to be completed over the next 10 years. The TDP will respond to current mobility patterns in Great Falls and address the changed needs of the community, especially since the COVID-19 pandemic.

Transit service requires a reliable bus fleet and spares. If transit service is to be expanded over time to increase frequency and add coverage area, this fleet needs to expand. In order to be competitive, the buses need to be replaced when approximately 12 years old. With an aged fleet, there are several drawbacks that impact customer satisfaction. Vehicle reliability is not as good as a more modern fleet, leading to an increased number of road failures and service disruptions. Customers are not given the advantage of new technology, such as improvements in seating, accessibility, and comfort when older equipment is kept in service beyond its useful life.

As of the 2024 LRTP, there were 19 fixed-route vehicles and 14 paratransit vehicles in the existing transit fleet. Four of the fixed-route buses and 11 of the paratransit vehicles were at or exceeding their useful life. However, the remaining vehicles are much newer, so the fleet has an overall average age of about 6.5 years. Investments are prioritized based primarily on available funding and assets that create a safety risk are the highest priority. Annually, the Transit Board of Directors budgets enough funds to cover the cost of replacement of assets in an emergency situation. Assets that have become cost prohibitive to repair are prioritized ahead of more reliable assets. Assets that are beyond their useful life but are still functioning safely are not considered a high priority. Currently, the only proposed investment for FY 2024 is the purchase of a new paratransit vehicle.

Fleet replacement on a regular cycle is the most pressing transit need to continue successful operations. As the older vehicles are cycled out of the fleet, and a consistent replacement cycle is realized, GFTD can turn attention to other recommendations in the TDP such as installation of bus stops, shelters and route service changes.

2.4.2. Goals and Recommended Improvements from TDP Update (Draft)

The draft TDP was reviewed to understand proposed transit improvements within the Great Falls area. Based on findings from public outreach and a service evaluation, four sets of goals and objectives were defined to help shape recommendations for the TDP.

1. **Improve Pre-Trip Infrastructure for Customers:** Improving pre-trip infrastructure for customers involves shifting from a flag stop arrangement currently practiced by GFTD to designated stops with appropriate amenities for customer comfort such as benches, shelters as well as information about the bus routes serving the stop.
2. **Provide Better Trip Planning Tools to Riders:** Providing better trip planning tools for riders can be achieved by providing apps for smart phones and computers that can provide real time information on bus arrivals at a specific stop and provide clear step by step directions for planning specific trips on transit.
3. **Increase Service Span and Frequency:** Increase service span and frequency will make transit usable for more trips by providing service at times GFTD is not operating and reducing the time a customer needs to wait for a bus.
4. **Improve Reliability of Bus Routes:** Improve reliability of bus routes can be achieved by targeted actions designed to address the afternoon period when delays due to traffic and heavier ridership are common.

Since increasing service also increases ongoing operating costs, recommendations to achieve these types of goals will be long-term since additional funding will be required. GFTD has identified several proposed improvements to its transit services to be achieved over the next 10 or more years. The improvements are categorized as short, medium, and long-term based on when the improvements can reasonably be expected to be achieved given current funding limitations.

- **Short Term:**
  - Add 1 additional inbound trip to Route 1 which would depart from Walmart East at 2:02pm to keep the route on-time.
  - Operate a Pilot Route 8 during morning and afternoon peak service hours to help alleviate heavy loads and improve on time performance.
- **Medium Term:**
  - Provide real time bus arrival information to customers which will allow them to better plan their trips.
- **Long Term:**
  - Replace the Flag Stop system with fixed bus stops with amenities and transit information.
  - Increase weekday peak hour service on Route 7 to 30 minutes which will match the service of the rest of the routes in the system.
  - Operate Sunday service for all routes to provide transit as on option for those trips made on Sundays.
  - Provide 30-minute service on all routes all day.
  - Operate 15-minute service on Route 1 during the peak morning and afternoon hours.
  - Provide evening and late-night microtransit service in the GFTD service area for people making trips after fixed route service ends.

At the time of writing, the GFTD is actively collecting public feedback on the proposed recommendations. A revised set of recommendations will be included in the final TDP, anticipated to be released later in 2024.

2.5. Recommendations Summary

An established plan for the Great Falls area's future transportation system is an essential component to community planning and future land development. It ensures that planners, landowners, and developers know the intent and location of the future road network and facilitates a long-term planning strategy. It enables the community to enhance the transportation network with, or ahead of, development rather than being caught behind development with no financial means to accommodate the associated travel demands.

This transportation plan includes 27 recommended projects, 27 illustrative projects, and 7 other planning projects to improve the area's transportation system and ensure roadways are safe and have sufficient capacity to accommodate existing and future travel demands through the year 2045. A total of 167 non-motorized network recommendations, including shared use paths, sidewalks, bike facilities, and spot improvements, are also included in the LRTP to support development of a safe and efficient multimodal transportation network. Multimodal travel is further supported by 9 draft recommendations for improvement of the transit system. An additional 17 projects are already committed with a secured funding source to be implemented between 2025 and 2028.

2.5.1. Visionary Transportation Network

All of the recommended projects have been compiled to make up the visionary transportation network. The visionary transportation network for the Great Falls area includes both motorized and non-motorized facilities and services and is meant to serve as guidance for future transportation projects. The visionary network may be changed or adapted to fit the MPO's changing needs.

Establishing a visionary transportation network is essential to ensure coordinated land development and achieve community planning goals. It is important that planners, landowners, developers, and city officials know where the future transportation network needs to be located so right-of-way needs can be anticipated and complimentary land uses can be established. With an approved visionary transportation network, everyone will know where future transportation facilities need to be developed.

VISIONARY MAJOR STREET NETWORK

Based on the anticipated development and traffic growth presented in the *Existing and Project Conditions Technical Memorandum*, the LRTP study area was examined to determine the most appropriate long-term vision for the transportation network. Like the existing major street network, the visionary major street network includes interstates, principal arterials, minor arterials, and collector routes. The established routes are intended to connect to primary destinations and provide continuous and parallel routes across Great Falls. The routes generally align with the visionary networks established in past LRTPs and recent planning documents except where changes to existing conditions since development of the respective plans warrant a change to the visionary network. The visionary transportation network for the study area is shown in **Figure 2.4**, the network includes the facility recommendations discussed previously in addition to anticipated future road connections.

All future alignments shown in **Figure 2.4** are conceptual in nature and may vary based on factors such as topography, wetlands, land ownership, and other unforeseen factors. The purpose of these figures is to illustrate the visionary transportation network at full build-out. It is likely that many of the corridors shown will not be developed into roads for many decades to come. On the other hand, if development is proposed in a particular area, the visionary transportation network will ensure that the various facilities will be established in a fashion that produces an efficient and logical future transportation system.

Presenting the visionary transportation network herein is an effort to help plan for the future development of the transportation system in the community. The acquisition of right-of-way for future road corridors should be one of the community's highest priorities. It is essential that these corridors be dedicated for roadway use before an area develops. This action will ensure that the roadway corridors remain clear and available for use when the future need arises.

VISIONARY NON-MOTORIZED NETWORK

For the visionary non-motorized transportation network, facilities include shared use paths, widened sidewalks, bicycle boulevards, bike lanes, and natural surface trails. This visionary network includes the non-motorized network recommendations discussed previously and is shown in **Figure 2.5**. For mapping purposes, the standard sidewalk network is not shown in **Figure 2.5**, though it is envisioned that all routes within the City of Great Falls eventually have sidewalks on each side of the roadway. Sidewalks should be considered with all new development, especially in county areas on the periphery of the city limits.

Proposed alignments shown are a planning level representation of intended routes. Adjustments or modifications to the alignments shown may be required due to environmental features, topography, ownership and future development of adjacent lands, jurisdictional requirements, and geometric features of adjacent roadways. Like the visionary major street network, the visionary non-motorized network is far-sighted and ambitious. It is likely that many of the pedestrian and bicycle facilities shown will not be developed for many decades to come. However, establishing this visionary network helps to assure that non-motorized facilities will be considered with future development and constructed in a manner that is logical and convenient for non-motorized users.

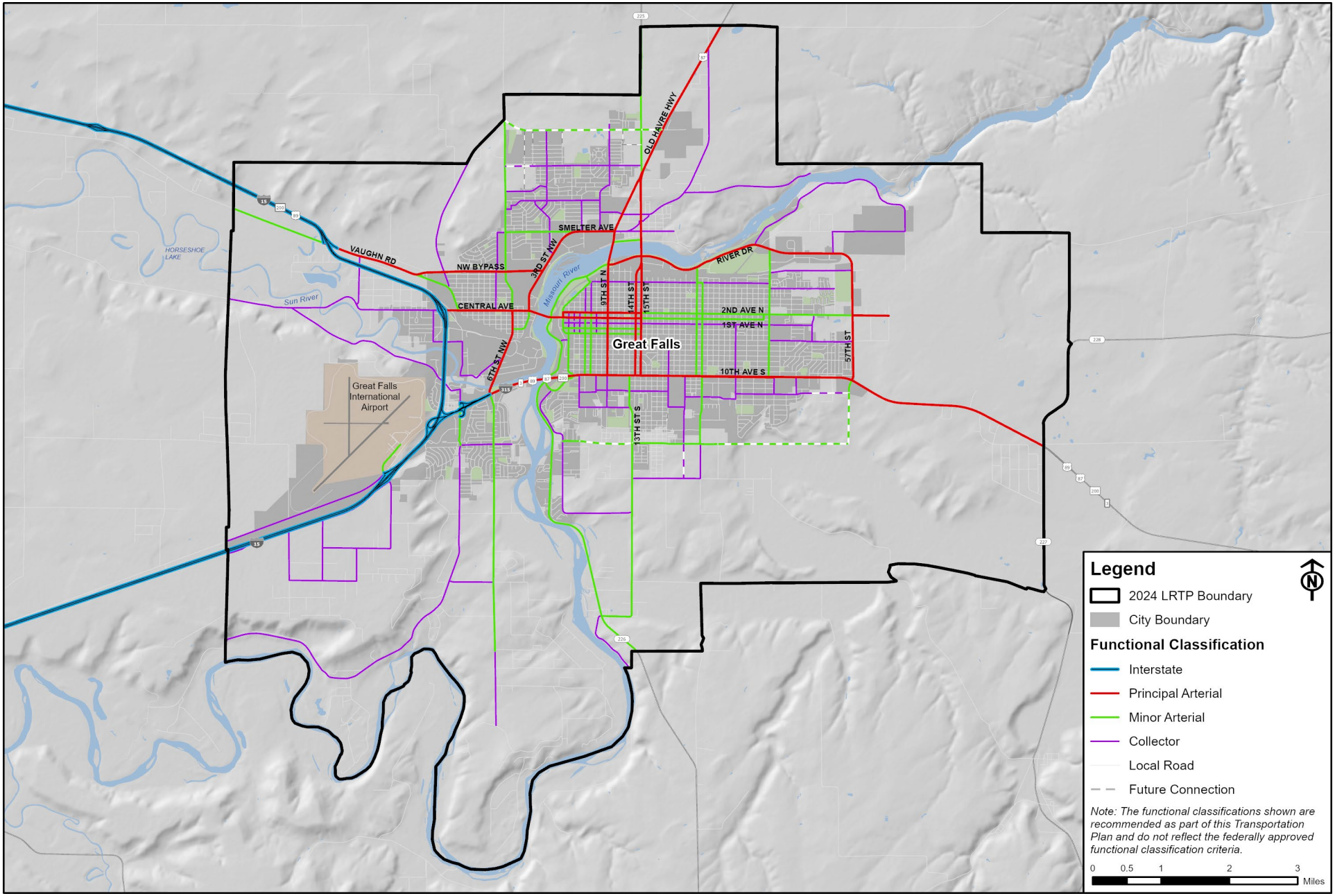

Figure 2.3: Visionary Major Street Network

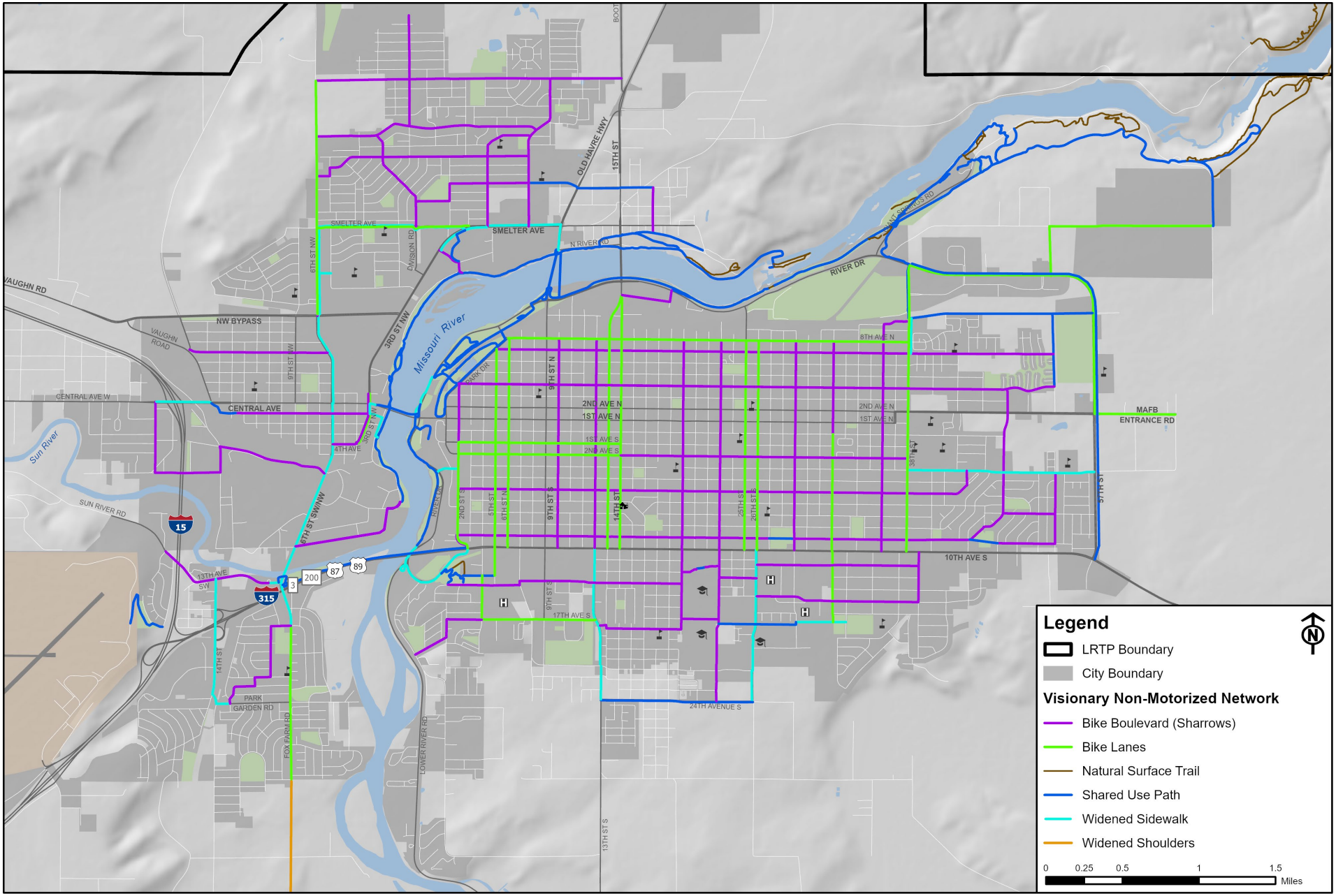

Figure 2.4: Visionary Non-Motorized Network

3.0 TRANSPORTATION FUNDING

Transportation improvements can be implemented using federal, state, local and private funding sources. Historically, federal and state funding programs have been used almost exclusively to construct and upgrade the major roads in the Great Falls area. Considering the current funding limits of these traditional programs, and the extensive list of recommended projects, more funding will be required from discretionary, local, and/or private sources if all transportation network needs are to be met over the planning horizon.

This chapter provides an overview of potential funding sources which may be available for transportation related projects and programs in the study area. A narrative description of each funding source is provided, including: the source of revenue; required match; purpose for which funds are intended; means by which the funds are distributed; and the agency or jurisdiction responsible for establishing priorities for use of the funds. Much of the provided information was assembled with the assistance of the Statewide and Urban Planning Section of MDT.

On November 15, 2021, the Bipartisan Infrastructure Law (BIL), also known as the "Infrastructure Investment and Jobs Act" (IIJA), was signed into law. The bill reauthorizes federal funding sources defined by the previous Fixing America's Surface Transportation (FAST) Act through federal fiscal year (FFY) 2026 and invests approximately $400 billion over that period to repair the nation's roads and bridges and support projects that will create jobs, boost the economy, make the transportation system safer and more resilient. Funds are apportioned to states based on formulas specified in federal law. Montana received $554,429,767 in formula funding for FY 2023.

Discussed are federal and state funding sources developed for the distribution of federal and state transportation funding, including federal funds the state receives. Programs funded from state and federal sources are administered by MDT each year in accordance with Montana Code Annotated (MCA) 60-2-127. The Montana Transportation Commission allocates a portion of available federal-aid highway funds for construction purposes and for projects located on the various systems in the state, as described in the following sections. A summary of local funding sources available through the city and county, as well as potential private funding sources, is also included. While other funding sources may be possible, those listed in this memorandum are the most probable sources at this time.

HIGHWAY SYSTEM DESIGNATIONS

When completing a regional transportation plan, it is important to understand the state highway system in place in the community. The formal highway system within the Great Falls LRTP planning area consists of National Highway System (NHS) – Interstate and Non-Interstate, Primary, Secondary, and Urban highways. The system designation is important for compliance with design standards and eligibility for federal funding sources. **Figure 3.1** contains a map of the current system designations within the LRTP planning area.

NHS routes are public highways designated by the Montana Transportation Commission and approved by the US Secretary of Transportation (Title 23, U.S.C.). There are specific federal laws, procedures, and guidelines for designation of the NHS and all NHS routes must comply with applicable federal regulations and design standards. The Primary, Secondary, and Urban Highway designation processes are guided by Montana law, Montana Transportation Commission policy, and MDT guidelines.

Per MCA 60-2-128, the Montana Transportation Commission designates which public highways are included on the state maintenance system. MDT owns and maintains all NHS and Primary System routes across the state. Some Secondary and Urban System routes are owned and maintained by MDT while others are owned and maintained by local jurisdictions such as Metropolitan Planning Organizations (MPOs), cities, or counties as shown in **Figure 3.1**.[1]

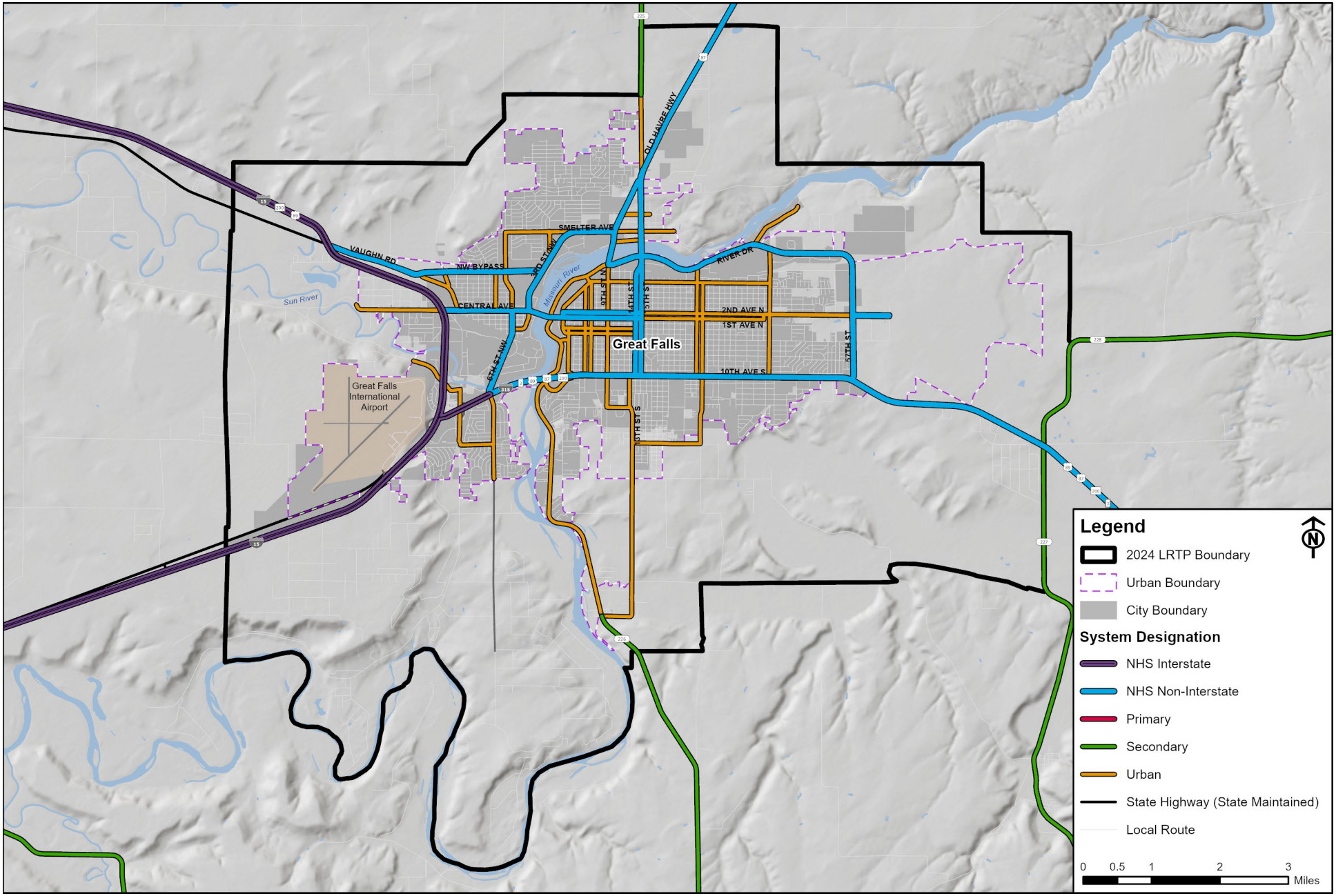

Figure 3.1: Highway System Designations

3.1. Federal Funding Sources

The following is a summary of major federal transportation funding categories received by the state through Titles 23-49 U.S.C., including state developed implementation/subprograms that may be potential sources for projects. Eligibility for federal funding is driven by federal and state mandated highway system designations as shown in **Figure 3.1**. In order to receive funding under the following programs, projects must also be included in the state's current *Surface Transportation Improvement Program* (STIP), where relevant.

3.1.1. Discretionary Programs

IIJA contains significant new funding for roadways, bridges, and other major projects funded through discretionary grant programs administered by the Federal Highway Administration (FHWA) and US Department of Transportation (USDOT). Grant funding is awarded on a competitive basis. The discretionary grant programs authorized under IIJA which may be relevant to recommended projects in the Great Falls area are summarized in the following sections.[2]

BRIDGE INVESTMENT PROGRAM

This Bridge Investment Program is a competitive program available to states, MPOs (representing an area with a population of more than 200,000), local governments, special purpose districts or public authorities with a transportation function, federal land management agencies, and Tribal governments. The program supports projects to improve bridge and culvert condition, safety, efficiency, and reliability. Eligible projects include replacement, rehabilitation, preservation, or protection of one or more bridges on the National Bridge Inventory and projects to replace or rehabilitate culverts to improve flood control and improve habitat connectivity for aquatic species. This program includes $12.5 billion in funds over the five-year period.

SAFE STREETS AND ROADS FOR ALL (SS4A) PROGRAM

IIJA established the SS4A discretionary grant program to fund regional, local, and tribal safety initiatives to prevent roadway deaths and serious injuries. MPOs, cities, counties, towns, transit agencies, tribal governments, and other special districts that are political subdivisions of a state are eligible for the program. SS4A requires an eligible Action Plan to be in place before applying to implement projects and strategies. An Action Plan is a comprehensive safety action plan that identifies the most significant roadway safety concerns in a community and identifies projects and strategies to address roadway safety issues. The SS4A program provides funding for two types of grants including Planning and Demonstration Grants and Implementation Grants. Planning and Demonstration Grants can be used to develop, complete, or supplement a comprehensive safety action plan while Implementation Grants are awarded to fund the projects and strategies identified in the Action Plan. A total of $5 billion will be available through this program through FFY 2026.

RURAL AND TRIBAL ASSISTANCE PILOT PROGRAM

IIJA created the Rural and Tribal Assistance Pilot Program to provide states, local governments, and tribal governments with grants to support project development leading to future applications to USDOT credit or grant programs. The grants can support legal, technical, and financial advisors to help advance infrastructure projects. Projects outside designated urban areas (as defined by the 2020 Census) or projects within a 2020 Census designated urban area with a population of 150,000 or less are eligible for this funding program. Eligible projects include pre-development-phase projects such as feasibility studies, project planning, funding analyses, preliminary engineering and design work, environmental review, and economic assessments. This program makes $10 million available over the five-year period.

NATIONALLY SIGNIFICANT MULTIMODAL FREIGHT AND HIGHWAY PROJECTS PROGRAM (INFRA)

The former Infrastructure for Rebuilding America (INFRA) Program is statutorily known as the Nationally Significant Multimodal Freight and Highway Projects Program under IIJA. The INFRA program awards competitive grants for multimodal freight and highway projects of national or regional significance to improve the safety, efficiency, and reliability of the movement of freight and people in and across rural and urban areas. INFRA grants are awarded on a competitive basis using several criteria. Selected projects would improve local economies; create jobs; meet all statutory requirements; apply innovative technology; be cost-effective; and address climate change, environmental justice, and racial equity. A total of $8 billion will be dedicated to this program over the five-year period.

REBUILDING AMERICAN INFRASTRUCTURE SUSTAINABLY AND EQUITABLY (RAISE) GRANTS

This competitive grant program (formerly BUILD and TIGER) provides funding for road, rail, transit, and other surface transportation of local and/or regional significance. Selection criteria includes safety, environmental sustainability, quality of life, universal design and accessibility, economic competitiveness and opportunity, state of good repair, partnership, innovation, supply chain efficiency, mobility, and community connectivity. USDOT also encourages applicants to consider how their projects can address climate change, ensure racial equity, and remove barriers to opportunity. A total of $7.5 billion in grants will be available over the five-year period.

NATIONAL INFRASTRUCTURE PROJECT ASSISTANCE (MEGA)

This program—sometimes referred to as the “Megaprojects program” or MEGA —provides grants on a competitive basis to support multi-jurisdictional or regional projects of significance that may also cut across multiple modes of transportation. Communities are eligible to apply for funding to complete critical large projects that would otherwise be unachievable without assistance.

RURAL SURFACE TRANSPORTATION GRANT PROGRAM (RURAL)

The Rural Surface Transportation Grant Program (RURAL) will support projects to improve and expand the surface transportation infrastructure in rural areas to increase connectivity, improve the safety and reliability of the movement of people and freight, and generate regional economic growth and improve quality of life.

3.1.2. Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT)

The PROTECT Formula Program will support planning, resilience improvements, community resilience and evacuation routes, and at-risk coastal infrastructure. States may use PROTECT Formula Program funds to conduct resilience planning, strengthen and protect evacuation routes, and increase the resilience of surface transportation infrastructure from the impacts of sea level rise, flooding, wildfires, extreme weather events, and other natural disasters. Highway, transit, and certain port projects are eligible.

PROTECT includes both formula funding and grant programs. Formula funding for PROTECT may be used for both planning and capital improvements to protect surface transportation assets by making them more resilient and protecting communities through resilience strategies that allow for the continued operation of rapid recovery of transportation systems. The federal share for this program is 86.58%. Montana’s FY 2023 formula apportionment for the PROTECT program is $15,181,291.

The PROTECT Discretionary Grant Program awards grants on a competitive basis for states, MPOs, local governments, special purpose districts or public authorities with a transportation function, Tribes, and federal land management agencies. Project eligibility for the discretionary program is similar to that of the formula program.

3.1.3. Carbon Reduction Program (CRP)

The CRP provides formula funds to states to develop carbon reduction strategies and implement projects that support the reduction of transportation emissions (defined as carbon dioxide (CO_2) emissions from on-road highway sources). Eligible projects include: the construction, planning, and design of trail facilities for pedestrians, bicyclists, and other nonmotorized forms of transportation; public transportation projects; and congestion management technologies. The State's annual apportionment is required to be obligated to urbanized areas in proportion to their relative share of the State's population. The federal share for this program is 86.58%. Montana's FY 2023 apportionment for the Carbon Reduction Program is $13,351,217.

3.1.4. Bridge Formula Program (BR)

The Bridge Formula Program provides formula funding to states to replace, rehabilitate, preserve, protect, and construct bridges on public roads. BR funding may be utilized on any on-system or off-system public bridge, however, the program includes a 15% set aside for off-system bridges which are owned and maintained by cities, counties, and towns—and typically located on roads normally ineligible for other federal highway funding. The federal share for this program is 86.58%. Montana is expected to receive $225 million in formula funds over the five-year period with $45 million being received each year.

3.1.5. National Highway Performance Program

The National Highway Performance Program (NHPP) provides funding for the NHS, including the Interstate System and NHS bridges. The purpose of the NHS is to provide an interconnected system of principal arterial routes which will serve major population centers, international border crossings, intermodal transportation facilities, and other major travel destinations; meet national defense requirements; and serve interstate and interregional travel. Activities eligible for the NHPP funding include construction, reconstruction, resurfacing, restoration, and rehabilitation of segments of NHS roadways; construction, replacement, rehabilitation, preservation and protection of bridges on the NHS; and projects as part of a program supporting national goals for improving infrastructure condition, safety, mobility, or freight movements on the NHS. Montana received $307,785,070 in NHPP funding for FY 2023 to implement projects across the state.

INTERSTATE MAINTENANCE (IM)

Interstate Maintenance funds are federally apportioned to Montana and allocated to MDT districts by the Montana Transportation Commission based on system performance. The IM program finances highway and bridge projects to rehabilitate, restore, resurface, and reconstruct the Interstate System. The federal share for this program is 91.24% and the state is responsible for the remaining 8.76%.

NATIONAL HIGHWAY SYSTEM [NON-INTERSTATE] (NH)

The NH Program finances highway and bridge projects to rehabilitate, restore, resurface, and reconstruct Non-Interstate NHS routes. Like the IM Program, funds are apportioned to Montana then allocated to MDT districts by the Transportation Commission. The federal share for non-interstate NHS projects is 86.58%, and the state is responsible for the remaining 13.42%.

NATIONAL HIGHWAY SYSTEM BRIDGE PROGRAM (NHPB)

Federal and state funds under this program are used to finance construction, replacement, rehabilitation, preservation and protection projects on NHS bridges (Interstate and non-Interstate). MDT's Bridge Program is allocated NHPB funds by Montana's Transportation Commission based on system performance. The federal share for this program is 86.58%, and the state is responsible for the remaining 13.42%.

3.1.6. National Highway Freight Program (NHFP)

The NHFP supports activities that improve the efficient movement of freight on the National Highway Freight Network. Activities eligible for NHFP funding include planning, environmental review, preliminary engineering, design work, construction, reconstruction, rehabilitation work and/or operational improvements that directly result in improved system performance – as well as interchange improvements, truck-only lanes, shoulder widening, traffic signal optimization, highway ramp metering and roadway capacity projects (that address freight bottlenecks).

Per federal guidelines, MDT adopted a freight plan prior to December 4, 2017 – thus allowing Montana to continue to obligate NHFP funds across the state. This program is apportioned to states by formula. Up to 10% of the apportioned funds may be used for intermodal projects. Generally, the federal share for this program is 91.24% and the state is responsible for the remaining 8.76% (for projects on the Interstate System). The match for projects on state highways is funded by the state while local governments are responsible for providing the match for local projects. Montana's FY 2023 NHFB apportionment was $14,513,778.

3.1.7. Surface Transportation Block Grant Program (STP)

The IIJA's Surface Transportation Block Grant Program (STP) is a funding category that may be used to preserve or improve conditions and performance on any federal-aid highway. STP funds are federally apportioned to Montana and allocated by the Montana Transportation Commission to six sub-programs. The federal share for STP projects is 86.58%, and the state is responsible for the remaining 13.42%. In FY 2023, Montana received $149,733,277 in STP funds to implement projects across the state.

SURFACE TRANSPORTATION PROGRAM PRIMARY (STPP)

The federal and state funds available under this program are used to finance transportation projects on the state-designated Primary Highway System. The Primary Highway System includes highway that have been functionally classified by MDT and FHWA as either principal or minor arterials and that have been selected by the Montana Transportation Commission to be placed on the Primary Highway System as per [MCA 60-2-125(3)]. The funds are primarily used to resurface, rehabilitate, or reconstruct roads and bridges on the Primary System.

SURFACE TRANSPORTATION PROGRAM SECONDARY (STPS)

The federal and state funds available under this program are used to finance transportation projects on the state-designated Secondary Highway System. The Secondary Highway System includes any highway that is not classified as a local route or rural minor collector and that has been selected by the Montana Transportation Commission to be placed on the Secondary Highway System. Funding is distributed by formula (per MCA 60-3-206) and is utilized to resurface, rehabilitate, and reconstruct roadways and bridges on the Secondary System. Priorities are identified in consultation with the appropriate local government authorizes and approved by the Montana Transportation Commission.

SURFACE TRANSPORTATION PROGRAM URBAN (STPU)

The federal and state funds available under this program are used to finance transportation projects on Montana's Urban Highways System, as per MCA 60-3-211. STPU allocations are determined through a statutory formula based on each area's population compared to the total population in all urban areas and are recalculated each decade following the US Census. STPU funds are primarily used for resurfacing, rehabilitation or reconstruction of existing facilities; operational improvements; bicycle facilities; pedestrian walkways and carpool projects.

Priorities for the use of urban funds are established at the local level through local planning processes with final approval by the Transportation Commission.

SURFACE TRANSPORTATION PROGRAM BRIDGE (STPB)

The federal and state funds available under this program are used to finance bridge projects for on-system and off-system routes in Montana. The IIJA requires that a minimum amount be set aside for off-system bridge projects. The remainder of the Bridge Program funding is established at the discretion of the state. STPB funds are primarily used for bridge rehabilitation or reconstruction activities on primary, secondary, urban, or off-system routes. Projects are identified based on bridge condition and performance metrics.

SURFACE TRANSPORTATION PROGRAM FOR OTHER ROUTES [OFF-SYSTEM] (STPX)

The federal and state funds available under this program are used to finance transportation projects on state-maintained highways (or in other areas) that are not located on a defined highway system.

URBAN PAVEMENT PRESERVATION PROGRAM (UPP)

The Urban Pavement Preservation Program is a sub-allocation of the STP that provides funding to urban areas with qualifying Pavement Management Systems (as determined jointly by MDT and FHWA). This sub-allocation is approved annually by the Montana Transportation Commission and provides opportunities for pavement preservation work on urban routes (based on system needs identified by the local Pavement Management Systems).

TRANSPORTATION ALTERNATIVES PROGRAM (TA)

The IIJA provides funding to the TA program via a set-aside from the STP. The TA program provides assistance to local governments, tribal entities, transit providers, resource agencies and/or school districts for community improvements. Eligible projects include pedestrian and bicycle facilities; construction of turnouts, overlooks, and viewing areas; community improvements such as historic preservation and vegetation management; environmental mitigation related to stormwater and habitat connectivity; recreational trails; safe routes to school projects; and vulnerable road user safety assessments. MDT solicits proposals from eligible entities, ranks each proposal, and then advances the highest priorities (without exceeding available TA funding).

Projects are awarded through a competitive process with the federal share at 86.58% and the state/local match at 13.42%. In 2023, $30 million was available for TA projects in Montana with $14,581,307 being allocated to the three MPOs in the state ($3.62 million in Great Falls), each with their own application and scoring process. In Great Falls, the TA Review Committee is made up of members from the Technical Advisory Committee (TAC) who consider and rate eligible applications for recommendation to the Policy Coordinating Committee (PCC). The PCC makes the final selection of projects.

RECREATIONAL TRAILS PROGRAM (RTP)

IIJA authorizes the RTP as a set-aside of TA funds from the STP Program. The 2023 Montana RTP set-aside, less program administration fees, was $1,478,169. The RTP funds represent a portion of the motor fuel excise tax collected from nonhighway recreational fuel use: fuel used for off-highway recreation by snowmobiles, all-terrain vehicles, off-highway motorcycles, and off-highway light trucks. The RTP is administered by Montana Fish, Wildlife and Parks (FWP) in collaboration with the State Trails Advisory Committee. The maximum award amount is $100,000 with a 20% match requirement.

RTP applicants can include federal, tribal, state, county or city agencies, private associations, and clubs. Examples of eligible projects include: maintenance and restoration of existing recreational trails; development and rehabilitation of trailside and trailhead facilities and trail linkages; purchase and lease of recreational trail construction and maintenance equipment; construction of new recreational trails; acquisition of easements and fee simple title for recreational trail corridors; and development and dissemination of publications and operation of educational programs to promote safety and environmental protection. FWP adheres to the federal guidance to meet the 30/30/40 requirement for RTP funding (30% to nonmotorized recreation, 30% to motorized recreation [including e-bikes], and 40% to recreational trail projects). Education projects are limited to 5% of the total RTP allocation for the state.

3.1.8. Highway Safety Improvement Program (HSIP)

HSIP is a funding category that helps states implement a data-driven and strategic approach to improving highway safety on all public roads. In Montana, the primary focus of the HSIP program involves identifying locations with crash trends (where feasible countermeasures exist) and prioritizing work according to benefit/cost ratios. However, MDT also advances systemic improvements (such as rumble strip projects, curve signing and wrong-way warnings) to address safety issues at the network level. The Montana Transportation Commission approves and awards the projects. The federal share for this program is 90% with the state contributing 10% matching funds. Montana's FY 2023 HSIP apportionment is $32,810,923.

RAILWAY- HIGHWAY CROSSINGS (RRS) PROGRAM

The IIJA designates a portion of HSIP funds to improve safety at railroad crossings via the installation of protective devices or the elimination of hazards. The federal share for this program is 90% with the state contributing 10% matching funds. In FY 2023, $2,089,706 was apportioned to Montana for the Railway-Highway Crossings Program.

3.1.9. Congestion Mitigation and Air Quality Improvement Program (CMAQ)

The CMAQ Program provides a flexible funding source to state and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) as well as former nonattainment areas that are now in compliance (maintenance areas). Eligible activities include transit improvements, traffic signal synchronization, bike/ped projects, intersection improvements, travel demand management strategies, traffic flow improvements, and public fleet conversions to cleaner fuels. At the project level, the use of CMAQ funds is not constrained to a particular system (i.e. Primary, Urban, or NHS).

CMAQ funds are federally apportioned to Montana and allocated to various programs by formula and by the Montana Transportation Commission. As a minimum apportionment state, a federally required distribution of CMAQ funds goes to projects in Missoula since it was Montana's only designated and classified air quality non-attainment area. The remaining non-formula funds (approximately 90%), referred to as "flexible CMAQ" is primarily directed to areas of the state with emerging air quality issues through the Montana Air and Congestion Initiative (MACI) Program. Of the total funding received, 86.58% is federal and 13.42% is provided by the state for projects on state highways and by local governments for local projects. A requirement for the use of these funds is to estimate the reduction in pollutants resulting from implementing the program/project. For FY 2023, Montana received $16,545,382 in CMAQ apportionments under IIJA.

MONTANA AIR & CONGESTION INITIATIVE (MACI)

MDT uses the CMAQ flexible funds to fund the Montana Air and Congestion Initiative (MACI) Program. The MACI Program provides funding for projects and programs that reduce transportation-related emissions in air quality non-attainment areas and areas identified as high risk for nonattainment designation. Funds are allocated annually to two programs:

- **MACI – Guaranteed:** MACI guaranteed funds are distributed to Billings and Great Falls at a level equivalent to what Missoula receives each year in CMAQ funds. Projects are prioritized through the MPO planning process.
- **MACI – Discretionary:** Projects using MACI discretionary funds are selected through a proposal process administered by the Transportation Planning Division of MDT. Projects are prioritized and selected amongst all eligible areas based on air quality benefits.

3.1.10. Transit Capital and Operating Assistance Funding

The MDT Transit Section provides federal and state funding to eligible recipients through federal and state programs. Federal funding is provided through the Section 5310 and Section 5311 transit programs and state funding is provided through the TransADE program. MAP-21 incorporated the Job Access and Reverse Commute and New Freedoms Programs into the Section 5311 and 5310 programs, respectively. It also created a new bus and bus facilities discretionary formula program (Section 5339) for fixed route bus operators.

All funded projects must be derived from a locally developed, coordinated public transit-human services transportation plan (a "coordinated plan"). The coordinated plan must be developed through a process that includes representatives of public, private, and nonprofit transportation and human service providers and participation from the public.

Urbanized Area Formula Grants (Section 5307)

This program enhances the access of people in urbanized areas (population of 50,000 or more) by providing public transportation. Federal funds pay 80% of capital costs and 50% of deficit operating costs. The remaining 20% and 50%, respectively, must come from the local recipient. The designated recipient of Section 5307 funds is the Governor who in turn can designate the funds to a public body. In Montana, the Governor has previously designated Missoula, Great Falls, and Billings as the recipients of the Section 5307 funds.

Enhanced Mobility of Seniors and Individuals with Disabilities (Section 5310)

Section 5310 authorizes capital grants to eligible organizations to assist in providing transportation for the elderly and/or persons with disabilities when the transportation service provided is unavailable, insufficient, or inappropriate to meeting these needs. The federal share of eligible capital costs may not exceed 80 percent, and 50 percent for operating assistance. The 10 percent that is eligible to fund program administrative costs including administration, planning, and technical assistance may be funded at 100 percent federal share. Section 5310 funds are apportioned among the states by a formula which is based on the number of seniors and people with disabilities in each state according to the latest available U.S. Census data. Formula funds are apportioned to direct recipients; for rural and small urban areas, this is MDT, while in large urban areas, a designated recipient is chosen by the governor. Eligible sub-recipients for this program are private nonprofit organizations, states or local government authorities, or operators of public transportation.

Formula Grants for Rural Areas (Section 5311)

This program enhances the access of people in non-urbanized (<50,000 population) areas by providing public transportation. Federal funds pay 80% of capital costs and 50% of operating costs, and 80% of paratransit service. The remaining 20%, 50%, and 20% respectively, must come from the local recipient. Eligible recipients of these funds can be state or local government authorities, nonprofit organizations, or operators of public transportation or intercity bus service that receives funds indirectly through a recipient.

The Rural Transit Assistance Program (RTAP) is a component of the Section 5311 grant. Funds are used to support a broad and flexible program of training, technical assistance, research, and other support services for non-urbanized transit. Eligible recipients of these funds include all Montana rural transit providers receiving federal transit grants. Funds are also available to Montana's public transit operators in small urbanized areas such as Billings, Missoula, and Great Falls, as long as the activities are primarily designed and delivered to benefit non-urbanized transit providers. This program is 100 percent federally funded.

Bus and Bus Facilities (Section 5339)

This program provides capital funding to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities including technological changes or innovations to modify low or no emission vehicles or facilities. Funding is provided through formula allocations and competitive grants. A sub-program provides competitive grants for bus and bus facility projects that support low and zero-emission vehicles. Federal funds pay 80% of capital costs and the remaining 20% must come from the local recipient. State and local government entities that operate fixed route bus service and that are eligible to receive direct grants under 5307 and 5311 may receive Section 5339 funds.

3.2. State Funding Sources

The following is a summary of Montana’s state funding sources which can be allocated to local governments and counties. State funds are dispersed automatically and on a need basis.

3.2.1. State Funded Construction (SFCN)

The State Funded Construction Program, which is funded entirely via Montana’s Highway State Special Revenue Account (HSSRA), provides funding for projects that preserve the condition and/or extend the service life of state highways.

3.2.2. TransADE

The Transit Assistance for the Disabled and Elderly (TransADE) program allocates funding to urban and tribal governments as well as rural transit providers based on the number of elderly and disabled rides provided as compared to the population of elderly and disabled within the service area. The goal of the program is to enhance the access of elderly and persons with disabilities in Montana to health care, shopping, education, employment, public services and recreation; and to assist in the maintenance, development, improvement, and use of specialized transportation systems.

3.2.3. State Funds for Transit Subsidies

The 46th Montana Legislature amended Section 7-14-102 MCA providing funds to offset up to 50 percent of the expenditures of a municipality or urban transportation district for public transportation. The allocation to operators of transit systems is based on the ratio of its local support for public transportation to the total financial support for all general-purpose transportation systems in the state. Local financial support must be determined by dividing the city's or district's expenditure of local revenue for public transportation operations during the fiscal year by the mill value of the city or urban transportation district.

3.2.4. State Fuel Tax

The State of Montana assesses a tax on each gallon of gasoline and clear diesel fuel sold in the state and used for transportation purposes. In addition to fuel taxes, House Bill 55 was signed on May 19, 2023, which imposes a tax on public charging stations in Montana with a rated capacity greater than 25 kw. The current tax rates in Montana, effective July 1, 2022, are listed in **Table 3.1**.

Table 3.1: Montana Fuel Tax Rate

Fuel Type	Tax Rate
Gasoline *(includes Ethanol & Ethanol Blended Gasoline)*	$0.33 / gal
Special Fuel *(includes Biodiesel)*	$0.2975 / gal
Aviation Fuel *(includes Avgas & Jet Fuel)*	$0.05 / gal
Electric Vehicle Charging Station Tax	$0.03 / kWh

According to state law (15-70-101 MCA), fuel tax funds must be allocated to cities, towns, counties, and consolidated city-county governments in the following manner:

a) The amount of $6,306,000 must be divided among the various counties in the following manner:
   i. 40% in the ratio of the rural road mileage in each county to the total rural road mileage in the state (exclusive of the NHS and Primary System);
   ii. 40% in the ratio of the rural population of each county to the total rural population in the state (outside incorporated cities and towns);
   iii. 20% in the ratio of the land area in each county to the total land area of the state.

b) The amount of $10,360,000 must be divided among the incorporated cities and towns in the following manner:
   i. 50% of the sum in the ratio of the population within each city and town to the total population in all cities and towns in the state;
   ii. 50% in the ratio of the street mileage within each city and town to the total street mileage in all incorporated cities and towns in the state (exclusive of the NHS and Primary System).

All fuel tax funds allocated to local governments must be used for the construction, reconstruction, maintenance, and repair of roads within their jurisdiction or for local match for federal funds allocated for the construction of roads that are part of the primary, secondary, or urban highway systems.

For state FY 2023, Cascade County received $199,200.09 from MCA 15-70-101 and $2,369.17 from MCA 7-14-102(2) for a total of $201,569.26 in state fuel tax funds. The amount varies annually. The City of Great Falls received $947,031.38 in FY 2023.

3.3. Local Funding Sources

Local governments generate revenue through a variety of funding mechanisms. Typically, several local programs related to transportation exist for budgeting purposes and to disperse revenues. These programs are tailored to fulfill specific transportation functions or provide particular services. The following summarizes programs that are or could be used to finance transportation improvements by the city and county.

3.3.1. City of Great Falls

The following funds are used by the City of Great Falls to budget and distribute revenues that are legally restricted for a specific purpose. Several such funds that benefit the transportation system are discussed briefly in the following paragraphs.

SPECIAL IMPROVEMENT DISTRICT (SID) REVOLVING FUND

This fund provides financing to satisfy bond payments for special improvement districts (SID) in need of additional funds. The city can establish street SID's with bond repayment to be made by the adjoining landowners receiving the benefit of the improvement. The city has provided labor and equipment for past projects through the General Fund, with a SID paying for materials.

GAS TAX APPORTIONMENT

Revenues are generated through State gasoline taxes apportioned from the State of Montana. Transfers are made from this fund to the General Fund to reimburse expenditures for construction, reconstruction, repair and maintenance of streets.

STREET DISTRICT

Every parcel within the city limits is assessed for street/alley/right-of-way repair and maintenance, with a square footage cap based on the type of property (residential versus commercial). Revenues generated from the assessment fund maintenance activities on public roadways. Street maintenance includes, but is not limited to, the following: sprinkling; graveling; oiling; chip sealing; seal coating; overlaying; treating; general cleaning; sweeping; flushing; snow and ice removal; and leaf and debris removal.

GREAT FALLS PARKING COMMISSION

Monthly lease rental payments, meter collections, and fines fund this program. Revenues are used to fund parking maintenance and operations in the downtown area.

TAX INCREMENT FINANCING (TIF)

Great Falls currently has five (5) active Tax Increment Financing (TIF) districts: 1) Central Montana Agricultural and Technology Park District; 2) West Bank Urban Renewal District; 3) Great Falls International Airport District; 4) East Industrial Park District, and; 5) Great Falls Downtown Urban Renewal District. A portion of the property taxes collected within a TIF district are collected to finance public improvements in the designated area. Each TIF district is created to provide local funds for community development, redevelopment, and revitalization, and the public improvements funded by a TIF should increase property values and expand the tax base within the district. The funds generated from the TIF could be used to finance projects including street and parking improvements; tree planting; installation of new bike racks; trash containers and benches; and other streetscape beautification projects.

COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM (CDBG)

Authorized in 1974, the CDBG program replaced a number of individual or categorical Federal assistance programs to cities, the Model Cities Program and Urban Renewal among the major ones. The funds are provided to metropolitan areas and urban counties with populations of 50,000 and above on an entitlement basis, with individual allocations determined by a formula of poverty, population, overcrowded housing, growth lag, and age of housing stock factors.

In Great Falls and Cascade County, the city is a direct recipient of the funds from the U.S. Department of Housing and Urban Development, whereas the County receives funds through the Montana Department of Commerce on a competitive basis. The State administers the block grant program and allocates funds to projects in small urban areas and counties based on a state adopted selection and priority program.

In planning for and using CDBG funds, recipients must ensure that no less than 51 percent of the funds must be used for activities that benefit low- and moderate-income persons, over a period specified by the grantee, but not to exceed three years.

There are numerous eligible activities for use of the funds, including construction of public facilities, which would include transportation improvements. Great Falls has used CDBG funds for many years to finance sidewalk repairs and handicap ramp installations. In some years, these funds have also been used for street paving and other street improvements.

3.3.2. Cascade County

ROAD FUND

The County Road Fund provides for the construction, maintenance, and repair of all county roads outside the corporate limits of cities and towns in Cascade County. Revenue for this fund comes from intergovernmental transfers (i.e., State gas tax apportionment and motor vehicle taxes), and a mill levy assessed against county residents living outside cities and towns.

County Road Fund monies are primarily used for maintenance with little allocated for new road construction. It should be noted that only a small percentage of the total miles on the county road system are located in the study area. Projects eligible for financing through this fund will be competing for available revenues on a county-wide basis.

BRIDGE FUND

The Bridge Fund provides financing for engineering services, capital outlays, and necessary maintenance for bridges on all off system and Secondary routes within the county. These monies are generated through intergovernmental fund transfers (i.e., vehicle licenses and fees), and a county wide mill levy.

MOTOR VEHICLE LICENSE FEE

The fees collected by counties from the licensing of motor vehicles are available for construction, maintenance, and repair of highways and streets within the transportation study area. The revenue collected is distributed among the jurisdictional areas of the county based on vehicle registration. In 1987, the State of Montana changes its method of licensing motor vehicles of ¾ ton or less. The flat fee tax on light vehicles was replaced by a 2 percent tax on the assessed value of the vehicle, using average trade-in or wholesale value. An ad valerom tax is still issued for all vehicles in excess of ¾ ton. A use tax of 1.5% is imposed on the list price of all newly licensed vehicles. The proceeds of this tax are credited to the State highway account of the State Special Revenue Fund. The funds from the 2 percent tax are distributed in the relative proportions required by the levies for State, County, School District and municipal purposes in the same manner personal property taxes are distributed. Additionally, counties have the option of imposing a 0.5 percent local vehicle tax that is distributed, with some restrictions, in the same manner as the base vehicle tax.

URBAN TRANSPORTATION DISTRICTS

Urban Transportation Districts are another method of providing local funds for transportation improvements. The creation of an urban transportation district is initiated by a petition of at least 20 percent of the registered voters within the proposed district. A formal public hearing must be held after which the creation of the district is put to a vote. The county commissioners determine whether a special election is necessary, or if a vote can take place at the next general election. Urban Transportation Districts are governed by an elected board, which is responsible for all operations of the district. The Great Falls Transit District was created under and operates under the guidelines for Urban Transportation Districts.

COUNTY ELDERLY ACTIVITIES TAX

Counties are allowed to levy up to one mill to promote, establish, and maintain recreational, educational, and other activities of the elderly. Funds from this source could be used to match the FTA Section 5310 funds for providing transportation services to the elderly and disabled. Cascade County generates revenue from this mill levy.

SPECIAL REVENUE FUNDS

Special revenue funds may be used by the county to budget and distribute revenues legally restricted to a specific purpose. Several such funds that benefit the transportation system are discussed briefly in the following paragraphs.

CAPITAL IMPROVEMENTS FUND

This fund is used to finance major capital improvements to county infrastructure. Revenues are generated by loans from other county funds and must be repaid within ten years. Major road construction projects are eligible for this type of financing.

RURAL SPECIAL IMPROVEMENT DISTRICT (RSID) REVOLVING FUND

This fund is used to administer and distribute monies for specified RSID projects. Revenue for this fund is generated primarily through a mill levy and through motor vehicle taxes and fees. A mill levy is assessed only when delinquent bond payments dictate such an action.

TIF DISTRICTS

Similar to the city TIF Districts, Cascade County previously established two TIF Districts. However, both TIF Districts expired and the work to improve infrastructure in those areas will be finished up in FY 2023.

3.3.3. Other Potential Local Funding Sources

The following funding sources could be used by the county in the future to fund roadway infrastructure improvements.

GENERAL OBLIGATION BONDS

The sale of General Obligation (GO) bonds can be used to finance a specific set of major highway improvements. A GO bond sale, subject to voter approval, provides the financing initially required for major improvements to the transportation system. The advantage of this funding method is that when the bond is retired, the obligation of the taxpaying public is also retired. State statutes limiting the level of bonded indebtedness for cities and counties restrict the use of GO bonds. The present property tax situation in Montana, and recent adverse citizen responses to proposed tax increases by local governments, suggests that the public may not be receptive to the use of this funding alternative.

MULTI-JURISDICTIONAL SERVICE DISTRICT

The State Legislature authorized this funding option in 1985. This procedure requires the establishment of a special district, somewhat like a SID, which has the flexibility to extend across city and county boundaries. Through this mechanism, an urban transportation district could be established to fund a specific highway improvement that crossed municipal boundaries (e.g., corporate limits, urban limits, or county lines). This type of fund is structured similar to an SID with bond backed by local government issued to cover the cost of a proposed improvement. Revenue to pay for the bonds would be raised through assessments against property owners in the service district.

LOCAL IMPROVEMENT DISTRICT

This funding option is only applicable to counties wishing to establish a local improvement district for road improvements. This funding option has the benefit of allowing counties to initiate a local improvement district through a more streamlined process than that associated with the development of an SID.

USER FEES

User fees are charges for county services where the benefits received from such services can be directly and equitably applied to those who receive the benefits. User fees are often costly to administer so there are only collected if it is cost-effective and administratively feasible to do so.

User fees and charges are used when distinct beneficiary populations or interest groups can be identified. User fees and charges are preferable to general taxes because user charges can provide clear demand signals that assist in determining what services to offer, their quantity and their quality. User charges are more equitable, since only those who use the service pay, thereby eliminating the subsidy provided by nonusers to users, which is inherent in general tax revenue.

LOCAL SALES TAX

If authorizing legislation were to be approved, local governments would be able to initiate local option taxes as a potential funding source for transportation improvements. One local option tax would be a local sales tax.

WHEEL TAX

If initiated, a tax per wheel on vehicles licensed in counties could generate substantial revenue. The cost to each user of the transportation network would be proportional to the number and type of vehicles owned.

LOCAL OPTIONS MOTOR FUEL TAX

A local option fuel tax is another means of raising revenue for the construction, reconstruction, maintenance, and repair of public streets and roads. This local tax may be imposed by the people of the county or by the adoption of a resolution by the county commissioners and referred to the people. An advantage of a local motor fuel tax, as with a wheel tax, is that it taxes only the users of the transportation system, and the tax paid by such individuals is directly proportional to their use of the facilities. The revenue from a motor fuel tax must be distributed proportionately among the county and its member municipalities based on vehicle registration.

EXCISE TAXES

Excise Taxes are similar to sales taxes with the exception that items taxed are those considered indulgent. The demand for items on which there is an excise tax is generally large; therefore, there is potential to raise a substantial amount of local revenue. Products on which an excise tax could be imposed for additional local revenue include such items as tobacco, alcohol, and various forms of entertainment. A potential problem with excise taxes arises when the tax causes inter-area competition.

Montana recently established taxes on marijuana products. Montana charges a 4% tax on medical marijuana and marijuana products sales and 20% tax on adult use marijuana and marijuana products sales. Marijuana Regulation and Taxation (MCA Title 16, Chapter 12) allows for counties to implement a local option marijuana excise tax not to exceed 3%. Cascade County collects a 3% tax on both medical and adult use marijuana sales. A portion of state taxes goes towards improving trails and recreational facilities.

VALUE CAPTURE TAXES

Value capture taxes are a way to raise revenue following development of transportation improvements. Whereas development fees are assessed to make necessary transportation improvements, value capture taxes impose a fee on businesses that benefit due to their location along improved, highly traveled routes, which assumes improvement have been made. Value capture taxes may be a means to enter into other forms of funding future improvements. One method to consider would be cash flow management that makes wise use of existing revenue rather than continuing to introduce new sources.

3.4. PRIVATE FUNDING SOURCES

Private financing of roadway improvements, in the form of right-of-way donations and cash contributions, has been successful for many years. In recent years, the private sector has recognized that better access and improved facilities can be profitable due to increase in land values and commercial development possibilities. Private funding sources that are already in use, as well as forms of private financing for transportation improvements used in other parts of the United States are described in this section.

MISSOURI-MADISON RIVER FUND GRANT

The Missouri-Madison River Fund Grant Program (River Fund), implemented through the *Missouri-Madison Comprehensive Recreation Plan*, addresses ongoing needs for public recreation in the Missouri-Madison Project Area. Created as a public-private partnership among local government, state and federal agencies, and the licensee of the Project 2188 Hydroelectric Project, River Fund grants and matching funds from NorthWestern Energy are awarded annually for qualifying projects. Great Falls has successfully obtained funding from the River Fund since its inception in 2007. There are currently six funding request applications in the Great Falls area under consideration by the River Fund Board for FY 2024.

RIVER'S EDGE TRAIL ENDOWMENT FUND

The River's Edge Trail Endowment Fund is managed by the River's Edge Trail Foundation, a volunteer nonprofit corporation that works with agency partners to develop, extend, and maintain River's Edge Trail (RET). A key role of the Foundation is raising money for the Endowment Fund from private donations to fund the Applicant Match required of many trail grant programs. The RET Foundation supports maintenance activities (such as resurfacing, weed abatement, riverbank work, signage, equipment, and labor), improvements, and new trail development.

COST SHARING

Developers may be required to construct transportation facilities as mitigation for traffic-related impacts to the roadway network.

PRIVATE OWNERSHIP

An arrangement where a private enterprise constructs and maintains a transportation facility, and the government agrees to pay for public use of the facility. Payment for public use of the facility is often accomplished through leasing agreements (wherein the facility is rented from the owner), or through access fees whereby the owner is paid a specified sum depending upon the level of public use.

TRANSPORTATION CORPORATIONS

These private entities are non-profit, tax-exempt organizations under the control of state and local government. They are created to stimulate private financing of highway improvements.

ROAD DISTRICTS

These are areas created by a petition of affected landowners, which enables issuance of bonds for financing local transportation projects.

PRIVATE DONATIONS

The private donation of money, property, or services to mitigate identified development impacts is the most common type of private transportation funding. Private donations are effective in areas where financial conditions do not permit a local government to implement a transportation improvement itself.

PRIVATIZATION

Either the temporary or long-term transfer of a public property of publicly owned rights belonging to a transportation agency to a private business. This transfer is made in return for a payment that can be applied toward construction or maintenance of transportation facilities.

3.5. Summary of Funding Sources

Transportation improvements can be implemented using federal, state, local, and private funding sources. Each funding source is constrained by different elements including system eligibility, funding allocations, and matching requirements. Depending on their intended purpose, some of the funding sources may not be entirely available for construction of capital improvements. Several of the sources listed allocate money for routine and/or deferred maintenance activities. Many of the funding sources are constrained to use for improving specific route systems including the NHS, Primary, Secondary, or Urban Highway Systems, and Off-system routes. Considering the current funding limits of these traditional programs, and the extensive list of recommended road projects, more funding will be required from local and private sources if all transportation network needs are to be met over the planning horizon. A summary of the various programs and their eligibility requirements is provided in **Table 3.2**.

Table 3.2: Funding Sources Summary

Funding Program	Source	Subprograms	Description
Discretionary Programs	Federal	• Bridge Investment Program • Safe Streets and Roads for All (SS4A) • Rural and Tribal Assistance Pilot Program • Nationally Significant Multimodal Freight and Highway Projects Program (INFRA) • Rebuilding American Infrastructure Sustainably and Equitably (RAISE) Grants • National Infrastructure Project Assistance (MEGA) • Rural Surface Transportation Grant Program (RURAL)	New funding opportunities for roadways, bridges, and other major projects authorized under IIJA. Eligibility, allocations, and matching requirements vary by program.
Promoting Resilient Operations for Transformative, Efficient, And Cost-Saving Transportation (PROTECT)	Federal	N/A	Formula funding to make surface transportation infrastructure more resilient to the effects of extreme weather and natural disasters.
Carbon Reduction Program (CRP)	Federal	N/A	Formula funding to reduce transportation emissions.
Bridge Formula Program (BR)	Federal	N/A	Formula funding to replace, rehabilitate, preserve, protect, and construct bridges on public roads.
National Highway Performance Program	Federal	• Interstate Maintenance (IM) • National Highway (NH) • NHPP Bridge (NHPB)	Provides funding for the NHS, including the Interstate System and NHS roads and bridges.
National Highway Freight Program (NHFP)	Federal	• N/A	Supports activities that improve the efficient movement of freight on the National Highway Freight Network.
Surface Transportation Block Grant Program (STBG)	Federal	• Primary (STPP) • Secondary (STPS) • Urban (STPU) • Bridge (STPB)	Funds available for projects to preserve or improve conditions and performance on state-designated Primary, Secondary, and Urban Highway Systems and some off-system routes.

Funding Program	Source	Subprograms	Description
		• Off-System Routes (STPX) • Urban Pavement Preservation Program (UPP) • Transportation Alternatives (TA) Program / Recreational Trails Program (RTP)	
Highway Safety Improvement Program (HSIP)	Federal	• Railroad Crossing Improvements (RRS)	Funds are apportioned for safety improvement projects included in the State Strategic Highway Safety Plan. Projects must correct or improve a hazardous road location or feature or address a highway safety problem.
Congestion Mitigation and Air Quality Improvement Program (CMAQ)	Federal	• CMAQ (formula) • Montana Air & Congestion Initiative (MACI)- Guaranteed & Discretionary Programs	Federal funds available under this program are used to finance transportation projects and programs to help improve air quality and meet the requirements of the Clean Air Act.
Transit Capital and Operating Assistance Funding	Federal	• Urbanized Area Formula Grants (Section 5307) • Enhanced Mobility of Seniors and Individuals with Disabilities (Section 5310) • Formula Grants for Rural Areas (Section 5311) • Bus and Bus Facilities (Section 5339)	The MDT Transit Section provides funding to eligible recipients through federal and state programs. All funded projects must be derived from a locally developed, coordinated public transit-human services transportation plan (a “coordinated plan”).
State Funded Construction (SFC)	State	N/A	Provides funding for projects that preserve the condition and/or extend the service life of state highways.
TransADE	State	N/A	Grant program offering operating assistance to eligible organizations providing transportation to the elderly and persons with disabilities.
State Funds for Transit Subsidies	State	N/A	Provides funds to offset expenditures of a municipality or urban transportation district for public transportation.
State Fuel Tax	State	• City and County Fuel Tax Formula Distributions	State taxes assessed on each gallon of gasoline and clear diesel fuel sold in the state are allocated to cities and counties for the construction, reconstruction, maintenance, and repair of roads.
City of Great Falls	Local	• Special Improvement District (SID) Revolving Fund • Gas Tax Apportionment • Street District • Great Falls Parking Commission • Tax Increment Financing (TIF) • Community Development Block Grant Program (CDBG)	Accounts for the proceeds of specific revenue sources that are legally restricted to expenditures for specified purposes.
Cascade County	Local	• Road Fund • Bridge Fund • Motor Vehicle License Fee • Urban Transportation Districts • County Elderly Activities Tax • Special Revenue Funds • Capital Improvements Fund • Rural Special Improvement District (RSID) Revolving Fund • Tax Increment Financing (TIF)	Accounts for the proceeds of specific revenue sources that are legally restricted to expenditures for specified purposes.

Funding Program	Source	Subprograms	Description
Other Potential Funding Sources	Local	• General Obligation Funds • Multi-Jurisdictional Service District • Local Improvement District • User Fees • Local Sales Tax • Wheel Tax • Local Options Motor Fuel Tax • Excise Taxes • Value Capture Taxes	Various other sources of funding may be available in the future, pending legislation and other political decisions made by governing entities.
Private Funding Sources	Private	• Missouri-Madison River Fund Grant • River's Edge Trail Endowment Fund • Cost Sharing • Private Ownership • Transportation Corporations • Road Districts • Private Donations • Privatization	Private financing of roadway improvements, in the form of right-of-way donations and cash contributions, has been successful for many years. In recent years, the private sector has recognized that better access and improved facilities can be profitable due to increase in land values and commercial development possibilities.

4.0 FUNDING PLAN

This chapter discusses the financial plan for the 2024 LRTP, projected out to the year 2045. Federal legislation requires that the LRTP be "fiscally constrained"; in other words, the cost of implementing and maintaining transportation improvements should be within a funding amount that can reasonably be expected to be available during the life of the plan.

Federal regulations establish the requirements for the financial plan in Title 23, Section 450.324(f)(11), of the Code of Federal Regulations. To summarize, the regulations (effective May 2016) state that the financial plan should include the following:

- Estimates of costs and revenue sources needed to adequately operate and maintain federal-aid highways and public transportation
- Estimates of funds that will be available to support the LRTP implementation and that are agreed upon by the MPO, public transportation operator(s), and the state
- Recommendations on any additional financing strategies to fund projects and programs included in the LRTP
- Revenue and cost estimates that use an inflation rate to reflect "year of expenditure dollars" and that have been developed cooperatively by the MPO, state, and public transportation operator

Funding to implement the LRTP recommendations comes from federal, state, and local sources. This financial element of the LRTP includes estimates of costs that would be required to implement the LRTP as well as estimates of existing and contemplated sources of funds available to pay for these improvements.

4.1. SUMMARY OF CURRENT FINANCIAL STATUS

Current financial information was obtained from the MDT Statewide and Urban Planning Section to get a picture of the projected revenue available for funding transportation projects in the Great Falls area over the next 20 years. This information is summarized in **Table 4.1**.

Table 4.1: Projected Funding by Funding Source (Estimated, Thousands)

Funding Source	FFY 2025 Beginning Balance	Expected Funding [1]				2025-2028 Expected Funding	Projected Annual Average Funding [2]	2029-2045 Projected Funding	Total Funding (2025-2045)
		2025	2026	2027	2028				
FEDERAL									
NHPP	**$0**	**$19,810**	**$1,694**	**$31,022**	**$5,724**	**$58,250**	**$8,784**	**$140,542**	**$198,792**
IM	*$0*	*$828*	*$500*	*$15,607*	*$2,954*	*$19,889*	*$1,783*	*$28,533*	*$48,422*
NH	*$0*	*$18,981*	*$1,194*	*$1,057*	*$2,770*	*$24,003*	*$6,001*	*$96,010*	*$120,012*
NHFP	**$0**	**$0**	**$0**	**$14,358**	**$0**	**$14,358**	**$1,000**	**$16,000**	**$30,358**
STP	**$7,580**	**$3,277**	**$2,369**	**$2,369**	**$2,369**	**$17,964**	**$2,596**	**$41,539**	**$59,503**
STPU	*$4,548*	*$1,314*	*$1,314*	*$1,314*	*$1,314*	*$9,802*	*$1,314*	*$21,018*	*$30,820*
STPX, STPS, SFCN	*$0*	*$25*	*$25*	*$25*	*$25*	*$100*	*$25*	*$400*	*$500*

Funding Source	FFY 2025 Beginning Balance	Expected Funding [1]				2025-2028 Expected Funding	Projected Annual Average Funding [2]	2029-2045 Projected Funding	Total Funding (2025-2045)
		2025	2026	2027	2028				
UPP	*$0*	*$1,407*	*$500*	*$500*	*$500*	*$2,907*	*$727*	*$11,630*	*$14,538*
TA [3]	*$3,032*	*$531*	*$531*	*$531*	*$531*	*$5,155*	*$531*	*$8,491*	*$13,646*
BR	**$0**	**$0**	**$2,278**	**$2,389**	**$16,354**	**$21,021**	**$5,255**	**$84,083**	**$105,104**
HSIP	**$0**	**$359**	**$586**	**$200**	**$200**	**$1,345**	**$336**	**$5,379**	**$6,724**
CMAQ	**$11,447**	**$3,523**	**$4,748**	**$3,811**	**$4,825**	**$31,711**	**$2,740**	**$43,846**	**$75,557**
CMAQ - Guaranteed Program	*$14,804*	*$23*	*$4,248*	*$3,311*	*$4,325*	*$26,711*	*$1,490*	*$23,846*	*$50,557*
MACI - Discretionary Program [4]	*$0*	*$3,500*	*$500*	*$500*	*$500*	*$5,000*	*$1,250*	*$20,000*	*$25,000*
CRP	**$1,681**	**$548**	**$548**	**$548**	**$548**	**$3,872**	**$548**	**$8,765**	**$12,637**
FTA	**$3,095**	**$5,755**	**$5,324**	**$5,513**	**$5,324**	**$25,011**	**$5,419**	**$86,699**	**$111,711**
STATE AND LOCAL									
TransADE	**$0**	**$454**	**$454**	**$454**	**$454**	**$1,815**	**$454**	**$7,258**	**$9,073**
Operations and Maintenance	**$0**	**$9,655**	**$9,655**	**$9,655**	**$9,655**	**$38,618**	**$9,655**	**$154,472**	**$193,090**
State	*$0*	*$1,026*	*$1,026*	*$1,026*	*$1,026*	*$4,103*	*$1,026*	*$16,411*	*$20,514*
City [5]	*$0*	*$5,546*	*$5,546*	*$5,546*	*$5,546*	*$22,183*	*$5,546*	*$88,732*	*$110,915*
County [5]	*$0*	*$3,083*	*$3,083*	*$3,083*	*$3,083*	*$12,332*	*$3,083*	*$49,329*	*$61,661*
State Fuel Tax	**$0**	**$2,054**	**$2,772**	**$2,772**	**$2,772**	**$10,371**	**$2,772**	**$44,358**	**$54,729**
City [5]	*$0*	*$1,740*	*$2,289*	*$2,289*	*$2,289*	*$8,606*	*$2,289*	*$36,618*	*$45,223*
County [5]	*$0*	*$314*	*$484*	*$484*	*$484*	*$1,765*	*$484*	*$7,741*	*$9,506*
TOTAL	**$23,802**	**$45,432**	**$28,150**	**$56,344**	**$31,871**	**$209,976**	**$33,304**	**$532,860**	**$721,816**

[1] Based on funding information provided by the Montana Department of Transportation regarding the DRAFT 2024-2028 Great Falls TIP.

[2] Projected Funding is estimated based on past funding levels and is the best information available at this time. There is no guarantee that funding will be available in the future.

[3] TA funds are allocated through a competitive process. Funding is not guaranteed and is dependent on availability.

[4] Great Falls does not receive an annual allocation of MACI Discretionary funding. Funding is allocated based on need and is not guaranteed.

[5] City and county funds received from state fuel taxes, local street assessments, and mill levies are primarily used for routine operations and maintenance. Excess funds are prioritized for capital expenditures based on need and priority.

4.2. Fiscal Constraint

Federal law requires that the cost of all projects in the LRTP must be estimated using inflated Year of Expenditure (YOE) dollars in order to provide a consistent and equivalent comparison of project costs to available revenue. Converting all costs to YOE dollars theoretically presents a more accurate picture of costs when compared to revenues, and identifies potential deficits associated with the LRTP. To provide for such a comparison, the total costs of committed projects, and the total costs of committed and recommended projects, were correlated to anticipated total revenue available through the year 2045. The portrayal of estimated costs against potential revenue throughout the life of the LRTP is a requirement of fiscal constraint. Initial project cost estimates were calculated in 2024 dollars and subsequently inflated to YOE dollars using a three percent annual inflation factor.

Due to funding requirements and jurisdictional boundaries, transportation financing is somewhat compartmentalized. Because of this, it is necessary to evaluate each project, and identify the most likely funding programs to finance each project.

Projects were assigned priority for funding based on their alignment with LRTP goals and objectives and the degree of community and agency support. Ultimately, the Transportation Advisory Committee acts in the decision-making capacity through advancing projects forward into the Transportation Improvement Program (TIP). Information from the draft 2024-2028 TIP is reflected in this memorandum.

4.3. Funding of Committed Projects

The committed improvement projects, as outlined in the draft 2024-2028 TIP, have been subdivided according to anticipated funding sources and are presented in **Table 4.2**.

Table 4.2: Committed Projects

MDT UPN	ID	Project	Description	Funding Source	YOE	Estimated Cost
10301	**C1**	SF 209 Great Falls Dist. Signs	Intersection safety improvements (signs, delineation, chevrons, etc.) at 12 locations w/in GF District. 2 locations w/in MPO boundary -- Fields Rd from RP 0.8-1.5 (0.7-miles) and Gibson Flats Rd from RP 0.6-1.1 (0.5-miles)	HSIP	2025	$140,500
10248	**C2**	6th Street NW/Fox Farm Rd - GF	Pavement preservation on Fox Farm Rd (10th Ave S to Alder Dr) and 6th St NW (Central Ave W to NW Bypass)	UPP	2025	$907,400
9846	**C3**	6th Street SW - Great Falls	Pavement Preservation from Fox Farm Rd to Central Ave (RP 0.0 - 1.3)	NH	2025	$11,200,000
10241	**C4**	57th Street - Great Falls	Pavement Preservation from 2nd Ave N to 10th Ave S (RP 7.49 - 8.20)	NH	2025	$1,975,500
10316	**C5**	Black Eagle NHS Routes - GF	Scrub seal on River Dr (15th to 38th), Overlay on Old Havre HWY (Smelter Ave to HWY 87) and HWY 87 (end of PCC to GTF North)	NH	2025	$3,557,900
10382	**C6**	Central-Vaughn Rd to 9th St NW	Pavement preservation Central Ave W (RP 0.23 - 0.792)	NH	2025	$1,128,900
TBD	**C7**	GF District ADA Upgrades	Various ADA improvements on 14th St (8th Ave N to 9th Ave S), 15th St (9th Ave S to 8th Ave N), and 1st Ave N (Park Drive to 8th St N)	MACI (CMAQ)	2025	$3,000,000
10338	**C8**	9th St NW - Great Falls	Reconstruction between Central Ave and NW Bypass (RP 0 and 0.57)	NH	2025	$62,000
				STPU	2026	$5,308,700

MDT UPN	ID	Project	Description	Funding Source	YOE	Estimated Cost
9762	C9	River's Edge Trail Connector	Bike/Ped shared use path connector along River Drive (3rd Ave S to 1st Ave N) with RRFBs at River Drive at-grade crossings (water park & 3rd Ave S)	CMAQ	2025	$23,000
				CMAQ	2026	$4,247,500
9901	C10	SF 189 Turn Lane 34th Vaughn Rd	Turn lane on Vaughn Rd at 34th St NW intersection	HSIP	2025	$18,100
				HSIP	2026	$386,300
9345	C11	Gore Hill Interchange - GTF	Reconstruction of existing I-15 interchange (roundabouts and new structure)	IM	2025	$241,100
				IM	2027	$14,482,500
				NHFP	2027	$14,357,700
				BR	2027	$2,388,600
10339	C12	Watson Coulee Road - Great Falls	Reconstruction between RP 0 and 0.24	STPU	2025	$96,800
				STPU	2027	$2,960,000
				CMAQ	2027	$3,311,200
10544	C13	Great Falls - Northwest	Pavement preservation & scrub seal on I-15 (RP 278.5 to 285.918)	IM	2025	$87,200
				IM	2028	$2,454,100
10517	C14	Great Falls Area Bridge Decks	Bridge rehabilitation project on 6 structures in Cascade County. The Sun River Rd/I-15 Overpass and 10th Ave S/Missouri River Bridge are the only structures within the LRTP boundary that are included in the project.	BR	2026	$2,278,300
				BR	2028	$16,353,900
10547	C15	14th/15th St - Great Falls	Pavement preservation on 14th and 15th Streets	NH	2026	$137,000
				NH	2028	$1,712,900
10414	C16	Slide Repairs - Great Falls Area	Drainage improvements and slope stabilization/restoration on I-15 RP 278.5 to 278.8	IM	2027	$624,400
10190	C17	Off System Sidewalks - GF	Improve sidewalk/ADA upgrades in NW quadrant of GF (Riverview area)	CMAQ	2028	$4,324,800
					TOTAL COMMITTED PROJECTS	$97,766,300

4.4. Funding of Annual Programs

Annual allocations for various programs are listed in **Table 4.3**. These programs are included to account for typical annual expenditures that are typically less costly and more routine than stand-alone projects. An estimate of annual costs was made for the inner (2025 – 2028) and outer years of the LRTP (2029 – 2045). Funding for these programs is not guaranteed and is determined on a case-by-case basis. Specific projects have yet to be identified for these programs. These programs are intended to identify funding needs for routine annual projects.

Table 4.3: Anticipated Annual Programs

ID	Name	Description	Funding Source	Annual Allocation	YOE	Estimated Cost
P1	Durable Pavement Markings Program	Install markings on Urban routes per City, County, and MDT	STPU	$50,000	2025-2028	$200,000
					2029-2045	$800,000
P2	MDT Preventative Maintenance	Maintenance - striping, durable pavement markings, pavement preservation	IM, NH	$1,582,100	2025-2028	$6,328,400
					2029-2045	$25,313,600
P3	Urban Pavement Preservation	Perform chip seals, overlays and related maintenance activities on Urban Routes	UPP	$500,000	2025-2028	$2,000,000
					2029-2045	$8,500,000
P4	Traffic Mitigation	Complete signalization projects that help mitigate traffic congestion	MACI-Discretionary	$250,000	2025-2028	$1,000,000
					2029-2045	$4,000,000
P5	ADA Compliance	Complete projects that help make the transportation system compliant with the Americans with Disabilities Act	MACI-Discretionary	$250,000	2025-2028	$1,000,000
					2029-2045	$4,000,000
P6	Transportation Alternatives Projects	Complete sidewalk infall, non-motorized transportation projects, and other eligible Transportation Alternatives projects	TA	$500,000	2025-2028	$1,000,000
					2029-2045	$4,000,000
P7	Transit Operating Expense	General transit operating expenses	FTA Sect 5307, Transade	$5,076,600	2025-2028	$21,711,256
					2029-2045	$86,845,024
P8	Transit Capital Purchase	Acquire vehicles and related equipment	FTA Sect 5339/5310	$251,700	2025-2028	$3,388,972
					2029-2045	$7,112,624
P9	MDT-nominated HSIP Safety Projects	Safety improvement projects	HSIP	$200,000	2025-2028	$800,000
					2029-2045	$3,400,000
P10	City of Great Falls 2024-2029 CIP Projects	ADA upgrades, sidewalk projects, pavement preservation projects	CITY	$3,750,000	2025-2028	$15,000,000
ANNUAL PROGRAM TOTAL (2025-2028)						**$53,428,628**
ANNUAL PROGRAM TOTAL (2029-2045)						**$147,271,248**

4.5. Funding of Recommended Projects

The recommended improvements are listed in **Chapter 2**. The projects were prioritized for anticipated funding according to a prioritization process aligned with LRTP goals and objectives and public and agency input. The proposed funding sources for each project are those that are most likely to be available to fund each project over the 20-year planning horizon, although additional or different funding sources may be used as available and appropriate. Furthermore, the estimated funding timeframe was determined based on anticipated funding allocations but are subject to change based on actual funding and project costs. Coordination with all implementing agencies (city, county, and state) will be essential to ensure continued progress toward implementation. Recommended improvement projects are summarized and shown in **Table 4.4**. Illustrative projects, described in **Section 2.2.4**, may be funded within the LRTP planning horizon as funding becomes available. Other projects, listed in **Section 2.2.5**, should be conducted over the 20-year planning horizon with planning funds, or on an as needed basis.

Table 4.4: Recommended Projects

ID	Project	Description	Proposed Funding Source	Estimated Funding Timeframe	Estimated Cost in YOE
R-1	City Sidewalk Infill Projects	Infill sidewalk gaps at various locations across the city	TA, CITY	2029 - 2033	$3,600,000
R-2	Central Avenue / 38th Street Intersection	Reconstruct intersection (traffic signal or roundabout)	STPU, CMAQ	2029 - 2033	$6,000,000
R-3	1st & 2nd Ave S (9th St S to 15th St S)	Overlay with new asphalt	CITY	2029 - 2033	$4,500,000
R-4	36th Avenue NE Traffic Calming	Traffic calming between Bootlegger Trail and terminus to heighten pedestrian visibility	CITY	2029 - 2033	$880,000
R-5	10th Ave S / 54th St S	Intersection safety improvements (access modifications)	HSIP	2029 - 2033	$77,000
R-6	2nd Ave N / 38th St N	Install dedicated north/southbound left-turn lanes	STPU, CMAQ, PRIVATE	2029 - 2033	$710,000
R-7	10th Avenue S Signal Improvements (20th St S & 23rd St S)	Install dedicated north/southbound left-turn lanes	NH, CMAQ	2029 - 2033	$3,000,000
R-8	River Drive N / 25th St N Intersection Improvements	Reconstruct intersection (traffic signal or roundabout)	NH, MACI	2029 - 2033	$6,700,000
R-9	Flood Road Curve Warning	Install enhanced curve warning signage	HSIP, CITY	2029 - 2033	$9,000
R-10	Lower Sun River Road Curve Warning	Install enhanced curve warning signage	HSIP, CITY	2029 - 2033	$4,000
R-11	Skyline Drive NW/NE Corridor Improvements	Traffic calming and evaluation of stop-control warrants along route	CITY	2029 - 2033	$1,500,000
R-12	Smelter Ave / 6th St NW	Intersection traffic study to identify priority movements, reconfigure stop control accordingly	CITY	2029 - 2033	$25,000
R-13	Skyline Drive NE / 9th St NE / 32nd Ave	Improve intersection definition (short-term), consider roundabout as a long-term solution	CITY	2029 - 2033	$32,000
R-14	11th Ave S Traffic Calming	Traffic calming between 26th St S and 32nd St S to heighten pedestrian visibility	CITY	2029 - 2033	$640,000

ID	Project	Description	Proposed Funding Source	Estimated Funding Timeframe	Estimated Cost in YOE
R-15	North Great Falls Geometric Intersection Improvements	Modify traffic control and improve intersection geometrics	CITY	2029 - 2033	$31,000
R-16	Park Drive - 8th Ave N to 2nd Ave N	Reconstruct to current standards with non-motorized accommodations and intersection improvements at Park Dr/6th St N/8th Ave N	STPU, CMAQ, MACI	2034-2039	$9,200,000
R-17	25th Avenue NE - Old Havre Hwy to 15th St N	Restripe to three-lane roadway, install shared use path	STPU, CRP, NH	2034-2039	$3,300,000
R-18	Fox Farm Road - Alder Dr to Park Garden Rd	Restripe to four-lane roadway, remove on-street parking, corridor safety improvements	STPU	2034-2039	$820,000
R-19	Fox Farm Intersection Improvements	Install dual eastbound left-turn lanes; install dedicated northbound left-turn lane if redevelopment occurs	CMAQ	2034-2039	$250,000
R-20	25th Street S – 10th Ave S to 11th Ave S	Modify to be one-way in the southbound direction	CMAQ	2034-2039	$45,000
R-21	15th Street Bridge Improvements	Rehabilitate or replace 15th Street Bridge	NH, NHFP, BR	2040-2045	$70,900,000
R-22	Warden Bridge Improvements	Rehabilitate or replace eastbound Warden Bridge	NH, NHFP, BR	2040-2045	$54,300,000
R-23	25th Street N - River Dr to 2nd Ave N	Reconstruct to urban minor arterial standards	NH, NHFP, BR	2040-2045	$13,400,000
R-24	15th Avenue S - 30th St S to 32nd St S	Extend eastward as a collector street, connecting at 14th Ave S/32nd St S	STPU, HSIP, CITY	2040-2045	$1,600,000
R-25	10th Avenue S - 26th St S to 39th St S	Widen to six-lane principal arterial	NH, NHFP	2040-2045	$22,000,000
R-26	15th St NE / River Drive N	Reconstruct intersection with additional capacity	NH, CMAQ	2040-2045	$2,300,000
R-27	24th Ave S - 3A St S to Eastern Terminus	Pave roadway to urban local street standard including urban design features	CITY	2040-2045	$550,000
				TOTAL RECOMMENDED PROJECTS	$206,373,000

Implementing facility improvements will demand creative and flexible project financing. To capitalize on available funding opportunities, local governments should proactively consider the following:

- Several discretionary funding programs are available. Governments should be educated on eligibility requirements for such programs and proactively and strategically identify qualified projects to submit for potential funding.
- Numerous conventional methods of financing are available to local government (such as bonds and Special Improvement Districts) and should not be overlooked.
- Financing for special types of projects is sometimes available. Currently, funding is available for certain kinds of safety projects, and projects for bicycle facilities and walking trails.
- Local government should attempt to link private beneficiaries of improvements with private sources of financing. Additionally, if private individuals come forward with funding, local government should be prepared to accept it.

4.6. Funding of Non-Motorized Projects

Because the LRTP presents a visionary network for the non-motorized transportation system, it is likely that improvements will coincide with roadway projects as they are developed. Accordingly, the network will be built over time. Non-motorized projects are not "recommended projects" in the conventional sense, however they should be developed as time and funding allows. Non-motorized network recommendations in this LRTP should be consulted any time a road or intersection project is being programmed. Most, if not all, of the funding sources previously mentioned can be used to contribute to non-motorized improvements, either as part of an overall project or as a stand-alone project.

There are three non-motorized projects that are committed, the GF District ADA Upgrades (C-7), River's Edge Trail Connector (C-9), and Off System Sidewalks – GF (C-17). By examining these committed projects, it can be seen that approximately $11.6 million will be expended on non-motorized specific projects between 2025 and 2028 – a period of 4 years. This amounts to an annual expenditure of roughly $2.9 million per year. This expenditure can be thought of as an annual program necessary and dedicated to non-motorized infrastructure.

4.7. Funding of Transit Projects

As described in **Section 2.4.1**, there are no specific committed improvement projects for the transit system; there are only annual funding allocations that contribute to the acquisition of new vehicles and related equipment over the years. GFTD plans to replace one paratransit van in 2024 and continue to replace assets as they reach their useful life. It is envisioned that this would continue over the course of the LRTP planning horizon as funds are available. GFTD also plans to work towards achieving the TDP goals and objectives through implementation of the TDP recommendations as funding becomes available.

4.8. Funding Summary

A comparison of the estimated costs for the various transportation improvements and the potential revenue from various funding sources confirms that the LRTP is fiscally constrained over the 20-year life of the plan (see **Table 4.5**). This LRTP is fiscally responsible in that traditional funding programs, targeted to be utilized for the majority of the projects within the Great Falls area, are identified, available and likely to be funded at current or slightly smaller levels than in past years.

Illustrative projects do not have definite funding sources within the timeframe of the plan. Therefore, these projects are not included in the summary for the purposes of fiscal constraint. As the MPO and its partner agencies review needs, identify new funding sources, and plan projects, the list of illustrative projects should be used as a guide for new projects.

Table 4.5: Comparison of LRTP Estimated Costs and Available Revenue (Thousands, Planning Year 2045)

Funding Source	2025-2028			2029-2033			2034-2039			2040-2045		
	Anticipated Funding[1]	Expenditures	Balance	Anticipated Funding[2]	Expenditures	Balance	Anticipated Funding[2]	Expenditures	Balance	Anticipated Funding[2]	Expenditures	Balance
NHPP	**$58,250**	**$58,250**	**$0**	**$43,920**	**$14,646**	**$29,274**	**$43,920**	**$7,951**	**$65,243**	**$52,703**	**$77,003**	**$40,944**
IM	*$19,889*	*$19,889*	*$0*	*$8,917*	*$2,500*	*$6,417*	*$8,917*	*$2,500*	*$12,833*	*$10,700*	*$3,000*	*$20,533*
NH	*$24,003*	*$24,003*	*$0*	*$30,003*	*$12,146*	*$17,858*	*$30,003*	*$5,286*	*$42,575*	*$36,004*	*$60,213*	*$18,366*
NHFP	**$14,358**	**$14,358**	**$0**	**$5,000**	**$0**	**$5,000**	**$5,000**	**$165**	**$9,835**	**$6,000**	**$13,790**	**$2,045**
STP	**$17,964**	**$13,573**	**$4,391**	**$12,981**	**$9,949**	**$7,423**	**$12,981**	**$9,615**	**$10,789**	**$15,577**	**$17,840**	**$8,526**
STPU	*$9,802*	*$8,566*	*$1,236*	*$6,568*	*$1,516*	*$6,288*	*$6,568*	*$6,990*	*$5,866*	*$7,882*	*$11,690*	*$2,058*
STPX, STPS, SFCN	*$100*	*$100*	*$0*	*$125*	*$125*	*$0*	*$125*	*$125*	*$0*	*$150*	*$150*	*$0*
UPP	*$2,907*	*$2,907*	*$0*	*$3,635*	*$2,500*	*$1,135*	*$3,635*	*$2,500*	*$2,269*	*$4,361*	*$3,000*	*$3,630*
TA[3]	*$5,155*	*$2,000*	*$3,155*	*$2,654*	*$5,808*	*$0*	*$2,654*	*$0*	*$2,654*	*$3,184*	*$3,000*	*$2,838*
BR	**$21,021**	**$21,021**	**$0**	**$26,276**	**$0**	**$26,276**	**$26,276**	**$0**	**$52,552**	**$31,531**	**$81,380**	**$2,703**
HSIP	**$1,345**	**$1,345**	**$0**	**$1,681**	**$1,084**	**$597**	**$1,681**	**$1,000**	**$1,278**	**$2,017**	**$1,200**	**$2,096**
CMAQ	**$31,711**	**$16,907**	**$14,804**	**$13,702**	**$10,734**	**$17,772**	**$13,702**	**$7,395**	**$24,079**	**$16,442**	**$3,460**	**$37,061**
CMAQ - Guaranteed	*$26,711*	*$11,907*	*$14,804*	*$7,452*	*$6,894*	*$15,362*	*$7,452*	*$2,595*	*$20,219*	*$8,942*	*$460*	*$28,701*
MACI - Discretionary[4]	*$5,000*	*$5,000*	*$0*	*$6,250*	*$3,840*	*$2,410*	*$6,250*	*$4,800*	*$3,860*	*$7,500*	*$3,000*	*$8,360*
CRP	**$3,872**	**$0**	**$3,872**	**$2,739**	**$0**	**$6,611**	**$2,739**	**$1,815**	**$7,535**	**$3,287**	**$0**	**$10,822**
FTA	**$25,011**	**$23,286**	**$1,726**	**$27,094**	**$27,094**	**$1,726**	**$27,094**	**$27,094**	**$1,726**	**$32,512**	**$32,512**	**$1,726**
TransADE	**$1,815**	**$1,815**	**$0**	**$2,268**	**$2,268**	**$0**	**$2,268**	**$2,268**	**$0**	**$2,722**	**$2,722**	**$0**
Ops & Maintenance	**$38,618**	**$15,000**	**$23,618**	**$48,273**	**$7,906**	**$63,985**	**$48,273**	**$0**	**$112,257**	**$57,927**	**$4,160**	**$166,024**
State	*$4,103*	*$0*	*$4,103*	*$5,129*	*$0*	*$9,231*	*$5,129*	*$0*	*$14,360*	*$6,154*	*$0*	*$20,514*
City[5]	*$22,183*	*$15,000*	*$7,183*	*$27,729*	*$7,906*	*$27,006*	*$27,729*	*$0*	*$54,734*	*$33,275*	*$4,160*	*$83,849*
County[5]	*$12,332*	*$0*	*$12,332*	*$15,415*	*$0*	*$27,748*	*$15,415*	*$0*	*$43,163*	*$18,498*	*$0*	*$61,661*
State Fuel Tax	**$10,371**	**$0**	**$10,371**	**$13,862**	**$0**	**$24,233**	**$13,862**	**$0**	**$38,095**	**$16,634**	**$0**	**$54,729**
City[5]	*$8,606*	*$0*	*$8,606*	*$11,443*	*$0*	*$20,049*	*$11,443*	*$0*	*$31,492*	*$13,732*	*$0*	*$45,223*
County[5]	*$1,765*	*$0*	*$1,765*	*$2,419*	*$0*	*$4,184*	*$2,419*	*$0*	*$6,603*	*$2,903*	*$0*	*$9,506*
TOTAL	**$209,976**	**$151,195**	**$58,781**	**$192,795**	**$73,680**	**$177,896**	**$192,795**	**$57,137**	**$313,554**	**$231,354**	**$220,277**	**$324,631**

[1] 2025-2028 Expected Funding is per the Draft Great Falls Transportation Improvement Program FY 2024-2028.
[2] 2029-2045 Projected Funding is estimated based on past funding levels and is the best information available at this time. There is no guarantee that funding will be available in the future.
[3] TA funds are allocated through a competitive process. Funding is not guaranteed and is dependent on availability.
[4] Great Falls does not receive an annual allocation of MACI Discretionary funding. Funding is allocated based on need and is not guaranteed.
[5] City and county funds received from state fuel taxes, local street assessments, and mill levies are primarily used for routine operations and maintenance. Excess funds are prioritized for capital expenditures based on need and priority.

4.9. Evaluation of Projects and Programs

Actively pursuing the advance acquisition of rights-of-ways needed for future extensions of already existing roadways is essential to the community as development occurs to the outlying areas. The majority of the recommended improvements developed through this LRTP Update will be able to work within the already established right-of-way corridors. If the property necessary for a low priority improvement, however, does become available prior to the time local government has scheduled the improvement, consideration should be given to changing the project's priority and acquiring the right-of-way at today's lower costs.

The following are additional considerations relating to right-of-way acquisitions:

- Focus on key landowners and work to maintain favorable relations with them. In some instances, particularly in situations in which there is a perception that property will be difficult to obtain, local government should attempt to initiate a negotiation process with the landowner as soon as possible.
- Do not rule out entering into agreements with landowners that may produce a benefit in the long-term. For instance, the local government may be aware of property it will require for future improvement. At present, local government may not have funds available for acquisition, and the landowner may not wish to sell. Nonetheless, by entering into an agreement for first right of refusal, local government can be in a better position to acquire the property in the future, when it may be in a more favorable financial situation.
- Local government can exert considerable influence on the development (or lack thereof), of property which may potentially be required by the community for transportation improvement purposes. Zoning, subdivision, and condemnation powers should not be overlooked particularly in right-of-way matters.

Another major difficulty in completing most of the major improvement projects will be that of securing financing. Project funding from the traditional public sources will likely be unavailable for many recommended improvements. However, in analyzing each improvement, it may be determined that a private party would benefit significantly from the project. In such a case, private dollars should be used as a match to secure public funds, or to fund the entire project. Therefore, in considering the prioritization of improvements, it is essential for local government to remain flexible and take advantage of financing opportunities as they arise.

The following recommendations present general guidelines for performing financial planning and increasing funding availability for project development and implementation.

- A coherent financial plan is necessary. Both the city and the county should continue to develop five-year Capital Improvement Plans (CIP) and the TIP. The CIPs and the TIP are the principal documents that outline the projects to be completed in the immediate future. These plans must include an analysis of all available sources of financing and link major network improvements to identified sources of financing.
- Matching funds can be a tremendous benefit to the local government. Consideration of matching funds should play a significant role in financial planning. Projects that have matching dollars available should be given a high priority. The city, county and state governments should work to develop new sources of matching funds.

- Financial planning should emphasize that in special cases, private dollars might be available to undertake a project. In such a case, the source of funding must be identified as a direct beneficiary of the project. The local government should bear in mind that such funding could provide the match necessary to receive State or Federal funds.
- Projects should be managed for efficiency and reductions in design and other pre-construction costs should be actively pursued. Incidental project costs such as the state's ICAP takes needed federal funds away from construction and drains scarce local funds. Local governments should look for ways to eliminate this burden, and the state should actively pursue other, more appropriate methods for funding its operating costs that do not take from funding categories needed for local projects.

Finally, in undertaking major network improvements, the local government should be aware of opportunities for constructing projects in separate phases. Often, funding is simply not available to address an improvement in its entirety. In such cases, a great deal can be accomplished by tackling separate components of individual improvements over the long term, such division of effort should not include separating bicycle and pedestrian facilities from initial street construction.

REFERENCES

[1] Montana Department of Transportation, *Highway System Modification Process*, April 2019, https://www.mdt.mt.gov/publications/docs/manuals/System-Mod.pdf

[2] The White House, *Building and Better America: A Guidebook to the Bipartisan Infrastructure Law for State, Local, Tribal, and Territorial Governments, and Other Partners*, May 2022, Available at: https://www.whitehouse.gov/wp-content/uploads/2022/05/BUILDING-A-BETTER-AMERICA-V2.pdf

GREAT FALLS AREA LONG RANGE TRANSPORTATION PLAN 2024

APPENDIX H-1:

Project Prioritization

ID	Project	Description	Proposed Funding Source	Estimated Funding Timeframe	Estimated Cost in YOE*	Project Prioritization									
						GOAL 1	GOAL 2	GOAL 3	GOAL 4	GOAL 5	GOAL 6	GOAL 7	SUB-TOTAL	Local Support Multiplier	TOTAL
						Preserve & maintain existing	Improve accessibility/ connectivity for all users	Improve reliability for efficient movement	Safety, security, resilliency	Consistency b/w transpo & land use	Improve QOL, conserve resources, protect enviro	Project delivery & cost effectiveness			
R-1	City Sidewalk Infill Projects	Infill sidewalk gaps at various locations across the city	TA, CITY	2029 - 2033	$ 3,600,000	2	2	2	2	2	2	2	14	3	42
R-2	Central Avenue / 38th Street Intersection	Reconstruct intersection (traffic signal or roundabout)	STPU, CMAQ	2029 - 2033	$ 6,000,000	1	2	2	1	2	1	1	10	3	30
R-3	1st & 2nd Ave S (9th St S to 15th St S)	Overlay with new asphalt	CITY	2029 - 2033	$ 4,500,000	2	0	0	1	1	2	2	8	3	24
R-4	36th Avenue NE Traffic Calming	Traffic calming between Bootlegger Trail and terminus to heighten pedestrian visibility	CITY	2029 - 2033	$ 880,000	1	2	1	2	2	2	1	11	2	22
R-5	10th Ave S / 54th St S	Intersection safety improvements (access modifications)	HSIP	2029 - 2033	$ 77,000	1	0	0	2	1	1	2	7	3	21
R-6	2nd Ave N/38th St N	Install dedicated north/southbound left-turn lanes	STPU, CMAQ, PRIVATE	2029 - 2033	$ 710,000	1	0	2	1	1	1	1	7	3	21
R-7	10th Avenue S Signal Improvements (20th St S & 23rd St S)	Install dedicated north/southbound left-turn lanes	NH, CMAQ	2029 - 2033	$ 3,000,000	0	0	2	1	1	1	1	6	3	18
R-8	River Drive N / 25th St N Intersection Improvements	Reconstruct intersection (traffic signal or roundabout)	NH, MACI	2029 - 2033	$ 6,700,000	2	0	1	2	1	2	1	9	2	18
R-9	Flood Road Curve Warning	Install enhanced curve warning signage	HSIP, CITY	2029 - 2033	$ 9,000	0	1	2	2	1	1	1	8	2	16
R-10	Lower Sun River Road Curve Warning	Install enhanced curve warning signage	HSIP, CITY	2029 - 2033	$ 4,000	2	0	0	2	0	0	2	6	2	12
R-11	Skyline Drive NW/NE Corridor Improvements	Traffic calming and evaluation of stop-control warrants along route	CITY	2029 - 2033	$ 1,500,000	2	0	0	2	0	0	2	6	2	12
R-12	Smelter Ave / 6th St NW	Intersection traffic study to identify priority movements, reconfigure stop control accordingly	CITY	2029 - 2033	$ 25,000	1	1	1	2	1	0	0	6	2	12
R-13	Skyline Drive NE / 9th St NE / 32nd Ave	Improve intersection definition (short-term), consider roundabout as a long-term solution	CITY	2029 - 2033	$ 32,000	1	1	1	2	0	0	1	6	2	12
R-14	11th Ave S Traffic Calming	Traffic calming between 26th St S and 32nd St S to heighten pedestrian visibility	CITY	2029 - 2033	$ 640,000	1	1	1	2	1	0	0	6	2	12
R-15	North Great Falls Geometric Intersection Improvements	Modify traffic control and improve intersection geometrics	CITY	2029 - 2033	$ 31,000	1	2	0	2	2	2	0	9	1	9
R-16	Park Drive - 8th Ave N to 2nd Ave N	Reconstruct to current standards with non-motorized accommodations and intersection improvements at Park Dr/6th St N/8th Ave N	STPU, CMAQ, MACI	2034-2039	$ 9,200,000	1	1	1	2	1	0	0	6	1	6
R-17	25th Avenue NE - Old Havre Hwy to 15th St N	Restripe to three-lane roadway, install shared use path	STPU, CRP, NH	2034-2039	$ 3,300,000	0	2	1	2	1	2	0	8	2	16
R-18	Fox Farm Road - Alder Dr to Park Garden Rd	Restripe to four-lane roadway, remove on-street parking, corridor safety improvements	STPU	2034-2039	$ 820,000	0	1	1	1	2	1	1	7	2	14
R-19	Fox Farm Intersection Improvements	Install dual eastbound left-turn lanes; install dedicated northbound left-turn lane if redevelopment occurs	CMAQ	2034-2039	$ 250,000	0	2	2	2	2	2	1	11	1	11
R-20	25th Street S – 10th Ave S to 11th Ave S	Modify to be one-way in the southbound direction	CMAQ	2034-2039	$ 45,000	0	2	1	2	2	2	0	9	1	9
R-21	15th Street Bridge Improvements	Rehabilitate or replace 15th Street Bridge	NH, NHFP, BR	2040-2045	$ 70,900,000	1	1	2	1	2	1	1	9	1	9
R-22	Warden Bridge Improvements	Rehabilitate or replace eastbound Warden Bridge	NH, NHFP, BR	2040-2045	$ 54,300,000	1	0	2	1	1	1	0	6	1	6
R-23	25th Street N - River Dr to 2nd Ave N	Reconstruct to urban minor arterial standards	NH, NHFP, BR	2040-2045	$ 13,400,000	1	0	2	1	1	1	0	6	1	6
R-24	15th Avenue S - 30th St S to 32nd St S	Extend eastward as a collector street, connecting at 14th Ave S/32nd St S	STPU, HSIP, CITY	2040-2045	$ 1,600,000	1	0	0	2	1	2	2	8	2	16
R-25	10th Avenue S - 26th St S to 39th St S	Widen to six-lane principal arterial	NH, NHFP	2040-2045	$ 22,000,000	1	2	1	1	2	2	1	10	1	10
R-26	15th St NE / River Drive N	Reconstruct intersection with addditional capacity	NH, CMAQ	2040-2045	$ 2,300,000	-1	2	2	1	2	2	1	9	1	9
R-27	24th Ave S - 3A St S to Eastern Terminus	Pave roadway to urban local street standard including urban design features	CITY	2040-2045	$ 550,000	0	0	2	0	1	0	1	4	2	8
				TOTAL RECOMMENDED PROJECTS	$ 206,373,000										
I-1	6th Street NW - Smelter Ave to Vinyard Rd	Reconstruct to urban minor arterial standards with bike lanes between Smelter Ave and 36th Ave NE	CITY, PRIVATE	--	$ 25,800,000	0	1	1	1	2	1	1	7	2	14
I-2	2nd Ave N (38th St N to 57th St N)	Install curb, gutter, and sidewalks, as development occurs	CITY, PRIVATE	--	$ 10,600,000	0	2	1	2	1	2	1	9	1	9
I-3	38th Street N/S - 10th Ave N to River Dr N	Reconstruct to urban minor arterial standards with bike lanes	STPU	--	$ 6,400,000	0	2	1	2	2	2	0	9	1	9
I-4	Lower River Road Reconstruction	Reconstruct roadway including bank stabilization and river wall improvements	STPU, COUNTY	--	$ 5,600,000	2	0	1	2	1	2	1	9	1	9
I-5	26th Street N - 8th Ave N to 2nd Ave N	Reconstruct to urban minor arterial standards	STPU	--	$ 8,200,000	1	2	1	1	1	2	0	8	1	8

ID	Project	Description	Proposed Funding Source	Estimated Funding Timeframe	Estimated Cost in YOE*	Project Prioritization									
						GOAL 1	GOAL 2	GOAL 3	GOAL 4	GOAL 5	GOAL 6	GOAL 7	SUB-TOTAL	Local Support Multiplier	TOTAL
						Preserve & maintain existing	Improve accessibility/ connectivity for all users	Improve reliability for efficient movement	Safety, security, resilliency	Consistency b/w transpo & land use	Improve QOL, conserve resources, protect enviro	Project delivery & cost effectiveness			
I-6	36th Avenue NE - 1st St NE to 6th St NW	Extend 36th Ave NE to 6th St NW as a minor arterial	CITY, PRIVATE	--	$ 7,800,000	-1	2	2	1	2	1	1	8	1	8
I-7	Vaughn Frontage Road – LRTP Boundary to I-15	Reconstruct to rural minor arterial standards	STPX	--	$ 12,400,000	1	1	1	1	2	1	1	8	1	8
I-8	Vaughn Road – I-15 to Central Ave W	Reconstruct to urban principal arterial standards	NH, STPU	--	$ 47,400,000	1	1	1	1	2	1	1	8	1	8
I-9	17th Avenue S - 7th St S to 13th St S	Reconstruct to collector standards with bike lanes	STPU, CITY	--	$ 7,600,000	0	1	1	1	2	1	1	7	1	7
I-10	43rd Avenue NE – Bootlegger Trail to US 87	Construct a new roadway to minor arterial standards	CITY, PRIVATE	--	$ 5,900,000	-1	2	1	1	2	1	1	7	1	7
I-11	43rd Avenue NE – Bootlegger Trail to 6th St NW/Vinyard Rd	Construct a new roadway to minor arterial standards	CITY, PRIVATE	--	$ 38,100,000	-1	2	1	1	2	1	1	7	1	7
I-12	River Drive - 3rd Ave S to 1st Ave N	Reconstruct to urban minor arterial standards with intersection and access improvements	STPU	--	$ 10,400,000	0	1	1	1	2	1	1	7	1	7
I-13	River Drive N - 25th St N to 38th St N	Reconstruct to three-lane arterial	NH	--	$ 26,800,000	1	0	2	1	2	0	1	7	1	7
I-14	3rd Avenue S East of 57th St	Reconstruct to urban local street standards	CITY, PRIVATE	--	$ 7,500,000	1	1	1	1	2	0	1	7	1	7
I-15	9th Street NW/Smelter Avenue NW (Ave E NW to 6th St NW)	Reconstruct to urban collector standards	CITY, PRIVATE	--	$ 3,000,000	1	1	1	1	2	1	0	7	1	7
I-16	Skyline Drive NW (6th St NW to Improved Section)	Reconstruct to urban collector standards	CITY, PRIVATE	--	$ 2,300,000	0	2	1	0	2	1	1	7	1	7
I-17	26th Street S - 24th Ave S to 33rd Ave S	Rebuild shoulders and flatten fill slopes; modify approach grade at 26th St S/33rd Ave S	COUNTY	--	$ 570,000	0	1	1	1	2	1	1	7	1	7
I-18	67th Street NE - Giant Springs Rd to 18th Ave N	Reconstruct to rural local street standards (matching Giant Springs Road) with shared use path	CITY	--	$ 6,150,000	0	1	2	2	0	1	0	6	1	6
I-19	20th St S - 18th Alley S to 20th Ave S	Extend 20th St S as a collector standard	CITY	--	$ 3,000,000	-1	2	1	0	2	-1	0	3	2	6
I-20	52nd Street N - 7th Ave N to 10th Ave N	Pave roadway to urban local street standard including urban design features and bike boulevard	CITY	--	$ 3,800,000	1	0	1	1	2	0	1	6	1	6
I-21	Central Avenue W - 20th St NW to 27th St NW	Reconstruct to urban collector standards	STPU	--	$ 11,400,000	0	1	1	1	1	1	0	5	1	5
I-22	Upper River Road - Overlook Dr to 19th Ave S	Reconstruct to urban collector standards	CITY	--	$ 11,500,000	0	1	1	1	1	1	0	5	1	5
I-23	13th Avenue S - 57th St West to Terminus	Extend to 57th St S as an urban local street	CITY, PRIVATE	--	$ 9,800,000	-1	2	1	0	2	0	1	5	1	5
I-24	13th Street S - 31st Ave S to 40th Ave S	Reconstruct to urban minor arterial standards	STPU	--	$ 11,300,000	0	1	0	1	0	1	-1	2	2	4
I-25	Flood Road - Park Garden Rd to Dick Rd	Reconstruct to collector standards	COUNTY, CITY	--	$ 20,800,000	0	1	1	1	1	0	0	4	1	4
I-26	Wilson Butte Road / 55th Avenue S / Eden Road / Lower River Road	Reconfigure as a roundabout	STPU, STPX	--	$ 4,500,000	0	0	1	2	0	0	0	3	1	3
I-27	River Drive (15th St to 25th St)	Reconstruct to three-lane arterial	NH	--	$ 21,400,000	0	0	1	1	1	-1	1	3	1	3
				TOTAL ILLUSTRATIVE PROJECTS	**$ 330,020,000**										
O-1	8th Street NE / 9th Street NE (Smelter Ave to 36th Ave NE)	Planning study to identify improvements to address safety and operational problems	PLANNING	--	$100k-$125k	1	2	1	2	2	2	2	12	2	24
O-2	Downtown Traffic Flow and Parking Study	Planning study to investigate the feasibility fo converting downtown one-ways to two-way streets, reducing travel lanes, modifying parking, and incorporating non-motorized improvements	PLANNING	--	$250k - $300k	2	2	0	2	2	2	2	12	2	24
O-3	Intersection Control Study	Monitor various intersections for increased traffic control to improve operations and safety	PLANNING	--	$15k - $35k	1	1	2	1	1	1	1	8	2	16
O-4	Speed Study	Conduct periodic speed studies	PLANNING	--	$7.5k - $25k	1	1	0	2	0	1	1	6	2	12
O-5	Central Avenue W - Vaughn Rd to 1st Ave N	Corridor feasibility study to investigate potential improvements	PLANNING	--	$250k - $300k	0	1	2	2	2	1	1	9	1	9
O-6	Emerson Junction Feasibility Study	Conduct an operational analysis/feasibility study investigating a full access interchange	PLANNING	--	$325k - $350k	0	0	2	1	2	0	0	5	1	5
O-7	Smelter Ave / 3rd St NW (4th St NE - 5th St NE)	Intersection safety improvements (realignment, access modifications, etc.)	PLANNING	--	$200k - $250k	1	1	0	2	0	0	0	4	1	4

GREAT FALLS AREA LONG RANGE TRANSPORTATION PLAN 2024

APPENDIX H-2:

Planning Level Cost Estimates

APPENDIX B: COST ESTIMATES

Planning-level costs were developed for each improvement option in accordance with procedures outlined by the MDT Cost Estimation Procedure for Highway Design Projects (Nov 2016). Costs include estimates for construction, engineering, utilities, drainage, and indirect costs. Construction cost estimates were based on unit quantity estimates and price information determined from recent MDT Bid Tabs and City Transportation Design Standards. Cost ranges are provided in some cases, indicating unknown factors at the particular planning level stage.

NOTES:
1) Miscellaneous items include unknown factors such as excavation, embankment, topsoil, utilities, slope treatments, ditch or channel excavation, temporary striping, erosion control, and public relations.
2) Estimates do not include anticipated right-of=way costs.
3) An inflationary factor of 3% percent per year was applied to the planning level costs to account for an estimated year of expenditure.

RECOMMENDED PROJECTS (2029 - 2045)

R-1 City Sidewalk Infill Projects — **$ 3,600,000**

TYPE	UNITS	UNIT PRICE	QUANTITY	COST
SIDEWALK INFILL (ENGINEER'S ESTIMATE)	LS	$ 3,600,000.00	1.0	$ 3,600,000
TOTAL				**$ 3,600,000**

R-2 Central Avenue / 38th Street Intersection — **$3.1M - $6.0M**

TRAFFIC SIGNAL — **$ 3,100,000** TOT

LENGTH (FT)	1600
WIDTH (FT)	44
SURFACING (IN)	5

TYPE	UNITS	UNIT PRICE	QUANTITY	COST
COLD MILLING	SQYD	$ 2.51	7822.2	$ 19,634
COMMERCIAL MIX PG 64-28	TON	$ 150.00	2094.1	$ 314,111
COVER - TYPE 2	SQYD	$ 1.00	7822.2	$ 7,822
EMULS ASPHALT CRS-2P	TON	$ 836.64	125.7	$ 105,136
SIDEWALK-CONCRETE 4"	SQYD	$ 196.44	711.1	$ 139,691
SIDEWALK-CONCRETE 6"	SQYD	$ 222.24	177.8	$ 39,509
CURB AND GUTTER-CONC	LNFT	$ 83.93	800.0	$ 67,144
SIGNS - URBAN	MILE	$ 52,000.00	0.15	$ 7,879
STRIPING & PAVEMENT MARKINGS - URBAN	MILE	$ 40,000.00	0.30	$ 12,121
LIGHTING - URBAN	MILE	$ 175,000.00	0.15	$ 26,515
TRAFFIC SIGNALS	LS	$ 275,000.00	1.00	$ 275,000
Subtotal 1				$ 1,014,562
MISCELLANEOUS ITEMS			25%	$ 253,640
TRAFFIC CONTROL - URBAN			6%	$ 60,874
Subtotal 2				$ 1,329,076
MOBILIZATION			12%	$ 159,489
Subtotal 3				$ 1,488,565
CONTINGENCY (LOW RISK)			20%	$ 297,713
Subtotal 4				$ 1,786,278
SHORT-TERM INFLATION	% PER YEAR	3%	9	$ 544,410
Subtotal 5				$ 2,330,688
CONSTRUCTION ENGINEERING (CE)			10%	$ 233,069
PRELIMINARY ENGINEERING (PE)			10%	$ 233,069
Subtotal 6				$ 2,796,825
INDIRECT COSTS (IDC)			10.91%	$ 305,134
TOTAL				**$ 3,101,959**

ROUNDABOUT — **$ 6,000,000** TOT

LENGTH (FT)	1600
NEW WIDTH (FT)	47
EXISTING WIDTH (FT)	44
SURFACING (IN)	6
AGGREGATE (IN)	16

TYPE	UNITS	UNIT PRICE	QUANTITY	COST
EXCAVATION-UNCLASSIFIED	CUYD	$ 9.02	1412.3	$ 12,739
CRUSHED AGGREGATE COURSE	CUYD	$ 44.53	237.0	$ 10,555
COMMERCIAL MIX PG 64-28	TON	$ 150.00	2512.9	$ 376,933
COVER - TYPE 2	SQYD	$ 1.00	8355.6	$ 8,356
EMULS ASPHALT CRS-2P	TON	$ 836.64	134.2	$ 112,304
COLD MILLING	SQYD	$ 2.51	7822.2	$ 19,634
SIDEWALK-CONCRETE 4"	SQYD	$ 196.44	1422.2	$ 279,381

SIDEWALK-CONCRETE 6"		SQYD	$	222.24	355.6	$	79,019
SIGNS - URBAN		MILE	$	52,000.00	0.3	$	15,758
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	0.3	$	12,121
LIGHTING - ROUNDABOUT		LS	$	40,000.00	1.0	$	40,000
DRAINAGE PIPE - ROUNDABOUT - ONE LANE (MS4)		LS	$	250,000.00	1.00	$	250,000
CONCRETE ROUNDABOUT - ONE LANE		EACH	$	585,000.00	1.00	$	585,000
	Subtotal 1					$	1,801,800
MISCELLANEOUS ITEMS					25%	$	450,450
TRAFFIC CONTROL - URBAN					6%	$	108,108
	Subtotal 2					$	2,360,358
MOBILIZATION					12%	$	283,243
	Subtotal 3					$	2,643,601
CONTINGENCY (MEDIUM RISK)					30%	$	793,080
	Subtotal 4					$	3,436,681
SHORT-TERM INFLATION		% PER YEAR		3%	9	$	1,047,408
	Subtotal 5					$	4,484,089
CONSTRUCTION ENGINEERING (CE)					10%	$	448,409
PRELIMINARY ENGINEERING (PE)					10%	$	448,409
	Subtotal 6					$	5,380,907
INDIRECT COSTS (IDC)					10.91%	$	587,057
	TOTAL					**$**	**5,967,964**

R-3 1st & 2nd Ave S (9th St S to 15th St S) — $ 4,500,000

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
PAVEMENT PRESERVATION (ENGINEER'S ESTIMATE)		LNFT	$	937.50	4800.0	$	4,500,000
	TOTAL					**$**	**4,500,000**

R-4 36th Avenue NE Traffic Calming — $ 880,000

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
CURB EXTENSION		EACH	$	15,000.00	16.0	$	240,000
CROSSWALKS		SQFT	$	0.35	1920.0	$	672
DETEC WARNING DEVICES-TYPE 1		SQYD	$	555.46	35.6	$	19,750
SIGNS-ALUM REFL SHEET IV		SQFT	$	40.78	80.0	$	3,262
POSTS-STEEL U SIGN		LB	$	7.57	160.0	$	1,211
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	1.3	$	52,000
	Subtotal 1					$	316,895
MISCELLANEOUS ITEMS					25%	$	79,224
TRAFFIC CONTROL - URBAN					6%	$	19,014
	Subtotal 2					$	415,133
MOBILIZATION					12%	$	49,816
	Subtotal 3					$	464,949
CONTINGENCY (LOW RISK)					20%	$	92,990
	Subtotal 4					$	557,939
SHORT-TERM INFLATION		% PER YEAR		3%	9	$	170,045
	Subtotal 5					$	727,983
CONSTRUCTION ENGINEERING (CE)					10%	$	72,798
PRELIMINARY ENGINEERING (PE)					10%	$	72,798
	TOTAL					**$**	**873,580**

R-5 10th Ave S / 54th St S — $ 77,000

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
CURB-CONC MEDIAN TYPE A		LNFT	$	21.96	1100	$	24,156
SIGNS-ALUM REFL SHEET IV		SQFT	$	40.78	12.5	$	510
POSTS-STEEL U SIGN		LB	$	7.57	40.0	$	303
	Subtotal 1					$	24,969
MISCELLANEOUS ITEMS					25%	$	6,242
TRAFFIC CONTROL - URBAN					6%	$	1,498
	Subtotal 2					$	32,709
MOBILIZATION					12%	$	3,925
	Subtotal 3					$	36,634
CONTINGENCY (LOW RISK)					20%	$	7,327
	Subtotal 4					$	43,961
SHORT-TERM INFLATION		% PER YEAR		3%	9	$	13,398
	Subtotal 5					$	57,359
CONSTRUCTION ENGINEERING (CE)					10%	$	5,736
PRELIMINARY ENGINEERING (PE)					10%	$	5,736
	Subtotal 6					$	68,830
INDIRECT COSTS (IDC)					10.91%	$	7,509
	TOTAL					**$**	**76,340**

R-6 2nd Ave N/38th St N — $ 710,000

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
TURN LANE WIDENING (ENGINEER'S ESTIMATE)		LS	$	447,890.00	1.0	$	447,890
CONTINGENCY (LOW RISK)					20%	$	89,578
	Subtotal 1					$	537,468
SHORT-TERM INFLATION		% PER YEAR		3%	9	$	163,806
	TOTAL					**$**	**701,274**

R-7 10th Avenue S Signal Improvements (20th St S & 23rd St S) **$ 3,000,000**

LENGTH (MI)	0.21
NEW WIDTH (FT)	49
EXISTING WIDTH (FT)	37
SURFACING (IN)	4
AGGREGATE (IN)	12

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED		CUYD	$	9.02	1216.8	$	10,975
CRUSHED AGGREGATE COURSE		CUYD	$	44.53	497.8	$	22,166
COVER - TYPE 2		SQYD	$	1.00	1493.3	$	1,493
COMMERCIAL MIX PG 64-28		TON	$	150.00	1305.9	$	195,891
EMULS ASPHALT CRS-2P		TON	$	836.64	74.0	$	61,887
COLD MILLING		SQYD	$	2.51	4604.4	$	11,557
SIDEWALK-CONCRETE 4"		SQYD	$	196.44	995.6	$	195,567
SIDEWALK-CONCRETE 6"		SQYD	$	222.24	248.9	$	55,313
CURB AND GUTTER-CONC		LNFT	$	83.93	2240.0	$	188,003
SIG-TRAF 3 COL-1 WAY 12-12-12		EACH	$	1,400.00	2.00	$	2,800
SIG-STANDARD TYPE 2-A-900-0		EACH	$	25,000.00	2.00	$	50,000
REMOVE AND SALVAGE MISC ELECTRICAL		LS	$	10,000.00	2.00	$	20,000
SIGNS - URBAN		MILE	$	52,000.00	0.21	$	11,030
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	0.21	$	8,485
LIGHTING - URBAN		MILE	$	175,000.00	0.21	$	37,121
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	0.21	$	106,061
	Subtotal 1					$	978,350
MISCELLANEOUS ITEMS					25%	$	244,587
TRAFFIC CONTROL - URBAN					6%	$	58,701
	Subtotal 2					$	1,281,638
MOBILIZATION					12%	$	153,797
	Subtotal 3					$	1,435,435
CONTINGENCY (LOW RISK)					20%	$	287,087
	Subtotal 4					$	1,722,522
SHORT-TERM INFLATION		% PER YEAR		3%	9	$	524,978
	Subtotal 5					$	2,247,500
CONSTRUCTION ENGINEERING (CE)					10%	$	224,750
PRELIMINARY ENGINEERING (PE)					10%	$	224,750
	Subtotal 6					$	2,697,000
INDIRECT COSTS (IDC)					10.91%	$	294,243
	TOTAL					**$**	**2,991,243**

R-8 River Drive N / 25th St N Intersection Improvements **$5.2M - $6.7M**

TRAFFIC SIGNAL **$ 5,200,000** **TOT**

LENGTH (FT)	1375
NEW WIDTH (FT)	44
EXISTING WIDTH (FT)	36
SURFACING (IN)	6
AGGREGATE (IN)	20

TYPE	UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED	CUYD	$	9.02	1986.1	$	17,915
CRUSHED AGGREGATE COURSE	CUYD	$	44.53	679.0	$	30,236
COMMERCIAL MIX PG 64-28	TON	$	150.00	2159.5	$	323,927
COVER - TYPE 2	SQYD	$	1.00	6722.2	$	6,722
EMULS ASPHALT CRS-2P	TON	$	836.64	108.0	$	90,351
COLD MILLING	SQYD	$	2.51	5500.0	$	13,805
SIDEWALK-CONCRETE 4"	SQYD	$	196.44	1222.2	$	240,093
SIDEWALK-CONCRETE 6"	SQYD	$	222.24	305.6	$	67,907
CURB AND GUTTER-CONC	LNFT	$	83.93	2750.0	$	230,808
GUARDRAIL-STEEL	LNFT	$	63.02	687.5	$	43,326
SIGNS - URBAN	MILE	$	52,000.00	0.26	$	13,542
STRIPING & PAVEMENT MARKINGS - URBAN	MILE	$	40,000.00	0.26	$	10,417
DRAINAGE PIPE - URBAN (MS4)	MILE	$	500,000.00	0.26	$	130,208
LIGHTING - URBAN	MILE	$	175,000.00	0.26	$	45,573
TRAFFIC SIGNALS	LS	$	275,000.00	1.00	$	275,000

	Subtotal 1				$	1,539,830	
MISCELLANEOUS ITEMS				25%	$	384,957	
TRAFFIC CONTROL - URBAN				6%	$	92,390	
	Subtotal 2				$	2,017,177	
MOBILIZATION				12%	$	242,061	
	Subtotal 3				$	2,259,238	
CONTINGENCY (MEDIUM RISK)				30%	$	677,771	
	Subtotal 4				$	2,937,009	
SHORT-TERM INFLATION		% PER YEAR	3%	9	$	895,122	
	Subtotal 5				$	3,832,131	
CONSTRUCTION ENGINEERING (CE)				10%	$	383,213	
PRELIMINARY ENGINEERING (PE)				10%	$	383,213	
	Subtotal 6				$	4,598,557	
INDIRECT COSTS (IDC)				10.91%	$	501,703	
	TOTAL				**$**	**5,100,260**	

ROUNDABOUT			**$**	**6,700,000**	**TOT**

LENGTH (FT)	1375
NEW WIDTH (FT)	44
EXISTING WIDTH (FT)	36
SURFACING (IN)	6
AGGREGATE (IN)	20

TYPE	UNITS	UNIT PRICE	QUANTITY	COST
EXCAVATION-UNCLASSIFIED	CUYD	$ 9.02	1986.1	$ 17,915
CRUSHED AGGREGATE COURSE	CUYD	$ 44.53	679.0	$ 30,236
COMMERCIAL MIX PG 64-28	TON	$ 150.00	2159.5	$ 323,927
COVER - TYPE 2	SQYD	$ 1.00	6722.2	$ 6,722
EMULS ASPHALT CRS-2P	TON	$ 836.64	108.0	$ 90,351
COLD MILLING	SQYD	$ 2.51	5500.0	$ 13,805
SIDEWALK-CONCRETE 4"	SQYD	$ 196.44	1222.2	$ 240,093
SIDEWALK-CONCRETE 6"	SQYD	$ 222.24	305.6	$ 67,907
GUARDRAIL-STEEL	LNFT	$ 63.02	687.5	$ 43,326
CURB AND GUTTER-CONC	LNFT	$ 83.93	2750.0	$ 230,808
SIGNS - URBAN	MILE	$ 52,000.00	0.26	$ 13,542
STRIPING & PAVEMENT MARKINGS - URBAN	MILE	$ 40,000.00	0.26	$ 10,417
LIGHTING - URBAN	MILE	$ 175,000.00	0.26	$ 45,573
LIGHTING - ROUNDABOUT	LS	$ 40,000.00	1.00	$ 40,000
DRAINAGE PIPE - ROUNDABOUT - ONE LANE (MS4)	LS	$ 250,000.00	1.00	$ 250,000
CONCRETE ROUNDABOUT - ONE LANE	EACH	$ 585,000.00	1.00	$ 585,000
Subtotal 1				$ 2,009,621
MISCELLANEOUS ITEMS			25%	$ 502,405
TRAFFIC CONTROL - URBAN			6%	$ 120,577
Subtotal 2				$ 2,632,604
MOBILIZATION			12%	$ 315,912
Subtotal 3				$ 2,948,516
CONTINGENCY (MEDIUM RISK)			30%	$ 884,555
Subtotal 4				$ 3,833,071
SHORT-TERM INFLATION	% PER YEAR	3%	9	$ 1,168,217
Subtotal 5				$ 5,001,289
CONSTRUCTION ENGINEERING (CE)			10%	$ 500,129
PRELIMINARY ENGINEERING (PE)			10%	$ 500,129
Subtotal 6				$ 6,001,546
INDIRECT COSTS (IDC)			10.91%	$ 654,769
TOTAL				**$ 6,656,315**

R-9	**Flood Road Curve Warning**	**$**	**9,000**

TYPE	UNITS	UNIT PRICE	QUANTITY	COST
LED CURVE AHEAD SIGN	EACH	$ 2,072.00	2.0	$ 4,144
Subtotal 1				$ 4,144
MISCELLANEOUS ITEMS			25%	$ 1,036
Subtotal 2				$ 5,180
CONTINGENCY (LOW RISK)			20%	$ 1,036
Subtotal 3				$ 6,216
SHORT-TERM INFLATION	% PER YEAR	3%	9	$ 1,894
TOTAL				**$ 8,110**

R-10	**Lower Sun River Road Curve Warning**	**$**	**4,000**

TYPE	UNITS	UNIT PRICE	QUANTITY	COST
SIGNS-ALUM REFL SHEET IV	SQFT	$ 40.78	30.0	$ 1,223
POSTS-STEEL U SIGN	LB	$ 7.57	100.0	$ 757

	Subtotal 1				$	1,980
MISCELLANEOUS ITEMS				25%	$	495
	Subtotal 2				$	2,476
CONTINGENCY (LOW RISK)				20%	$	495
	Subtotal 3				$	2,971
SHORT-TERM INFLATION		% PER YEAR	3%	9	$	905
	TOTAL				**$**	**3,876**

R-11 Skyline Drive NW/NE Corridor Improvements — $ 1,500,000

TYPE	UNITS	UNIT PRICE	QUANTITY		COST
SIGNS - URBAN	MILE	$ 52,000.00	1.46	$	75,920
STRIPING & PAVEMENT MARKINGS - URBAN	MILE	$ 40,000.00	1.46	$	58,400
LIGHTING - URBAN	MILE	$ 175,000.00	1.46	$	255,500
CURB EXTENSION	EACH	$ 15,000.00	8.00	$	120,000
Subtotal 1				$	509,820
MISCELLANEOUS ITEMS			25%	$	127,455
TRAFFIC CONTROL - URBAN			6%	$	30,589
Subtotal 2				$	667,864
MOBILIZATION			12%	$	80,144
Subtotal 3				$	748,008
CONTINGENCY (LOW RISK)			20%	$	149,602
Subtotal 4				$	897,609
SHORT-TERM INFLATION	% PER YEAR	3%	9	$	273,567
Subtotal 5				$	1,171,177
CONSTRUCTION ENGINEERING (CE)			10%	$	117,118
PRELIMINARY ENGINEERING (PE)			10%	$	117,118
TOTAL				**$**	**1,405,412**

R-12 Smelter Ave / 6th St NW — $ 25,000

TYPE	UNITS	UNIT PRICE	QUANTITY		COST
INTERSECTION OPERATIONAL ANALYSIS	EACH	$ 15,000.00	1.0	$	15,000
REMOVE AND RESET SIGNS	EACH	$ 341.63	6.0	$	2,050
SIGNS-ALUM REFL SHEET IV	SQFT	$ 40.78	25.0	$	1,020
POSTS-STEEL U SIGN	LB	$ 7.57	80.0	$	606
Subtotal 1				$	18,675
CONTINGENCY (LOW RISK)			20%	$	3,735
Subtotal 2				$	18,735
SHORT-TERM INFLATION	% PER YEAR	3%	9	$	5,710
TOTAL				**$**	**24,445**

R-13 Skyline Drive NE / 9th St NE / 32nd Ave — $ 32,000

TYPE	UNITS	UNIT PRICE	QUANTITY		COST
CURB 4 IN-CONCRETE	LNFT	$ 20.83	460	$	9,582
STRIPING-WHITE EPOXY	GAL	$ 122.64	8.4	$	1,029
DELINEATOR-FLEX SURF MTD YLW	EACH	$ 141.27	6.0	$	848
Subtotal 1				$	11,459
MISCELLANEOUS ITEMS			25%	$	2,865
TRAFFIC CONTROL - URBAN			6%	$	688
Subtotal 2				$	15,011
MOBILIZATION			12%	$	1,801
Subtotal 3				$	16,812
CONTINGENCY (LOW RISK)			20%	$	3,362
Subtotal 4				$	20,175
SHORT-TERM INFLATION	% PER YEAR	3%	9	$	6,149
Subtotal 5				$	26,323
CONSTRUCTION ENGINEERING (CE)			10%	$	2,632
PRELIMINARY ENGINEERING (PE)			10%	$	2,632
TOTAL				**$**	**31,588**

R-14 11th Ave S Traffic Calming — $ 640,000

TYPE	UNITS	UNIT PRICE	QUANTITY		COST
CURB EXTENSION	EACH	$ 15,000.00	14.0	$	210,000
CROSSWALKS	SQFT	$ 0.35	1680.0	$	588
DETEC WARNING DEVICES-TYPE 1	SQYD	$ 555.46	15.6	$	8,640
BIKE LANE SIGNING & STRIPING	MILE	$ 15,000.00	0.5	$	7,429
SIGNS-ALUM REFL SHEET IV	SQFT	$ 40.78	20.0	$	816
POSTS-STEEL U SIGN	LB	$ 7.57	40.0	$	303
REMOVE AND RESET SIGNS	EACH	$ 341.63	6.0	$	2,050
Subtotal 1				$	229,826
MISCELLANEOUS ITEMS			25%	$	57,456
TRAFFIC CONTROL - URBAN			6%	$	13,790

	Subtotal 2				$	301,072
MOBILIZATION				12%	$	36,129
	Subtotal 3				$	337,200
CONTINGENCY (LOW RISK)				20%	$	67,440
	Subtotal 4				$	404,640
SHORT-TERM INFLATION		% PER YEAR	3%	9	$	123,323
	Subtotal 5				$	527,964
CONSTRUCTION ENGINEERING (CE)				10%	$	52,796
PRELIMINARY ENGINEERING (PE)				10%	$	52,796
	TOTAL				**$**	**633,556**

R-15 North Great Falls Geometric Intersection Improvements **$ 31,000**

TYPE	UNITS	UNIT PRICE	QUANTITY	COST
CURB 4 IN-CONCRETE	LNFT	$ 20.83	450	$ 9,374
STRIPING-WHITE EPOXY	GAL	$ 122.64	6.3	$ 768
SIGNS-ALUM REFL SHEET IV	SQFT	$ 40.78	12.5	$ 510
POSTS-STEEL U SIGN	LB	$ 7.57	40.0	$ 303
Subtotal 1				$ 10,954
MISCELLANEOUS ITEMS			25%	$ 2,739
TRAFFIC CONTROL - URBAN			6%	$ 657
Subtotal 2				$ 14,350
MOBILIZATION			12%	$ 1,722
Subtotal 3				$ 16,072
CONTINGENCY (LOW RISK)			20%	$ 3,214
Subtotal 4				$ 19,286
SHORT-TERM INFLATION	% PER YEAR	3%	9	$ 5,878
Subtotal 5				$ 25,164
CONSTRUCTION ENGINEERING (CE)			10%	$ 2,516
PRELIMINARY ENGINEERING (PE)			10%	$ 2,516
TOTAL				**$ 30,197**

R-16 Park Drive - 8th Ave N to 2nd Ave N **$5.7M - $9.2M**

RECONSTRUCTION **$ 5,700,000** **TOT**

LENGTH (MI)	0.62
NEW WIDTH (FT)	37
EXISTING WIDTH (FT)	37
SURFACING (IN)	6
AGGREGATE (IN)	16

TYPE	UNITS	UNIT PRICE	QUANTITY	COST
EXCAVATION-UNCLASSIFIED	CUYD	$ 9.02	1445.4	$ 13,038
SIDEWALK-CONCRETE 4"	SQYD	$ 196.44	1455.6	$ 285,929
SIDEWALK-CONCRETE 6"	SQYD	$ 222.24	363.9	$ 80,871
CURB AND GUTTER-CONC	LNFT	$ 83.93	6550.0	$ 549,742
CURB EXTENSION	EACH	$ 15,000.00	10.0	$ 150,000
CROSSWALKS	SQFT	$ 0.35	1184.0	$ 414
SIGNS - URBAN	MILE	$ 52,000.00	0.62	$ 32,254
STRIPING & PAVEMENT MARKINGS - URBAN	MILE	$ 40,000.00	0.62	$ 24,811
LIGHTING - URBAN	MILE	$ 175,000.00	0.62	$ 108,546
DRAINAGE PIPE - URBAN (MS4)	MILE	$ 500,000.00	0.62	$ 310,133
Subtotal 1				$ 1,555,737
MISCELLANEOUS ITEMS			25%	$ 388,934
TRAFFIC CONTROL - URBAN			6%	$ 93,344
Subtotal 2				$ 2,038,016
MOBILIZATION			12%	$ 244,562
Subtotal 3				$ 2,282,578
CONTINGENCY (LOW RISK)			20%	$ 456,516
Subtotal 4				$ 2,739,093
MID-TERM INFLATION	% PER YEAR	3%	15	$ 1,528,325
Subtotal 5				$ 4,267,418
CONSTRUCTION ENGINEERING (CE)			10%	$ 426,742
PRELIMINARY ENGINEERING (PE)			10%	$ 426,742
Subtotal 6				$ 5,120,901
INDIRECT COSTS (IDC)			10.91%	$ 558,690
TOTAL				**$ 5,679,592**

ROUNDABOUT **$ 3,500,000** **TOT**

TYPE	UNITS	UNIT PRICE	QUANTITY	COST
LIGHTING - ROUNDABOUT	LS	$ 40,000.00	1.0	$ 40,000
DRAINAGE PIPE - ROUNDABOUT - ONE LANE (MS4)	LS	$ 250,000.00	1.00	$ 250,000
CONCRETE ROUNDABOUT - ONE LANE	EACH	$ 585,000.00	1.00	$ 585,000

	Subtotal 1				$	875,000
MISCELLANEOUS ITEMS				25%	$	218,750
TRAFFIC CONTROL - URBAN				6%	$	52,500
	Subtotal 2				$	1,146,250
MOBILIZATION				12%	$	137,550
	Subtotal 3				$	1,283,800
CONTINGENCY (MEDIUM RISK)				30%	$	385,140
	Subtotal 4				$	1,668,940
MID-TERM INFLATION		% PER YEAR	3%	15	$	931,214
	Subtotal 5				$	2,600,154
CONSTRUCTION ENGINEERING (CE)				10%	$	260,015
PRELIMINARY ENGINEERING (PE)				10%	$	260,015
	Subtotal 6				$	3,120,185
INDIRECT COSTS (IDC)				10.91%	$	340,412
	TOTAL				**$**	**3,460,597**

R-17 25th Avenue NE - Old Havre Hwy to 15th St N — $ 3,300,000

LENGTH (MI)	0.26
NEW WIDTH (FT)	40
EXISTING WIDTH (FT)	87
SURFACING (IN)	5

TYPE	UNITS	UNIT PRICE	QUANTITY	COST
EXCAVATION-UNCLASSIFIED	CUYD	$ 9.02	979.2	$ 8,832
CURB AND GUTTER-CONC	LNFT	$ 83.93	2700.0	$ 226,611
SIDEWALK-CONCRETE 4"	SQYD	$ 196.44	600.0	$ 117,864
SIDEWALK-CONCRETE 6"	SQYD	$ 222.24	150.0	$ 33,336
COVER - TYPE 2	SQYD	$ 1.00	1500.0	$ 1,500
COMMERCIAL MIX PG 64-28	TON	$ 150.00	200.8	$ 30,117
EMULS ASPHALT CRS-2P	TON	$ 836.64	24.1	$ 20,161
CURB EXTENSION	EACH	$ 15,000.00	4.0	$ 60,000
PEDESTRIAN HYBRID BEACON	EACH	$ 100,000.00	2.0	$ 200,000
REVEGETATION	SQYD	$ 1.06	4800	$ 5,088
SIGNS - URBAN	MILE	$ 52,000.00	0.26	$ 13,295
STRIPING & PAVEMENT MARKINGS - URBAN	MILE	$ 40,000.00	0.26	$ 10,227
LIGHTING - URBAN	MILE	$ 175,000.00	0.26	$ 44,744
DRAINAGE PIPE - URBAN (MS4)	MILE	$ 500,000.00	0.26	$ 127,841

	Subtotal 1				$	899,617
MISCELLANEOUS ITEMS				25%	$	224,904
TRAFFIC CONTROL - URBAN				6%	$	53,977
	Subtotal 2				$	1,178,498
MOBILIZATION				12%	$	141,420
	Subtotal 3				$	1,319,918
CONTINGENCY (LOW RISK)				20%	$	263,984
	Subtotal 4				$	1,583,902
MID-TERM INFLATION		% PER YEAR	3%	15	$	883,766
	Subtotal 5				$	2,467,668
CONSTRUCTION ENGINEERING (CE)				10%	$	246,767
PRELIMINARY ENGINEERING (PE)				10%	$	246,767
	Subtotal 6				$	2,961,201
INDIRECT COSTS (IDC)				10.91%	$	323,067
	TOTAL				**$**	**3,284,268**

R-18 Fox Farm Road - Alder Dr to Park Garden Rd — $ 820,000

LENGTH (FT)	3250.00

TYPE	UNITS	UNIT PRICE	QUANTITY	COST
REMOVE PAVEMENT MARKINGS	LNFT	$ 0.29	3250.00	$ 943
BIKE LANE SIGNING & STRIPING	MILE	$ 15,000.00	0.50	$ 7,500
STRIPING & PAVEMENT MARKINGS - URBAN	MILE	$ 40,000.00	0.62	$ 24,621
CROSSWALKS	SQFT	$ 0.35	1375.00	$ 481
RECTANGULAR RAPID FLASHING BEACON	EACH	$ 9,589.00	4.0	$ 38,356
CURB EXTENSION	EACH	$ 15,000.00	8.0	$ 120,000
SIGNS - URBAN	MILE	$ 52,000.00	0.62	$ 32,008

	Subtotal 1				$	223,909
MISCELLANEOUS ITEMS				25%	$	55,977
TRAFFIC CONTROL - URBAN				6%	$	13,435
	Subtotal 2				$	293,320
MOBILIZATION				12%	$	35,198
	Subtotal 3				$	328,519
CONTINGENCY (LOW RISK)				20%	$	65,704
	Subtotal 4				$	394,222
MID-TERM INFLATION		% PER YEAR	3%	15	$	219,963

	Subtotal 5				$	614,186
CONSTRUCTION ENGINEERING (CE)				10%	$	61,419
PRELIMINARY ENGINEERING (PE)				10%	$	61,419
	Subtotal 6				$	737,023
INDIRECT COSTS (IDC)				10.91%	$	80,409
	TOTAL				**$**	**817,432**

R-19 Fox Farm Intersection Improvements **$ 250,000**

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
REMOVE MEDIAN CURB		LNFT	$	8.56	1000.0	$	8,560
REMOVE CONCRETE		SQYD	$	34.31	500.0	$	17,155
SIG-TRAF 3 COL-1 WAY 12-12-12		EACH	$	1,400.00	1.0	$	1,400
SIG-STANDARD TYPE 2-A-900-0		EACH	$	25,000.00	1.0	$	25,000
REMOVE AND SALVAGE MISC ELECTRICAL		LS	$	10,000.00	1.0	$	10,000
REMOVE AND RESET EXISTING POLE		EACH	$	400.00	1.0	$	400
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	0.1	$	5,600
	Subtotal 1					$	68,115
MISCELLANEOUS ITEMS					25%	$	17,029
TRAFFIC CONTROL - URBAN					6%	$	4,087
	Subtotal 2					$	89,231
MOBILIZATION					12%	$	10,708
	Subtotal 3					$	99,938
CONTINGENCY (LOW RISK)					20%	$	19,988
	Subtotal 4					$	119,926
MID-TERM INFLATION		% PER YEAR		3%	15	$	66,915
	Subtotal 5					$	186,841
CONSTRUCTION ENGINEERING (CE)					10%	$	18,684
PRELIMINARY ENGINEERING (PE)					10%	$	18,684
	Subtotal 6					$	224,209
INDIRECT COSTS (IDC)					10.91%	$	24,461
	TOTAL					**$**	**248,670**

R-20 25th Street S – 10th Ave S to 11th Ave S **$ 45,000**

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
REMOVE PAVEMENT MARKINGS		LNFT	$	0.29	270.00	$	78
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	0.05	$	2,045
REMOVE AND SALVAGE MISC ELECTRICAL		LS	$	10,000.00	1.0	$	10,000
	Subtotal 1					$	12,124
MISCELLANEOUS ITEMS					25%	$	3,031
TRAFFIC CONTROL - URBAN					6%	$	727
	Subtotal 2					$	15,882
MOBILIZATION					12%	$	1,906
	Subtotal 3					$	17,788
CONTINGENCY (LOW RISK)					20%	$	3,558
	Subtotal 4					$	21,346
MID-TERM INFLATION		% PER YEAR		3%	15	$	11,910
	Subtotal 5					$	33,256
CONSTRUCTION ENGINEERING (CE)					10%	$	3,326
PRELIMINARY ENGINEERING (PE)					10%	$	3,326
	Subtotal 6					$	39,907
INDIRECT COSTS (IDC)					10.91%	$	4,354
	TOTAL					**$**	**44,261**

R-21 15th Street Bridge Improvements **$27.9M - $70.9M**

BRIDGE REHABILITATION **$ 27,900,000** **TOT**

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
BRIDGE REHABILITATION		SQFT	$	133.28	63,028	$	8,400,372
	Subtotal 1					$	8,400,372
MISCELLANEOUS ITEMS					25%	$	2,100,093
TRAFFIC CONTROL - URBAN					6%	$	504,022
	Subtotal 2					$	11,004,487
MOBILIZATION					12%	$	1,320,538
	Subtotal 3					$	12,325,026
CONTINGENCY (MEDIUM RISK)					30%	$	3,697,508
	Subtotal 4					$	16,022,533
SHORT-TERM INFLATION		% PER YEAR		3%	9	$	4,883,238
	Subtotal 5					$	20,905,772
CONSTRUCTION ENGINEERING (CE)					10%	$	2,090,577
PRELIMINARY ENGINEERING (PE)					10%	$	2,090,577
	Subtotal 6					$	25,086,926

	INDIRECT COSTS (IDC)					10.91%	$	2,736,984
		TOTAL					**$**	**27,823,910**
	BRIDGE REPLACEMENT						**$**	**70,900,000** **TOT**
	TYPE		**UNITS**	**UNIT PRICE**	**QUANTITY**		**COST**	
	BRIDGE REPLACEMENT		SQFT	$ 196.00	76,534	$	15,000,664	
		Subtotal 1				$	15,000,664	
	MISCELLANEOUS ITEMS					25%	$	3,750,166
	TRAFFIC CONTROL - URBAN					6%	$	900,040
		Subtotal 2				$	19,650,870	
	MOBILIZATION					12%	$	2,358,104
		Subtotal 3				$	22,008,974	
	CONTINGENCY (MEDIUM RISK)					30%	$	6,602,692
		Subtotal 4				$	28,611,666	
	LONG-TERM INFLATION		% PER YEAR	3%	21	$	24,614,461	
		Subtotal 5				$	53,226,128	
	CONSTRUCTION ENGINEERING (CE)					10%	$	5,322,613
	PRELIMINARY ENGINEERING (PE)					10%	$	5,322,613
		Subtotal 6				$	63,871,353	
	INDIRECT COSTS (IDC)					10.91%	$	6,968,365
		TOTAL					**$**	**70,839,718**
R-22	**Warden Bridge Improvements**						**$25.9M - $54.3M**	
	BRIDGE REHABILITATION						**$**	**25,900,000** **TOT**
	TYPE		**UNITS**	**UNIT PRICE**	**QUANTITY**		**COST**	
	BRIDGE REHABILITATION		SQFT	$ 133.28	58,584	$	7,808,129	
		Subtotal 1				$	7,808,129	
	MISCELLANEOUS ITEMS					25%	$	1,952,032
	TRAFFIC CONTROL - URBAN					6%	$	468,488
		Subtotal 2				$	10,228,649	
	MOBILIZATION					12%	$	1,227,438
		Subtotal 3				$	11,456,087	
	CONTINGENCY (MEDIUM RISK)					30%	$	3,436,826
		Subtotal 4				$	14,892,913	
	SHORT-TERM INFLATION		% PER YEAR	3%	9	$	4,538,960	
		Subtotal 5				$	19,431,873	
	CONSTRUCTION ENGINEERING (CE)					10%	$	1,943,187
	PRELIMINARY ENGINEERING (PE)					10%	$	1,943,187
		Subtotal 6				$	23,318,248	
	INDIRECT COSTS (IDC)					10.91%	$	2,544,021
		TOTAL					**$**	**25,862,268**
	BRIDGE REPLACEMENT						**$**	**54,300,000** **TOT**
	TYPE		**UNITS**	**UNIT PRICE**	**QUANTITY**		**COST**	
	BRIDGE REPLACEMENT		SQFT	$ 196.00	58,584	$	11,482,542	
		Subtotal 1				$	11,482,542	
	MISCELLANEOUS ITEMS					25%	$	2,870,636
	TRAFFIC CONTROL - URBAN					6%	$	688,953
		Subtotal 2				$	15,042,131	
	MOBILIZATION					12%	$	1,805,056
		Subtotal 3				$	16,847,186	
	CONTINGENCY (MEDIUM RISK)					30%	$	5,054,156
		Subtotal 4				$	21,901,342	
	LONG-TERM INFLATION		% PER YEAR	3%	21	$	18,841,606	
		Subtotal 5				$	40,742,948	
	CONSTRUCTION ENGINEERING (CE)					10%	$	4,074,295
	PRELIMINARY ENGINEERING (PE)					10%	$	4,074,295
		Subtotal 6				$	48,891,537	
	INDIRECT COSTS (IDC)					10.91%	$	5,334,067
		TOTAL					**$**	**54,225,604**
R-23	**25th Street N - River Dr to 2nd Ave N**						**$**	**13,400,000**

LENGTH (MI)	0.68
NEW WIDTH (FT)	40
EXISTING WIDTH (FT)	30
SURFACING (IN)	6
AGGREGATE (IN)	16

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED		CUYD	$	9.02	4854.9	$	43,792
CRUSHED AGGREGATE COURSE		CUYD	$	44.53	1765.4	$	78,615
COVER - TYPE 2		SQYD	$	1.00	3972.2	$	3,972
COMMERCIAL MIX PG 64-28		TON	$	150.00	5104.3	$	765,646
EMULS ASPHALT CRS-2P		TON	$	836.64	255.3	$	213,557
COLD MILLING		SQYD	$	2.51	11916.7	$	29,911
SIDEWALK-CONCRETE 4"		SQYD	$	196.44	2142.2	$	420,818
SIDEWALK-CONCRETE 6"		SQYD	$	222.24	535.6	$	119,022
CURB AND GUTTER-CONC		LNFT	$	83.93	7150.0	$	600,100
SIGNS - URBAN		MILE	$	52,000.00	0.68	$	35,208
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	0.68	$	27,083
LIGHTING - URBAN		MILE	$	175,000.00	0.68	$	118,490
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	0.68	$	338,542
	Subtotal 1					$	2,794,754
MISCELLANEOUS ITEMS					25%	$	698,689
	Subtotal 2					$	3,493,443
TRAFFIC CONTROL - URBAN					6%	$	209,607
	Subtotal 3					$	3,703,049
MOBILIZATION					12%	$	444,366
	Subtotal 4					$	4,147,415
CONTINGENCY (MEDIUM RISK)					30%	$	1,244,225
	Subtotal 5					$	5,391,640
LONG-TERM INFLATION		% PER YEAR		3%	21	$	4,638,398
	Subtotal 6					$	10,030,038
PRELIMINARY ENGINEERING (PE)					10%	$	1,003,004
CONSTRUCTION ENGINEERING (CE)					10%	$	1,003,004
	Subtotal 7					$	12,036,045
INDIRECT COSTS (IDC)					10.91%	$	1,313,133
	TOTAL					**$**	**13,349,178**

R-24 15th Avenue S - 30th St S to 32nd St S **$ 1,600,000**

LENGTH (MI)	0.09
WIDTH (FT)	37
SURFACING (IN)	4
AGGREGATE (IN)	12

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED		CUYD	$	9.02	1044.4	$	9,421
CRUSHED AGGREGATE COURSE		CUYD	$	44.53	616.7	$	27,460
COVER - TYPE 1		SQYD	$	1.03	1850.0	$	1,906
COMMERCIAL MIX PG 58-28		TON	$	120.00	396.2	$	47,545
EMULS ASPHALT CRS-2P		TON	$	836.64	29.7	$	24,865
SIDEWALK-CONCRETE 4"		SQYD	$	196.44	400.0	$	78,576
SIDEWALK-CONCRETE 6"		SQYD	$	222.24	100.0	$	22,224
CURB AND GUTTER-CONC		LNFT	$	83.93	900.0	$	75,537
SIGNS - URBAN		MILE	$	52,000.00	0.09	$	4,432
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	0.09	$	3,409
LIGHTING - URBAN		MILE	$	175,000.00	0.09	$	14,915
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	0.09	$	42,614
	Subtotal 1					$	352,903
MISCELLANEOUS ITEMS					25%	$	88,226
TRAFFIC CONTROL - URBAN					6%	$	21,174
	Subtotal 2					$	462,303
MOBILIZATION					12%	$	55,476
	Subtotal 3					$	517,779
CONTINGENCY (MEDIUM RISK)					30%	$	155,334
	Subtotal 4					$	673,113
LONG-TERM INFLATION		% PER YEAR		3%	21	$	579,076
	Subtotal 5					$	1,252,189
CONSTRUCTION ENGINEERING (CE)					10%	$	125,219
PRELIMINARY ENGINEERING (PE)					10%	$	125,219
	TOTAL					**$**	**1,502,626**

R-25 10th Avenue S - 26th St S to 39th St S **$ 22,000,000**

LENGTH (MI)	0.68
NEW WIDTH (FT)	84
EXISTING WIDTH (FT)	78
SURFACING (IN)	6
AGGREGATE (IN)	20

TYPE	UNITS	UNIT PRICE	QUANTITY	COST

EXCAVATION-UNCLASSIFIED		CUYD	$	9.02	6311.4	$	56,929
CRUSHED AGGREGATE COURSE		CUYD	$	44.53	1324.1	$	58,961
COVER - TYPE 2		SQYD	$	1.00	2383.3	$	2,383
COMMERCIAL MIX PG 64-28		TON	$	150.00	10719.0	$	1,607,856
EMULS ASPHALT CRS-2P		TON	$	836.64	536.0	$	448,469
COLD MILLING		SQYD	$	2.51	30983.3	$	77,768
SIDEWALK-CONCRETE 4"		SQYD	$	196.44	5084.4	$	998,788
SIDEWALK-CONCRETE 6"		SQYD	$	222.24	1271.1	$	282,492
CURB AND GUTTER-CONC		LNFT	$	83.93	7150.0	$	600,100
SIGNS - URBAN		MILE	$	52,000.00	0.68	$	35,208
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	0.68	$	27,083
LIGHTING - URBAN		MILE	$	175,000.00	0.68	$	118,490
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	0.68	$	338,542
	Subtotal 1					$	4,653,069
MISCELLANEOUS ITEMS					25%	$	1,163,267
TRAFFIC CONTROL - URBAN					6%	$	279,184
	Subtotal 2					$	6,095,520
MOBILIZATION					12%	$	731,462
	Subtotal 3					$	6,826,983
CONTINGENCY (MEDIUM RISK)					30%	$	2,048,095
	Subtotal 4					$	8,875,078
LONG-TERM INFLATION		% PER YEAR		3%	21	$	7,635,181
	Subtotal 5					$	16,510,259
CONSTRUCTION ENGINEERING (CE)					10%	$	1,651,026
PRELIMINARY ENGINEERING (PE)					10%	$	1,651,026
	Subtotal 6					$	19,812,310
INDIRECT COSTS (IDC)					10.91%	$	2,161,523
	TOTAL					**$**	**21,973,833**

R-26 15th St NE / River Drive N **$ 2,300,000**

LENGTH (MI)	0.09
NEW WIDTH (FT)	72
EXISTING WIDTH (FT)	60
SURFACING (IN)	5
AGGREGATE (IN)	12

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED		CUYD	$	9.02	446.0	$	4,023
CRUSHED AGGREGATE COURSE		CUYD	$	44.53	222.2	$	9,896
COVER - TYPE 2		SQYD	$	1.00	666.7	$	667
COMMERCIAL MIX PG 64-28		TON	$	150.00	1070.8	$	160,625
EMULS ASPHALT CRS-2P		TON	$	836.64	53.6	$	44,802
COLD MILLING		SQYD	$	2.51	3333.3	$	8,367
CURB AND GUTTER-CONC		LNFT	$	83.93	1000.0	$	83,930
SIG-TRAF 3 COL-1 WAY 12-12-12		EACH	$	1,400.00	2.00	$	2,800
SIG-STANDARD TYPE 2-A-900-0		EACH	$	25,000.00	2.00	$	50,000
REMOVE AND SALVAGE MISC ELECTRICAL		LS	$	10,000.00	1.00	$	10,000
SIGNS - URBAN		MILE	$	52,000.00	0.09	$	4,924
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	0.09	$	3,788
LIGHTING - URBAN		MILE	$	175,000.00	0.09	$	16,572
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	0.09	$	47,348
	Subtotal 1					$	447,741
MISCELLANEOUS ITEMS					25%	$	111,935
TRAFFIC CONTROL - URBAN					6%	$	26,864
	Subtotal 2					$	586,541
MOBILIZATION					12%	$	70,385
	Subtotal 3					$	656,926
CONTINGENCY (HIGH RISK)					40%	$	262,770
	Subtotal 4					$	919,697
LONG-TERM INFLATION		% PER YEAR		3%	21	$	791,210
	Subtotal 5					$	1,710,906
CONSTRUCTION ENGINEERING (CE)					10%	$	171,091
PRELIMINARY ENGINEERING (PE)					10%	$	171,091
	Subtotal 6					$	2,053,088
INDIRECT COSTS (IDC)					10.91%	$	223,992
	TOTAL					**$**	**2,277,080**

R-27 24th Ave S - 3A St S to Eastern Terminus **$ 550,000**

LENGTH (MI)	0.10
WIDTH (FT)	22
EXISTING WIDTH (FT)	22
SURFACING (IN)	4
AGGREGATE (IN)	12

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
COVER - TYPE 2		SQYD	$	1.00	1344.4	$	1,344
COMMERCIAL MIX PG 64-28		TON	$	150.00	287.9	$	43,190
EMULS ASPHALT CRS-2P		TON	$	836.64	21.6	$	18,070
SIGNS - URBAN		MILE	$	52,000.00	0.10	$	5,417
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	0.10	$	4,167
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	0.10	$	52,083
	Subtotal 1					$	124,272
MISCELLANEOUS ITEMS					25%	$	31,068
TRAFFIC CONTROL - URBAN					6%	$	7,456
	Subtotal 2					$	162,796
MOBILIZATION					12%	$	19,535
	Subtotal 3					$	182,331
CONTINGENCY (LOW RISK)					20%	$	36,466
	Subtotal 4					$	218,797
LONG-TERM INFLATION		% PER YEAR		3%	21	$	188,230
	Subtotal 5					$	407,028
CONSTRUCTION ENGINEERING (CE)					10%	$	40,703
PRELIMINARY ENGINEERING (PE)					10%	$	40,703
	Subtotal 6					$	488,433
INDIRECT COSTS (IDC)					10.91%	$	53,288
	TOTAL					**$**	**541,721**

ILLUSTRATIVE PROJECTS (BEYOND 2045)

I-1 6th Street NW - Smelter Ave to Vinyard Rd — $ 25,800,000

LENGTH (MI)	1.65
NEW WIDTH (FT)	37
EXISTING WIDTH (FT)	22
SURFACING (IN)	6
AGGREGATE (IN)	16

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED		CUYD	$	9.02	14788.9	$	133,396
CRUSHED AGGREGATE COURSE		CUYD	$	44.53	6453.3	$	287,367
COVER - TYPE 1		SQYD	$	1.03	14520.0	$	14,956
COMMERCIAL MIX PG 58-28		TON	$	120.00	11505.9	$	1,380,707
EMULS ASPHALT CRS-2P		TON	$	836.64	575.4	$	481,389
COLD MILLING		SQYD	$	2.51	21296.0	$	53,453
SIDEWALK-CONCRETE 4"		SQYD	$	196.44	3872.0	$	760,616
SIDEWALK-CONCRETE 6"		SQYD	$	222.24	968.0	$	215,128
CURB AND GUTTER-CONC		LNFT	$	83.93	17424.0	$	1,462,396
SIGNS - URBAN		MILE	$	52,000.00	1.65	$	85,800
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	1.65	$	66,000
LIGHTING - URBAN		MILE	$	175,000.00	1.65	$	288,750
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	1.65	$	825,000
	Subtotal 1					$	6,054,958
MISCELLANEOUS ITEMS					25%	$	1,513,739
TRAFFIC CONTROL - URBAN					6%	$	363,297
	Subtotal 2					$	7,931,995
MOBILIZATION					12%	$	951,839
	Subtotal 3					$	8,883,834
CONTINGENCY (MEDIUM RISK)					30%	$	2,665,150
	Subtotal 4					$	11,548,984
LONG-TERM INFLATION		% PER YEAR		3%	21	$	9,935,528
	Subtotal 5					$	21,484,512
CONSTRUCTION ENGINEERING (CE)					10%	$	2,148,451
PRELIMINARY ENGINEERING (PE)					10%	$	2,148,451
	TOTAL					**$**	**25,781,415**

I-2 2nd Ave N (38th St N to 57th St N) — $ 10,600,000

LENGTH (MI)	1.18
SURFACING (IN)	4
AGGREGATE (IN)	18

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED		CUYD	$	9.02	500.0	$	4,510
SIDEWALK-CONCRETE 4"		SQYD	$	196.44	5538.1	$	1,087,911
SIDEWALK-CONCRETE 6"		SQYD	$	222.24	1384.5	$	307,699
CURB AND GUTTER-CONC		LNFT	$	83.93	12460.8	$	1,045,835
	Subtotal 1					$	2,445,954
MISCELLANEOUS ITEMS					25%	$	611,489
TRAFFIC CONTROL - RURAL					5%	$	122,298
	Subtotal 2					$	3,179,741
MOBILIZATION					12%	$	381,569
	Subtotal 3					$	3,561,309
CONTINGENCY (LOW RISK)					20%	$	712,262
	Subtotal 4					$	4,273,571
LONG-TERM INFLATION		% PER YEAR		3%	21	$	3,676,530
	Subtotal 5					$	7,950,102
CONSTRUCTION ENGINEERING (CE)					10%	$	795,010
PRELIMINARY ENGINEERING (PE)					10%	$	795,010
	Subtotal 6					$	9,540,122
INDIRECT COSTS (IDC)					10.91%	$	1,040,827
	TOTAL					**$**	**10,580,949**

I-3 38th Street N/S - 10th Ave N to River Dr N — $ 6,400,000

LENGTH (MI)	0.35
NEW WIDTH (FT)	34
EXISTING WIDTH (FT)	28
SURFACING (IN)	6
AGGREGATE (IN)	16

TYPE	UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED	CUYD	$	9.02	1982.7	$	17,884

CRUSHED AGGREGATE COURSE		CUYD	$	44.53	540.7	$	24,079
COVER - TYPE 2		SQYD	$	1.00	1216.7	$	1,217
COMMERCIAL MIX PG 64-28		TON	$	150.00	2214.8	$	332,226
EMULS ASPHALT CRS-2P		TON	$	836.64	110.8	$	92,666
COLD MILLING		SQYD	$	2.51	5677.8	$	14,251
SIDEWALK-CONCRETE 4"		SQYD	$	196.44	1622.2	$	318,669
SIDEWALK-CONCRETE 6"		SQYD	$	222.24	405.6	$	90,131
CURB AND GUTTER-CONC		LNFT	$	83.93	3650.0	$	306,345
SIGNS - URBAN		MILE	$	52,000.00	0.35	$	17,973
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	0.35	$	13,826
LIGHTING - URBAN		MILE	$	175,000.00	0.35	$	60,488
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	0.3	$	172,822
	Subtotal 1					$	1,462,576
MISCELLANEOUS ITEMS					25%	$	365,644
TRAFFIC CONTROL - URBAN					6%	$	87,755
	Subtotal 2					$	1,915,975
MOBILIZATION					12%	$	229,917
	Subtotal 3					$	2,145,892
CONTINGENCY (LOW RISK)					20%	$	429,178
	Subtotal 4					$	2,575,070
LONG-TERM INFLATION		% PER YEAR		3%	21	$	2,215,319
	Subtotal 5					$	4,790,389
CONSTRUCTION ENGINEERING (CE)					10%	$	479,039
PRELIMINARY ENGINEERING (PE)					10%	$	479,039
	Subtotal 6					$	5,748,467
INDIRECT COSTS (IDC)					10.91%	$	627,158
	TOTAL					**$**	**6,375,625**

I-4 Lower River Road Reconstruction — $ 5,600,000

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
RECONSTRUCTION (ENGINEER'S ESTIMATE)		LS	$	3,600,000.00	1.0	$	3,000,000
LONG-TERM INFLATION		% PER YEAR		3%	21	$	2,580,884
	TOTAL					**$**	**5,580,884**

I-5 26th Street N - 8th Ave N to 2nd Ave N — $ 8,200,000

LENGTH (MI)	0.45
NEW WIDTH (FT)	38
EXISTING WIDTH (FT)	32
SURFACING (IN)	6
AGGREGATE (IN)	16

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED		CUYD	$	9.02	2607.4	$	23,519
CRUSHED AGGREGATE COURSE		CUYD	$	44.53	711.1	$	31,666
COVER - TYPE 2		SQYD	$	1.00	1600.0	$	1,600
COMMERCIAL MIX PG 64-28		TON	$	150.00	3255.3	$	488,300
EMULS ASPHALT CRS-2P		TON	$	836.64	162.8	$	136,198
COLD MILLING		SQYD	$	2.51	8533.3	$	21,419
SIDEWALK-CONCRETE 4"		SQYD	$	196.44	1097.8	$	215,647
SIDEWALK-CONCRETE 6"		SQYD	$	222.24	274.4	$	60,993
CURB AND GUTTER-CONC		LNFT	$	83.93	4800.0	$	402,864
SIGNS - URBAN		MILE	$	52,000.00	0.45	$	23,636
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	0.45	$	18,182
LIGHTING - URBAN		MILE	$	175,000.00	0.45	$	79,545
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	0.45	$	227,273
	Subtotal 1					$	1,730,842
MISCELLANEOUS ITEMS					25%	$	432,710
TRAFFIC CONTROL - URBAN					6%	$	103,851
	Subtotal 2					$	2,267,403
MOBILIZATION					12%	$	272,088
	Subtotal 3					$	2,539,491
CONTINGENCY (MEDIUM RISK)					30%	$	761,847
	Subtotal 4					$	3,301,339
LONG-TERM INFLATION		% PER YEAR		3%	21	$	2,840,124
	Subtotal 5					$	6,141,462
CONSTRUCTION ENGINEERING (CE)					10%	$	614,146
PRELIMINARY ENGINEERING (PE)					10%	$	614,146
	Subtotal 6					$	7,369,755
INDIRECT COSTS (IDC)					10.91%	$	804,040
	TOTAL					**$**	**8,173,795**

I-6 36th Avenue NE - 1st St NE to 6th St NW — $ 7,800,000

LENGTH (MI)	0.41
WIDTH (FT)	37
SURFACING (IN)	6
AGGREGATE (IN)	16

TYPE		UNITS	UNIT PRICE	QUANTITY	COST
EXCAVATION-UNCLASSIFIED		CUYD	$ 9.02	6957.2	$ 62,754
CRUSHED AGGREGATE COURSE		CUYD	$ 44.53	3983.2	$ 177,372
COVER - TYPE 2		SQYD	$ 1.00	8962.2	$ 8,962
COMMERCIAL MIX PG 64-28		TON	$ 150.00	2879.1	$ 431,867
EMULS ASPHALT CRS-2P		TON	$ 836.64	144.0	$ 120,458
SIDEWALK-CONCRETE 4"		SQYD	$ 196.44	1937.8	$ 380,657
SIDEWALK-CONCRETE 6"		SQYD	$ 222.24	484.4	$ 107,663
CURB AND GUTTER-CONC		LNFT	$ 83.93	4360.0	$ 365,935
SIGNS - URBAN		MILE	$ 52,000.00	0.4	$ 21,470
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$ 40,000.00	0.4	$ 16,515
LIGHTING - URBAN		MILE	$ 175,000.00	0.4	$ 72,254
DRAINAGE PIPE - URBAN (MS4)		MILE	$ 500,000.00	0.4	$ 206,439
	Subtotal 1				$ 1,972,346
MISCELLANEOUS ITEMS				25%	$ 493,086
TRAFFIC CONTROL - URBAN				6%	$ 118,341
	Subtotal 2				$ 2,583,773
MOBILIZATION				12%	$ 310,053
	Subtotal 3				$ 2,893,826
CONTINGENCY (LOW RISK)				20%	$ 578,765
	Subtotal 4				$ 3,472,591
LONG-TERM INFLATION		% PER YEAR	3%	21	$ 2,987,451
	Subtotal 5				$ 6,460,042
CONSTRUCTION ENGINEERING (CE)				10%	$ 646,004
PRELIMINARY ENGINEERING (PE)				10%	$ 646,004
	TOTAL				**$ 7,752,051**

I-7 Vaughn Frontage Road – LRTP Boundary to I-15 — $ 12,400,000

	RURAL
LENGTH (MI)	1.25
NEW WIDTH (FT)	54
EXISTING WIDTH (FT)	24
SURFACING (IN)	4
AGGREGATE (IN)	18

TYPE		UNITS	UNIT PRICE	QUANTITY	COST
EXCAVATION-UNCLASSIFIED		CUYD	$ 9.02	13444.4	$ 121,269
CRUSHED AGGREGATE COURSE		CUYD	$ 44.53	11000.0	$ 489,830
COVER - TYPE 2		SQYD	$ 1.00	22000.0	$ 22,000
COMMERCIAL MIX PG 64-28		TON	$ 150.00	8481.0	$ 1,272,150
EMULS ASPHALT CRS-2P		TON	$ 836.64	636.2	$ 532,249
COLD MILLING		SQYD	$ 2.51	17600.0	$ 44,176
SIGNS - RURAL		MILE	$ 8,000.00	1.25	$ 10,000
STRIPING & PAVEMENT MARKINGS - RURAL		MILE	$ 16,000.00	1.25	$ 20,000
DRAINAGE PIPE - RURAL		MILE	$ 100,000.00	1.25	$ 125,000
	Subtotal 1				$ 2,636,674
MISCELLANEOUS ITEMS				25%	$ 659,168
TRAFFIC CONTROL - RURAL				5%	$ 131,834
	Subtotal 2				$ 3,427,676
MOBILIZATION				12%	$ 411,321
	Subtotal 3				$ 3,838,997
CONTINGENCY (MEDIUM RISK)				30%	$ 1,151,699
	Subtotal 4				$ 4,990,696
LONG-TERM INFLATION		% PER YEAR	3%	21	$ 4,293,468
	Subtotal 5				$ 9,284,164
CONSTRUCTION ENGINEERING (CE)				10%	$ 928,416
PRELIMINARY ENGINEERING (PE)				10%	$ 928,416
	Subtotal 6				$ 11,140,997
INDIRECT COSTS (IDC)				10.91%	$ 1,215,483
	TOTAL				**$ 12,356,479**

I-8 Vaughn Road – I-15 to Central Ave W — $ 47,400,000

	URBAN
LENGTH (MI)	2.40
NEW WIDTH (FT)	48
EXISTING WIDTH (FT)	24
SURFACING (IN)	6
AGGREGATE (IN)	20

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED		CUYD	$	9.02	24405.3	$	220,136
CRUSHED AGGREGATE COURSE		CUYD	$	44.53	18773.3	$	835,977
COVER - TYPE 2		SQYD	$	1.00	33792.0	$	33,792
COMMERCIAL MIX PG 64-28		TON	$	150.00	21711.4	$	3,256,704
EMULS ASPHALT CRS-2P		TON	$	836.64	1085.7	$	908,371
COLD MILLING		SQYD	$	2.51	33792.0	$	84,818
SIDEWALK-CONCRETE 4"		SQYD	$	196.44	11264.0	$	2,212,700
SIDEWALK-CONCRETE 6"		SQYD	$	222.24	2816.0	$	625,828
SIGNS - URBAN		MILE	$	52,000.00	2.40	$	124,800
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	2.40	$	96,000
LIGHTING - URBAN		MILE	$	175,000.00	2.40	$	420,000
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	2.40	$	1,200,000
	Subtotal 1					$	10,019,126
MISCELLANEOUS ITEMS					25%	$	2,504,781
TRAFFIC CONTROL - URBAN					6%	$	601,148
	Subtotal 2					$	13,125,054
MOBILIZATION					12%	$	1,575,007
	Subtotal 3					$	14,700,061
CONTINGENCY (MEDIUM RISK)					30%	$	4,410,018
	Subtotal 4					$	19,110,079
LONG-TERM INFLATION		% PER YEAR		3%	21	$	16,440,297
	Subtotal 5					$	35,550,377
CONSTRUCTION ENGINEERING (CE)					10%	$	3,555,038
PRELIMINARY ENGINEERING (PE)					10%	$	3,555,038
	Subtotal 6					$	42,660,452
INDIRECT COSTS (IDC)					10.91%	$	4,654,255
	TOTAL					**$**	**47,314,707**

I-9 17th Avenue S - 7th St S to 13th St S **$ 7,600,000**

LENGTH (MI)	0.41
NEW WIDTH (FT)	37
EXISTING WIDTH (FT)	24
SURFACING (IN)	5
AGGREGATE (IN)	12

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED		CUYD	$	9.02	2630.8	$	23,730
CRUSHED AGGREGATE COURSE		CUYD	$	44.53	1049.6	$	46,740
COVER - TYPE 2		SQYD	$	1.00	3148.9	$	3,149
COMMERCIAL MIX PG 64-28		TON	$	150.00	2399.3	$	359,889
EMULS ASPHALT CRS-2P		TON	$	836.64	144.0	$	120,458
COLD MILLING		SQYD	$	2.51	5813.3	$	14,591
SIDEWALK-CONCRETE 4"		SQYD	$	196.44	1937.8	$	380,657
SIDEWALK-CONCRETE 6"		SQYD	$	222.24	484.4	$	107,663
CURB AND GUTTER-CONC		LNFT	$	83.93	4360.0	$	365,935
SIGNS - URBAN		MILE	$	52,000.00	0.41	$	21,470
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	0.41	$	16,515
LIGHTING - URBAN		MILE	$	175,000.00	0.41	$	72,254
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	0.41	$	206,439
	Subtotal 1					$	1,739,490
MISCELLANEOUS ITEMS					25%	$	434,873
TRAFFIC CONTROL - URBAN					6%	$	104,369
	Subtotal 2					$	2,278,732
MOBILIZATION					12%	$	273,448
	Subtotal 3					$	2,552,180
CONTINGENCY (LOW RISK)					20%	$	510,436
	Subtotal 4					$	3,062,616
LONG-TERM INFLATION		% PER YEAR		3%	21	$	2,634,752
	Subtotal 5					$	5,697,368
CONSTRUCTION ENGINEERING (CE)					10%	$	569,737
PRELIMINARY ENGINEERING (PE)					10%	$	569,737
	Subtotal 6					$	6,836,841
INDIRECT COSTS (IDC)					10.91%	$	745,899
	TOTAL					**$**	**7,582,741**

I-10 43rd Avenue NE – Bootlegger Trail to US 87 **$ 5,900,000**

LENGTH (MI)	0.31
WIDTH (FT)	42
SURFACING (IN)	6
AGGREGATE (IN)	16

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED		CUYD	$	9.02	5737.7	$	51,754
CRUSHED AGGREGATE COURSE		CUYD	$	44.53	3370.4	$	150,083
COVER - TYPE 1		SQYD	$	1.03	7583.3	$	7,811
COMMERCIAL MIX PG 58-28		TON	$	120.00	2436.1	$	292,338
EMULS ASPHALT CRS-2P		TON	$	836.64	121.8	$	101,925
SIDEWALK-CONCRETE 4"		SQYD	$	196.44	1444.4	$	283,747
SIDEWALK-CONCRETE 6"		SQYD	$	222.24	361.1	$	80,253
CURB AND GUTTER-CONC		LNFT	$	83.93	3250.0	$	272,773
SIGNS - URBAN		MILE	$	52,000.00	0.31	$	16,004
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	0.31	$	12,311
LIGHTING - URBAN		MILE	$	175,000.00	0.31	$	53,859
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	0.31	$	153,883
	Subtotal 1					$	1,476,738
MISCELLANEOUS ITEMS					25%	$	369,184
TRAFFIC CONTROL - URBAN					6%	$	88,604
	Subtotal 2					$	1,934,526
MOBILIZATION					12%	$	232,143
	Subtotal 3					$	2,166,669
CONTINGENCY (LOW RISK)					20%	$	433,334
	Subtotal 4					$	2,600,003
LONG-TERM INFLATION		% PER YEAR		3%	21	$	2,236,769
	Subtotal 5					$	4,836,772
CONSTRUCTION ENGINEERING (CE)					10%	$	483,677
PRELIMINARY ENGINEERING (PE)					10%	$	483,677
	TOTAL					**$**	**5,804,127**

I-11 43rd Avenue NE – Bootlegger Trail to 6th St NW/Vinyard Rd — $ 38,100,000

LENGTH (MI)	2.02
WIDTH (FT)	42
SURFACING (IN)	6
AGGREGATE (IN)	16

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED		CUYD	$	9.02	37658.8	$	339,682
CRUSHED AGGREGATE COURSE		CUYD	$	44.53	22121.2	$	985,059
COVER - TYPE 1		SQYD	$	1.03	49772.8	$	51,266
COMMERCIAL MIX PG 58-28		TON	$	120.00	15989.5	$	1,918,741
EMULS ASPHALT CRS-2P		TON	$	836.64	799.6	$	668,977
SIDEWALK-CONCRETE 4"		SQYD	$	196.44	9480.5	$	1,862,356
SIDEWALK-CONCRETE 6"		SQYD	$	222.24	2370.1	$	526,738
CURB AND GUTTER-CONC		LNFT	$	83.93	21331.2	$	1,790,328
SIGNS - URBAN		MILE	$	52,000.00	2.02	$	105,040
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	2.02	$	80,800
LIGHTING - URBAN		MILE	$	175,000.00	2.02	$	353,500
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	2.02	$	1,010,000
	Subtotal 1					$	9,692,488
MISCELLANEOUS ITEMS					25%	$	2,423,122
TRAFFIC CONTROL - URBAN					6%	$	581,549
	Subtotal 2					$	12,697,159
MOBILIZATION					12%	$	1,523,659
	Subtotal 3					$	14,220,818
CONTINGENCY (LOW RISK)					20%	$	2,844,164
	Subtotal 4					$	17,064,982
LONG-TERM INFLATION		% PER YEAR		3%	21	$	14,680,912
	Subtotal 5					$	31,745,894
CONSTRUCTION ENGINEERING (CE)					10%	$	3,174,589
PRELIMINARY ENGINEERING (PE)					10%	$	3,174,589
	TOTAL					**$**	**38,095,072**

I-12 River Drive - 3rd Ave S to 1st Ave N — $ 10,400,000

LENGTH (MI)	0.44
NEW WIDTH (FT)	40
EXISTING WIDTH (FT)	22
SURFACING (IN)	6
AGGREGATE (IN)	16

TYPE	UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED	CUYD	$	9.02	4401.4	$	39,700
CRUSHED AGGREGATE COURSE	CUYD	$	44.53	2057.8	$	91,633
COVER - TYPE 2	SQYD	$	1.00	4630.0	$	4,630
COMMERCIAL MIX PG 64-28	TON	$	150.00	3305.3	$	495,796
EMULS ASPHALT CRS-2P	TON	$	836.64	165.3	$	138,289

COLD MILLING		SQYD	$	2.51	5658.9	$	14,204
SIDEWALK-CONCRETE 4"		SQYD	$	196.44	2057.8	$	404,230
SIDEWALK-CONCRETE 6"		SQYD	$	222.24	514.4	$	114,330
CURB AND GUTTER-CONC		LNFT	$	83.93	4630.0	$	388,596
SIGNS - URBAN		MILE	$	52,000.00	0.4	$	22,799
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	0.4	$	17,538
LIGHTING - URBAN		MILE	$	175,000.00	0.4	$	76,728
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	0.4	$	219,223
	Subtotal 1					$	2,027,697
MISCELLANEOUS ITEMS					25%	$	506,924
TRAFFIC CONTROL - URBAN					6%	$	121,662
	Subtotal 2					$	2,656,282
MOBILIZATION					12%	$	318,754
	Subtotal 3					$	2,975,036
CONTINGENCY (HIGH RISK)					40%	$	1,190,015
	Subtotal 4					$	4,165,051
LONG-TERM INFLATION		% PER YEAR		3%	21	$	3,583,171
	Subtotal 5					$	7,748,222
CONSTRUCTION ENGINEERING (CE)					10%	$	774,822
PRELIMINARY ENGINEERING (PE)					10%	$	774,822
	Subtotal 6					$	9,297,866
INDIRECT COSTS (IDC)					10.91%	$	1,014,397
	TOTAL					**$**	**10,312,263**

Note: This cost estimate does not include any costs to improve or rebuild the railroad overpass, nor does it include costs to revise access.

I-13 River Drive N - 25th St N to 38th St N — $ 26,800,000

LENGTH (MI)	1.11
NEW WIDTH (FT)	40
EXISTING WIDTH (FT)	26
SURFACING (IN)	6
AGGREGATE (IN)	20

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED		CUYD	$	9.02	11287.5	$	101,813
CRUSHED AGGREGATE COURSE		CUYD	$	44.53	5064.9	$	225,540
COVER - TYPE 2		SQYD	$	1.00	9116.8	$	9,117
COMMERCIAL MIX PG 64-28		TON	$	150.00	8367.9	$	1,255,188
EMULS ASPHALT CRS-2P		TON	$	836.64	418.5	$	350,101
COLD MILLING		SQYD	$	2.51	16931.2	$	42,497
SIDEWALK-CONCRETE 4"		SQYD	$	196.44	4167.7	$	818,699
SIDEWALK-CONCRETE 6"		SQYD	$	222.24	1041.9	$	231,556
CURB AND GUTTER-CONC		LNFT	$	83.93	11721.6	$	983,794
GUARDRAIL-STEEL		LNFT	$	63.02	4500.0	$	72,180
RETAINING WALL		SQYD	$	801.49	1485.0	$	730,249
SIGNS - URBAN		MILE	$	52,000.00	1.11	$	57,720
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	1.11	$	44,400
LIGHTING - URBAN		MILE	$	175,000.00	1.11	$	194,250
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	1.11	$	555,000
	Subtotal 1					$	5,672,104
MISCELLANEOUS ITEMS					25%	$	1,418,026
TRAFFIC CONTROL - URBAN					6%	$	340,326
	Subtotal 2					$	7,430,456
MOBILIZATION					12%	$	891,655
	Subtotal 3					$	8,322,111
CONTINGENCY (MEDIUM RISK)					30%	$	2,496,633
	Subtotal 4					$	10,818,744
LONG-TERM INFLATION		% PER YEAR		3%	21	$	9,307,307
	Subtotal 5					$	20,126,051
CONSTRUCTION ENGINEERING (CE)					10%	$	2,012,605
PRELIMINARY ENGINEERING (PE)					10%	$	2,012,605
	Subtotal 6					$	24,151,261
INDIRECT COSTS (IDC)					10.91%	$	2,634,903
	TOTAL					**$**	**26,786,164**

I-14 3rd Avenue S East of 57th St — $ 7,500,000

LENGTH (MI)	0.51
NEW WIDTH (FT)	31
EXISTING WIDTH (FT)	24
SURFACING (IN)	4
AGGREGATE (IN)	12

TYPE	UNITS	UNIT PRICE	QUANTITY	COST

EXCAVATION-UNCLASSIFIED		CUYD	$	9.02	2266.7	$	20,445
CRUSHED AGGREGATE COURSE		CUYD	$	44.53	700.0	$	31,171
COVER - TYPE 1		SQYD	$	1.03	2100.0	$	2,163
COMMERCIAL MIX PG 58-28		TON	$	120.00	1991.8	$	239,010
EMULS ASPHALT CRS-2P		TON	$	836.64	149.4	$	124,998
COLD MILLING		SQYD	$	2.51	7200.0	$	18,072
SIDEWALK-CONCRETE 4"		SQYD	$	196.44	2400.0	$	471,456
SIDEWALK-CONCRETE 6"		SQYD	$	222.24	600.0	$	133,344
CURB AND GUTTER-CONC		LNFT	$	83.93	5400.0	$	453,222
SIGNS - URBAN		MILE	$	52,000.00	0.51	$	26,591
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	0.51	$	20,455
LIGHTING - URBAN		MILE	$	175,000.00	0.51	$	89,489
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	0.51	$	255,682
	Subtotal 1					$	1,886,097
MISCELLANEOUS ITEMS					25%	$	471,524
TRAFFIC CONTROL - URBAN					6%	$	113,166
	Subtotal 2					$	2,470,787
MOBILIZATION					12%	$	296,494
	Subtotal 3					$	2,767,282
CONTINGENCY (LOW RISK)					20%	$	553,456
	Subtotal 4					$	3,320,738
LONG-TERM INFLATION		% PER YEAR		3%	21	$	2,856,813
	Subtotal 5					$	6,177,551
CONSTRUCTION ENGINEERING (CE)					10%	$	617,755
PRELIMINARY ENGINEERING (PE)					10%	$	617,755
	TOTAL					**$**	**7,413,061**

I-15 9th Street NW/Smelter Avenue NW (Ave E NW to 6th St NW) — $ 3,000,000

LENGTH (MI)	0.17
WIDTH (FT)	37
EXISTING WIDTH (FT)	28
SURFACING (IN)	4
AGGREGATE (IN)	12

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED		CUYD	$	9.02	830.4	$	7,490
CRUSHED AGGREGATE COURSE		CUYD	$	44.53	295.0	$	13,136
COVER - TYPE 1		SQYD	$	1.03	885.0	$	912
COMMERCIAL MIX PG 58-28		TON	$	120.00	779.2	$	93,505
EMULS ASPHALT CRS-2P		TON	$	836.64	58.4	$	48,901
COLD MILLING		SQYD	$	2.51	2753.3	$	6,911
SIDEWALK-CONCRETE 4"		SQYD	$	196.44	786.7	$	154,533
SIDEWALK-CONCRETE 6"		SQYD	$	222.24	196.7	$	43,707
CURB AND GUTTER-CONC		LNFT	$	83.93	1770.0	$	148,556
SIGNS - URBAN		MILE	$	52,000.00	0.17	$	8,716
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	0.17	$	6,705
LIGHTING - URBAN		MILE	$	175,000.00	0.17	$	29,332
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	0.17	$	83,807
	Subtotal 1					$	646,211
MISCELLANEOUS ITEMS					25%	$	161,553
TRAFFIC CONTROL - URBAN					6%	$	38,773
	Subtotal 2					$	846,537
MOBILIZATION					12%	$	101,584
	Subtotal 3					$	948,121
CONTINGENCY (HIGH RISK)					40%	$	379,248
	Subtotal 4					$	1,327,369
LONG-TERM INFLATION		% PER YEAR		3%	21	$	1,141,929
	Subtotal 5					$	2,469,298
CONSTRUCTION ENGINEERING (CE)					10%	$	246,930
PRELIMINARY ENGINEERING (PE)					10%	$	246,930
	TOTAL					**$**	**2,963,157**

I-16 Skyline Drive NW (6th St NW to Improved Section) — $ 2,300,000

LENGTH (MI)	0.12
NEW WIDTH (FT)	32
EXISTING WIDTH (FT)	22
SURFACING (IN)	4
AGGREGATE (IN)	12

TYPE	UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED	CUYD	$	9.02	642.0	$	5,791
CRUSHED AGGREGATE COURSE	CUYD	$	44.53	240.7	$	10,720
COVER - TYPE 1	SQYD	$	1.03	722.2	$	744

COMMERCIAL MIX PG 58-28		TON	$	120.00	495.0	$	59,396
EMULS ASPHALT CRS-2P		TON	$	836.64	37.1	$	31,063
COLD MILLING		SQYD	$	2.51	1588.9	$	3,988
SIDEWALK-CONCRETE 4"		SQYD	$	196.44	1004.4	$	197,313
SIDEWALK-CONCRETE 6"		SQYD	$	222.24	251.1	$	55,807
CURB AND GUTTER-CONC		LNFT	$	83.93	1300.0	$	109,109
SIGNS - URBAN		MILE	$	52,000.00	0.12	$	6,402
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	0.12	$	4,924
LIGHTING - URBAN		MILE	$	175,000.00	0.12	$	21,544
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	0.12	$	61,553
	Subtotal 1					$	568,352
MISCELLANEOUS ITEMS					25%	$	142,088
TRAFFIC CONTROL - URBAN					6%	$	34,101
	Subtotal 2					$	744,542
MOBILIZATION					12%	$	89,345
	Subtotal 3					$	833,887
CONTINGENCY (LOW RISK)					20%	$	166,777
	Subtotal 4					$	1,000,664
LONG-TERM INFLATION		% PER YEAR		3%	21	$	860,866
	Subtotal 5					$	1,861,530
CONSTRUCTION ENGINEERING (CE)					10%	$	186,153
PRELIMINARY ENGINEERING (PE)					10%	$	186,153
	TOTAL					**$**	**2,233,836**
PRELIMINARY ENGINEERING (PE)					10%	$	223,384
CONSTRUCTION ENGINEERING (CE)					10%	$	223,384
	TOTAL					**$**	**2,680,603**

I-17 26th Street S - 24th Ave S to 33rd Ave S — $ 570,000

LENGTH (MI)	0.5
MODIFIED SHOULDER WIDTH (FT)	16
EXISTING WIDTH (FT)	22
SURFACING (IN)	3
AGGREGATE (IN)	3
SUBBASE (IN)	8

TYPE	UNITS	UNIT PRICE		QUANTITY		COST
EXCAVATION-UNCLASSIFIED	CUYD	$	9.02	1974.7	$	17,811.72
SPECIAL BORROW	CUYD	$	24.00	1128.4	$	27,081.48
CRUSHED AGGREGATE COURSE	CUYD	$	44.53	423.1	$	18,842.79
COVER - TYPE 2	SQYD	$	1.00	5077.8	$	5,077.78
COMMERCIAL MIX PG 64-28	TON	$	150.00	216.0	$	32,392.71
EMULS ASPHALT CRS-2P	TON	$	836.64	21.6	$	18,070.17
COLD MILLING	SQYD	$	2.51	611.1	$	1,533.89
DRAINAGE PIPE - RURAL	MILE	$	100,000.00	0.10	$	10,416.67
STRIPING & PAVEMENT MARKINGS - RURAL	MILE	$	16,000.00	0.10	$	1,666.67
Subtotal 1					$	132,894
MISCELLANEOUS ITEMS				25%	$	33,223
TRAFFIC CONTROL - RURAL				5%	$	6,645
Subtotal 2					$	172,762
MOBILIZATION				12%	$	20,731
Subtotal 3					$	193,493
CONTINGENCY (MEDIUM RISK)				30%	$	58,048
Subtotal 4					$	251,542
LONG-TERM INFLATION	% PER YEAR		3%	21	$	216,400
Subtotal 5					$	467,941
CONSTRUCTION ENGINEERING (CE)				10%	$	46,794
PRELIMINARY ENGINEERING (PE)				10%	$	46,794
TOTAL					**$**	**561,530**

I-18 67th Street NE - Giant Springs Rd to 18th Ave N — $ 6,150,000

ROAD RECONSTRUCT — **$ 5,600,000** **TOT**

LENGTH (MI)	1.00
NEW WIDTH (FT)	22
EXISTING WIDTH (FT)	20
SURFACING (IN)	4
AGGREGATE (IN)	12

TYPE	UNITS	UNIT PRICE		QUANTITY		COST
EXCAVATION-UNCLASSIFIED	CUYD	$	9.02	521.5	$	4,704
CRUSHED AGGREGATE COURSE	CUYD	$	44.53	391.1	$	17,416
COVER - TYPE 1	SQYD	$	1.03	12906.7	$	13,294
COMMERCIAL MIX PG 58-28	TON	$	120.00	2764.2	$	331,701

EMULS ASPHALT CRS-2P		TON	$	836.64	207.3	$	173,474
SIGNS - URBAN		MILE	$	52,000.00	1.00	$	52,000
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	1.00	$	40,000
LIGHTING - URBAN		MILE	$	175,000.00	1.00	$	175,000
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	1.00	$	500,000
	Subtotal 1					$	1,307,589
MISCELLANEOUS ITEMS					25%	$	326,897
TRAFFIC CONTROL - URBAN					6%	$	78,455
	Subtotal 2					$	1,712,941
MOBILIZATION					12%	$	205,553
	Subtotal 3					$	1,918,494
CONTINGENCY (MEDIUM RISK)					30%	$	575,548
	Subtotal 4					$	2,494,043
LONG-TERM INFLATION		% PER YEAR		3%	21	$	2,145,611
	Subtotal 5					$	4,639,654
CONSTRUCTION ENGINEERING (CE)					10%	$	463,965
PRELIMINARY ENGINEERING (PE)					10%	$	463,965
	TOTAL					**$**	**5,567,584**

SHARED USE PATH		**$**	**550,000** **TOT**

LENGTH (MI)	0.5
WIDTH (FT)	10.0
SURFACING (IN)	2.5
AGGREGATE (IN)	9

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED		CUYD	$	9.02	846.5	$	7,636
CRUSHED AGGREGATE COURSE		CUYD	$	44.53	662.5	$	29,501
COVER - TYPE 2		SQYD	$	1.00	2650.0	$	2,650
COMMERCIAL MIX PG 64-28		TON	$	150.00	354.7	$	53,207
EMULS ASPHALT CRS-2P		TON	$	836.64	42.6	$	35,618
	Subtotal 1					$	128,611
MISCELLANEOUS ITEMS					25%	$	32,153
TRAFFIC CONTROL - URBAN					6%	$	7,717
	Subtotal 2					$	168,481
MOBILIZATION					12%	$	20,218
	Subtotal 3					$	188,699
CONTINGENCY (MEDIUM RISK)					30%	$	56,610
	Subtotal 4					$	245,308
LONG-TERM INFLATION		% PER YEAR		3%	21	$	211,037
	Subtotal 5					$	456,346
CONSTRUCTION ENGINEERING (CE)					10%	$	45,635
PRELIMINARY ENGINEERING (PE)					10%	$	45,635
	TOTAL					**$**	**547,615**

I-19	**20th St S - 18th Alley S to 20th Ave S**	**$**	**3,000,000**

LENGTH (MI)	0.16
WIDTH (FT)	37
SURFACING (IN)	4
AGGREGATE (IN)	12

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED		CUYD	$	9.02	1972.8	$	17,795
CRUSHED AGGREGATE COURSE		CUYD	$	44.53	1164.8	$	51,869
COVER - TYPE 2		SQYD	$	1.00	3494.4	$	3,494
COMMERCIAL MIX PG 64-28		TON	$	150.00	748.4	$	112,259
EMULS ASPHALT CRS-2P		TON	$	836.64	56.1	$	46,968
SIDEWALK-CONCRETE 4"		SQYD	$	196.44	755.6	$	148,421
SIDEWALK-CONCRETE 6"		SQYD	$	222.24	188.9	$	41,979
CURB AND GUTTER-CONC		LNFT	$	83.93	1700.0	$	142,681
SIGNS - URBAN		MILE	$	52,000.00	0.16	$	8,371
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	0.16	$	6,439
LIGHTING - URBAN		MILE	$	175,000.00	0.16	$	28,172
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	0.16	$	80,492
	Subtotal 1					$	688,942
MISCELLANEOUS ITEMS					25%	$	172,235
TRAFFIC CONTROL - URBAN					6%	$	41,336
	Subtotal 2					$	902,513
MOBILIZATION					12%	$	108,302
	Subtotal 3					$	1,010,815
CONTINGENCY (MEDIUM RISK)					30%	$	303,245
	Subtotal 4					$	1,314,060

LONG-TERM INFLATION		% PER YEAR	3%	21	$	1,130,478
	Subtotal 5				$	2,444,538
CONSTRUCTION ENGINEERING (CE)				10%	$	244,454
PRELIMINARY ENGINEERING (PE)				10%	$	244,454
	TOTAL				**$**	**2,933,446**

I-20 52nd Street N - 7th Ave N to 10th Ave N — $ 3,800,000

LENGTH (MI)	0.26
NEW WIDTH (FT)	34
EXISTING WIDTH (FT)	34
SURFACING (IN)	4
AGGREGATE (IN)	12

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED		CUYD	$	9.02	681.5	$	6,147
CRUSHED AGGREGATE COURSE		CUYD	$	44.53	0.0	$	-
COVER - TYPE 1		SQYD	$	1.03	5213.3	$	5,370
COMMERCIAL MIX PG 58-28		TON	$	120.00	1116.5	$	133,983
EMULS ASPHALT CRS-2P		TON	$	836.64	83.8	$	70,070
SIDEWALK-CONCRETE 4"		SQYD	$	196.44	1226.7	$	240,966
SIDEWALK-CONCRETE 6"		SQYD	$	222.24	306.7	$	68,154
CURB AND GUTTER-CONC		LNFT	$	83.93	2760.0	$	231,647
SIGNS - URBAN		MILE	$	52,000.00	0.26	$	13,591
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	0.26	$	10,455
LIGHTING - URBAN		MILE	$	175,000.00	0.26	$	45,739
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	0.26	$	130,682
	Subtotal 1					$	956,803
MISCELLANEOUS ITEMS					25%	$	239,201
TRAFFIC CONTROL - URBAN					6%	$	57,408
	Subtotal 2					$	1,253,411
MOBILIZATION					12%	$	150,409
	Subtotal 3					$	1,403,821
CONTINGENCY (LOW RISK)					20%	$	280,764
	Subtotal 4					$	1,684,585
LONG-TERM INFLATION		% PER YEAR		3%	21	$	1,449,239
	Subtotal 5					$	3,133,824
CONSTRUCTION ENGINEERING (CE)					10%	$	313,382
PRELIMINARY ENGINEERING (PE)					10%	$	313,382
	TOTAL					**$**	**3,760,589**

I-21 Central Avenue W - 20th St NW to 27th St NW — $ 11,400,000

LENGTH (MI)	0.62
NEW WIDTH (FT)	37
EXISTING WIDTH (FT)	24
SURFACING (IN)	5
AGGREGATE (IN)	12

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED		CUYD	$	9.02	3934.1	$	35,486
CRUSHED AGGREGATE COURSE		CUYD	$	44.53	1569.6	$	69,896
COVER - TYPE 2		SQYD	$	1.00	4708.9	$	4,709
COMMERCIAL MIX PG 64-28		TON	$	150.00	3587.9	$	538,183
EMULS ASPHALT CRS-2P		TON	$	836.64	215.3	$	180,134
COLD MILLING		SQYD	$	2.51	8693.3	$	21,820
SIDEWALK-CONCRETE 4"		SQYD	$	196.44	2897.8	$	569,239
SIDEWALK-CONCRETE 6"		SQYD	$	222.24	724.4	$	161,001
CURB AND GUTTER-CONC		LNFT	$	83.93	6520.0	$	547,224
SIGNS - URBAN		MILE	$	52,000.00	0.62	$	32,106
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	0.62	$	24,697
LIGHTING - URBAN		MILE	$	175,000.00	0.62	$	108,049
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	0.62	$	308,712
	Subtotal 1					$	2,601,256
MISCELLANEOUS ITEMS					25%	$	650,314
TRAFFIC CONTROL - URBAN					6%	$	156,075
	Subtotal 2					$	3,407,645
MOBILIZATION					12%	$	408,917
	Subtotal 3					$	3,816,563
CONTINGENCY (LOW RISK)					20%	$	763,313
	Subtotal 4					$	4,579,875
LONG-TERM INFLATION		% PER YEAR		3%	21	$	3,940,042
	Subtotal 5					$	8,519,917
CONSTRUCTION ENGINEERING (CE)					10%	$	851,992
PRELIMINARY ENGINEERING (PE)					10%	$	851,992

		Subtotal 6			$	10,223,900
	INDIRECT COSTS (IDC)			10.91%	$	1,115,428
		TOTAL			**$**	**11,339,328**

I-22 Upper River Road - Overlook Dr to 19th Ave S — $ 11,500,000

LENGTH (MI)	0.57
NEW WIDTH (FT)	37
EXISTING WIDTH (FT)	22
SURFACING (IN)	5
AGGREGATE (IN)	12

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED		CUYD	$	9.02	3954.9	$	35,673
CRUSHED AGGREGATE COURSE		CUYD	$	44.53	1675.0	$	74,588
COVER - TYPE 2		SQYD	$	1.00	5025.0	$	5,025
COMMERCIAL MIX PG 64-28		TON	$	150.00	3318.2	$	497,737
EMULS ASPHALT CRS-2P		TON	$	836.64	199.1	$	166,597
COLD MILLING		SQYD	$	2.51	7370.0	$	18,499
SIDEWALK-CONCRETE 4"		SQYD	$	196.44	2680.0	$	526,459
SIDEWALK-CONCRETE 6"		SQYD	$	222.24	670.0	$	148,901
CURB AND GUTTER-CONC		LNFT	$	83.93	6030.0	$	506,098
SIGNS - URBAN		MILE	$	52,000.00	0.57	$	29,693
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	0.57	$	22,841
LIGHTING - URBAN		MILE	$	175,000.00	0.57	$	99,929
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	0.57	$	285,511
	Subtotal 1					$	2,417,550
MISCELLANEOUS ITEMS					25%	$	604,387
TRAFFIC CONTROL - URBAN					6%	$	145,053
	Subtotal 2					$	3,166,990
MOBILIZATION					12%	$	380,039
	Subtotal 3					$	3,547,029
CONTINGENCY (MEDIUM RISK)					30%	$	1,064,109
	Subtotal 4					$	4,611,138
LONG-TERM INFLATION		% PER YEAR		3%	21	$	3,966,937
	Subtotal 5					$	8,578,075
CONSTRUCTION ENGINEERING (CE)					10%	$	857,807
PRELIMINARY ENGINEERING (PE)					10%	$	857,807
	Subtotal 6					$	10,293,690
INDIRECT COSTS (IDC)					10.91%	$	1,123,042
	TOTAL					**$**	**11,416,731**

I-23 13th Avenue S - 57th St West to Terminus — $ 9,800,000

LENGTH (MI)	0.57
WIDTH (FT)	30
SURFACING (IN)	4
AGGREGATE (IN)	12

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED		CUYD	$	9.02	5975.3	$	53,897
CRUSHED AGGREGATE COURSE		CUYD	$	44.53	3361.1	$	149,670
COVER - TYPE 2		SQYD	$	1.00	10083.3	$	10,083
COMMERCIAL MIX PG 64-28		TON	$	150.00	2159.5	$	323,927
EMULS ASPHALT CRS-2P		TON	$	836.64	162.0	$	135,526
SIDEWALK-CONCRETE 4"		SQYD	$	196.44	2688.9	$	528,205
SIDEWALK-CONCRETE 6"		SQYD	$	222.24	672.2	$	149,395
CURB AND GUTTER-CONC		LNFT	$	83.93	6050.0	$	507,777
SIGNS - URBAN		MILE	$	52,000.00	0.57	$	29,792
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	0.57	$	22,917
LIGHTING - URBAN		MILE	$	175,000.00	0.57	$	100,260
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	0.57	$	286,458
	Subtotal 1					$	2,297,908
MISCELLANEOUS ITEMS					25%	$	574,477
TRAFFIC CONTROL - URBAN					6%	$	137,874
	Subtotal 2					$	3,010,259
MOBILIZATION					12%	$	361,231
	Subtotal 3					$	3,371,490
CONTINGENCY (MEDIUM RISK)					30%	$	1,011,447
	Subtotal 4					$	4,382,937
LONG-TERM INFLATION		% PER YEAR		3%	21	$	3,770,617
	Subtotal 5					$	8,153,555
CONSTRUCTION ENGINEERING (CE)					10%	$	815,355
PRELIMINARY ENGINEERING (PE)					10%	$	815,355
	TOTAL					**$**	**9,784,266**

I-24 13th Street S - 31st Ave S to 40th Ave S — $ 11,300,000

LENGTH (MI)	0.63
NEW WIDTH (FT)	30
EXISTING WIDTH (FT)	24
SURFACING (IN)	6
AGGREGATE (IN)	16

TYPE		UNITS	UNIT PRICE	QUANTITY	COST
EXCAVATION-UNCLASSIFIED		CUYD	$ 9.02	3606.9	$ 32,534
CRUSHED AGGREGATE COURSE		CUYD	$ 44.53	983.7	$ 43,804
COVER - TYPE 2		SQYD	$ 1.00	2213.3	$ 2,213
COMMERCIAL MIX PG 64-28		TON	$ 150.00	3555.2	$ 533,275
EMULS ASPHALT CRS-2P		TON	$ 836.64	177.8	$ 148,743
COLD MILLING		SQYD	$ 2.51	8853.3	$ 22,222
SIDEWALK-CONCRETE 4"		SQYD	$ 196.44	2951.1	$ 579,716
SIDEWALK-CONCRETE 6"		SQYD	$ 222.24	737.8	$ 163,964
CURB AND GUTTER-CONC		LNFT	$ 83.93	6640.0	$ 557,295
OBLITERATE ROADWAY		LNFT	$ 19.85	340.0	$ 6,751
REVEGETATION		SQYD	$ 1.06	8853.3	$ 9,385
SIGNS - URBAN		MILE	$ 52,000.00	0.63	$ 32,697
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$ 40,000.00	0.63	$ 25,152
LIGHTING - URBAN		MILE	$ 175,000.00	0.63	$ 110,038
DRAINAGE PIPE - URBAN (MS4)		MILE	$ 500,000.00	0.63	$ 314,394
	Subtotal 1				$ 2,582,182
MISCELLANEOUS ITEMS				25%	$ 645,546
TRAFFIC CONTROL - URBAN				6%	$ 154,931
	Subtotal 2				$ 3,382,659
MOBILIZATION				12%	$ 405,919
	Subtotal 3				$ 3,788,578
CONTINGENCY (LOW RISK)				20%	$ 757,716
	Subtotal 4				$ 4,546,294
LONG-TERM INFLATION		% PER YEAR	3%	21	$ 3,911,152
	Subtotal 5				$ 8,457,445
CONSTRUCTION ENGINEERING (CE)				10%	$ 845,745
PRELIMINARY ENGINEERING (PE)				10%	$ 845,745
	Subtotal 6				$ 10,148,934
INDIRECT COSTS (IDC)				10.91%	$ 1,107,249
	TOTAL				**$ 11,256,183**

I-25 Flood Road - Park Garden Rd to Dick Rd — $ 20,800,000

RURAL		URBAN	
LENGTH (MI)	1.20	LENGTH (MI)	0.80
NEW WIDTH (FT)	42	NEW WIDTH (FT)	42
EXISTING WIDTH (FT)	22	EXISTING WIDTH (FT)	22
SURFACING (IN)	3	SURFACING (IN)	4
AGGREGATE (IN)	3	AGGREGATE (IN)	12
SUBBASE (IN)	8		

TYPE		UNITS	UNIT PRICE	QUANTITY	COST
EXCAVATION-UNCLASSIFIED		CUYD	$ 9.02	9647.4	$ 87,020
SPECIAL BORROW		CUYD	$ 24.00	3128.9	$ 75,093
CRUSHED AGGREGATE COURSE		CUYD	$ 44.53	4302.2	$ 191,578
COVER - TYPE 2		SQYD	$ 1.00	23466.7	$ 23,467
COMMERCIAL MIX PG 64-28		TON	$ 150.00	8971.0	$ 1,345,652
EMULS ASPHALT CRS-2P		TON	$ 836.64	791.7	$ 662,354
COLD MILLING		SQYD	$ 2.51	25813.3	$ 64,791
SIDEWALK-CONCRETE 4"		SQYD	$ 196.44	3754.7	$ 737,567
SIDEWALK-CONCRETE 6"		SQYD	$ 222.24	938.7	$ 208,609
CURB AND GUTTER-CONC		LNFT	$ 83.93	8448.0	$ 709,041
SIGNS - RURAL		MILE	$ 8,000.00	1.2	$ 9,600
SIGNS - URBAN		MILE	$ 52,000.00	0.8	$ 41,600
STRIPING & PAVEMENT MARKINGS - RURAL		MILE	$ 16,000.00	1.2	$ 19,200
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$ 40,000.00	0.8	$ 32,000
DRAINAGE PIPE - RURAL		MILE	$ 100,000.00	1.2	$ 120,000
LIGHTING - URBAN		MILE	$ 175,000.00	0.8	$ 140,000
DRAINAGE PIPE - URBAN (MS4)		MILE	$ 500,000.00	0.8	$ 400,000
	Subtotal 1				$ 4,867,572
MISCELLANEOUS ITEMS				25%	$ 1,216,893
TRAFFIC CONTROL - URBAN				6%	$ 292,054
	Subtotal 2				$ 6,376,519
MOBILIZATION				12%	$ 765,182
	Subtotal 3				$ 7,141,701

CONTINGENCY (MEDIUM RISK)				30%	$	2,142,510
	Subtotal 4				$	9,284,211
LONG-TERM INFLATION		% PER YEAR	3%	21	$	7,987,156
	Subtotal 5				$	17,271,368
CONSTRUCTION ENGINEERING (CE)				10%	$	1,727,137
PRELIMINARY ENGINEERING (PE)				10%	$	1,727,137
	TOTAL				**$**	**20,725,641**

I-26 Wilson Butte Road / 55th Avenue S / Eden Road / Lower River Road — $ 4,500,000

LENGTH (FT)	1750
WIDTH (FT)	34
EXISTING WIDTH (FT)	22
SURFACING (IN)	4
AGGREGATE (IN)	18

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED		CUYD	$	9.02	1425.9	$	12,862
CRUSHED AGGREGATE COURSE		CUYD	$	44.53	1166.7	$	51,952
COVER - TYPE 2		SQYD	$	1.00	2333.3	$	2,333
COMMERCIAL MIX PG 64-28		TON	$	150.00	499.7	$	74,958
EMULS ASPHALT CRS-2P		TON	$	836.64	106.2	$	88,857
COLD MILLING		SQYD	$	2.51	4277.8	$	10,737
OBLITERATE ROADWAY		LNFT	$	19.85	670.0	$	13,303
SIGNS - RURAL		MILE	$	8,000.00	0.3	$	2,652
STRIPING & PAVEMENT MARKINGS - RURAL		MILE	$	16,000.00	0.3	$	5,303
LIGHTING - ROUNDABOUT		LS	$	40,000.00	1.0	$	40,000
STORM DRAIN - ROUNDABOUT - ONE LANE		LS	$	125,000.00	1.00	$	125,000
CONCRETE ROUNDABOUT - ONE LANE		EACH	$	585,000.00	1.00	$	585,000
	Subtotal 1					$	1,012,957
MISCELLANEOUS ITEMS					25%	$	253,239
	Subtotal 2					$	1,266,196
TRAFFIC CONTROL - RURAL					5%	$	63,310
	Subtotal 3					$	1,329,506
MOBILIZATION					12%	$	159,541
	Subtotal 4					$	1,489,047
CONTINGENCY (LOW RISK)					20%	$	297,809
	Subtotal 5					$	1,786,856
LONG-TERM INFLATION		% PER YEAR		3%	21	$	1,537,223
	Subtotal 6					$	3,324,078
CONSTRUCTION ENGINEERING (CE)					10%	$	332,408
PRELIMINARY ENGINEERING (PE)					10%	$	332,408
	Subtotal 7					$	3,988,894
INDIRECT COSTS (IDC)					10.91%	$	435,188
	TOTAL					**$**	**4,424,083**

I-27 River Drive N - 25th St N to 38th St N — $ 21,400,000

LENGTH (MI)	0.85
NEW WIDTH (FT)	40
EXISTING WIDTH (FT)	26
SURFACING (IN)	6
AGGREGATE (IN)	20

TYPE		UNITS		UNIT PRICE	QUANTITY		COST
EXCAVATION-UNCLASSIFIED		CUYD	$	9.02	8618.5	$	77,739
CRUSHED AGGREGATE COURSE		CUYD	$	44.53	3867.3	$	172,210
COVER - TYPE 2		SQYD	$	1.00	6961.1	$	6,961
COMMERCIAL MIX PG 64-28		TON	$	150.00	6389.3	$	958,396
EMULS ASPHALT CRS-2P		TON	$	836.64	319.5	$	267,319
COLD MILLING		SQYD	$	2.51	12927.8	$	32,449
SIDEWALK-CONCRETE 4"		SQYD	$	196.44	3182.2	$	625,116
SIDEWALK-CONCRETE 6"		SQYD	$	222.24	795.6	$	176,804
CURB AND GUTTER-CONC		LNFT	$	83.93	8950.0	$	751,174
GUARDRAIL-STEEL		LNFT	$	63.02	4500.0	$	72,180
RETAINING WALL		SQYD	$	801.49	1485.0	$	730,249
SIGNS - URBAN		MILE	$	52,000.00	0.85	$	44,072
STRIPING & PAVEMENT MARKINGS - URBAN		MILE	$	40,000.00	0.85	$	33,902
LIGHTING - URBAN		MILE	$	175,000.00	0.85	$	148,319
DRAINAGE PIPE - URBAN (MS4)		MILE	$	500,000.00	0.85	$	423,769
	Subtotal 1					$	4,520,658
MISCELLANEOUS ITEMS					25%	$	1,130,164
TRAFFIC CONTROL - URBAN					6%	$	271,239
	Subtotal 2					$	5,922,062
MOBILIZATION					12%	$	710,647

	Subtotal 3				$	6,632,709
CONTINGENCY (MEDIUM RISK)				30%	$	1,989,813
	Subtotal 4				$	8,622,522
LONG-TERM INFLATION		% PER YEAR	3%	21	$	7,417,909
	Subtotal 5				$	16,040,430
CONSTRUCTION ENGINEERING (CE)				10%	$	1,604,043
PRELIMINARY ENGINEERING (PE)				10%	$	1,604,043
	Subtotal 6				$	19,248,516
INDIRECT COSTS (IDC)				10.91%	$	2,100,013
	TOTAL				**$**	**21,348,529**

OTHER PROJECTS

O-1	**8th Street NE / 9th Street NE (Smelter Ave to 36th Ave NE)**	**$100k - $125k**

TYPE	COST
MULTIMODAL CORRIDOR SAFETY STUDY	$100,000 - $125,000

O-2	**Downtown Traffic Flow and Parking Study**	**$250k - $300k**

TYPE	COST
TRAFFIC STUDY	$250,000 - $350,000

O-3	**Intersection Control Study**	**$15k - $35k EACH**

TYPE	UNITS	COST
INTERSECTION OPERATIONAL ANALYSIS	EACH	$15,000 - $35,000

O-4	**Speed Study**	**$7.5k - $25k EACH**

TYPE	UNITS	COST
SPEED STUDY	EACH	$7,500 - $25,000

O-5	**Central Avenue W - Vaughn Rd to 1st Ave N**	**$250k - $300k**

TYPE	COST
CORRIDOR STUDY	$250,000 - $300,000

O-6	**Emerson Junction Feasibility Study**	**$325k - $350k**

TYPE	COST
FEASIBILITY STUDY	$325,000 - $350,000

O-7	**Smelter Ave / 3rd St NW (4th St NE - 5th St NE)**	**$200k - $250k**

TYPE	COST
INTERSECTION SAFETY STUDY & PRELIMINARY DESIGN	$200,000 - $250,000