7.0 DISCUSSION AND RECOMMENDATIONS

In Chapter 1, a set of corridor goals and objectives was presented that were developed by MDT and FHWA based on input from the public. Through the study process, the intent was to identify improvement options that would:

- Improve Corridor Operation and Design
- Improve Corridor Safety
- Minimize Impacts to the Environment
- Ensure Cost Effectiveness and Fundability
- Enhance Multi-Modal Transportation

Chapters 4 and 5 highlighted a number of existing and projected operational issues within the US 93 corridor, including limited side-street access, mainline delay at signalized intersections, and increasing congestion in the northern portion of the corridor over the planning horizon. As a group, improvement options presented in Chapter 6 were intended to improve corridor operation, design, and safety while minimizing impacts to the environment, enhancing mode choices, and ensuring cost effectiveness and fundability.

Fully meeting the goal of improving corridor operation and design while accommodating projected 2030 demand would require major construction projects providing additional capacity and/or limiting access to US 93 and providing local roadway networks and grade separation at several locations throughout the US 93 corridor. Because no funding is currently available or immediately foreseeable, these options are currently not advanced in this study. Although not recommended by this study, Section 7.2 identifies the set of improvement options that would most cost-effectively and comprehensively address future needs. If additional funds become available, this identified package could be reconsidered at an appropriate time in the future.

Despite the current and projected lack of funding for large-scale construction projects within the US 93 corridor, progress towards addressing operational and design needs can be achieved through implementation of spot improvements, transit options, and policy tools over the 2030 planning horizon. Sections 7.3 through 7.5 present these recommended options, provide recommended implementation timeframes, and identify potential funding sources.

7.1 Potential Funding Sources

This section describes potential sources that could be used to help fund transportation improvement projects in the US 93 Corridor.

National Highway System Program

The most direct source of funding for improvements along the US 93 corridor is National Highway (NH) System Program funds. States can use NH funds for projects on National Highway System routes, including Interstate Highways and Non-Interstate National Highways. Activities eligible for the NH funding include construction, reconstruction, resurfacing, restoration, and rehabilitation of segments of the National Highway System. Operational improvements as well as highway safety improvements are also eligible. Other miscellaneous activities that may qualify for NH funding include research, planning, carpool projects, bikeways, and pedestrian walkways. The Montana Transportation Commission establishes priorities for the use of NH funds and projects are let through a competitive bidding process.

NH funds are federally apportioned to Montana and allocated based on system performance by the Montana Transportation Commission. The federal share for National Highway System projects is 86.58 percent and the state is responsible for the remaining 13.24 percent. The state share is funded through the Highway State Special Revenue Account.

National Highway System routes within MDT's Western Montana (Missoula) District are US 93, US 2, US 12, MT 40 and MT 200. The Missoula District is expected to receive an average of about $600,000,000 to $800,000,000 of NH funds over the course of the US 93 Corridor Study planning horizon of 20 years. Current Missoula District priorities already under development total an estimated construction cost of $800,000,000 to $850,000,000, of which approximately $8,000,000 is for improvements along segments of the US 93 corridor inside the study area, while $306,000,000 is for other US 93 improvements outside the study area. Given the estimated planning level cost of $55,000,000 to $250,000,000 to add capacity to the study segment, availability of NH funding for this level of improvement or smaller scale improvements is unlikely.

Potential funding sources for smaller scale improvements along this corridor are discussed below.

Transit Capital and Operating Assistance Funding

MDT provides federal and state funding to eligible recipients through several federal and state programs. Federal transit funding is provided through the Section 5311, Section 5310, Section 5316, and Section 5317 Programs and state funding is provided through the TransADE Program. All projects funded 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. The following programs may be an eligible source of funding for the US 93 Corridor transit needs.

Public Mass Transportation (Section 5307 Program)
Because a portion of the corridor study area is within the Missoula urban boundary, public mass transportation funds are considered eligible funding sources. The Section 5307 grant provides public mass transportation for cities with populations over 50,000. Federal funds pay 80 percent of capital and planning projects and 50 percent of deficit operating costs. The remaining match of 20 percent and 50 percent respectively, must come from non-federal funds or from non-farebox revenue. 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 designated Missoula, Great Falls and Billings as the recipients of Section 5307 funds.

Public Transportation for Rural Areas Program (Section 5311)
Federal transit funding for rural areas is currently provided through the Non-Urbanized Formula Program. Local matching requirements include a 14 percent match for capital programs, a 46 percent match for operating costs, a 30 percent match for administration, and a 20 percent match for maintenance expenditures. All of the funds are apportioned and administered directly to rural transportation providers based on population, ridership, and mileage criteria. This program has historically been the source of Federal Transit Administration (FTA) funds for many rural areas in the United States and, with the new SAFETEA-LU authorization bill, has seen a dramatic increase in funding level. Montana received a significant increase in funding which was used to expand the rural transit program throughout the state. Currently all funds are being used by existing rural transit programs. Section 5311 funds cannot be utilized within the urban boundary.

Metropolitan Planning/State Planning & Research Programs (Section 5303/5304)
These are the principal sources of federal financial assistance for the development and improvement of comprehensive public mass transportation systems. The eligible recipient of Section 5303/5304 funds is the State of Montana.

Job Access and Reverse Commute (JARC) Program (Section 5316)
The JARC program was established to improve access to transportation services to employment and employment-related activities for welfare recipients and eligible low-income individuals and to transport residents of urbanized areas and non-urbanized areas to suburban employment opportunities. Toward this goal, the FTA provides financial assistance for transportation services planned, designed, and carried out to meet the transportation needs of eligible low-income individuals, and of reverse commuters regardless of income. The program requires coordination of federally-assisted programs

and services in order to make the most efficient use of federal resources. JARC funds may be used to finance capital, planning and operating expenses. The federal share of eligible capital and planning costs may not exceed 80 percent of the net cost of the activity. The federal share of the eligible operating costs may not exceed 50 percent of the net operating costs of the activity.

New Freedom (Section 5317)

The New Freedom Program aims to provide additional tools to overcome existing barriers facing Americans with disabilities seeking integration into the work force and full participation in society. The New Freedom Program seeks to reduce barriers to transportation services and expand the transportation mobility options available to people with disabilities beyond the requirements of the American with Disabilities Act (ADA) of 1990. New Freedom funds, which are administered by MDT in Montana, may be used to finance capital and operating expenses. The federal share of eligible capital and planning costs may not exceed 80 percent of the net cost of the activity. The federal share of the eligible operating costs may not exceed 50 percent of the net operating costs of the activity.

Section 5309 Bus and Bus Facilities

The Bus and Bus Facilities Discretionary Program provides capital assistance for new and replacement buses and related equipment and facilities. Eligible capital projects include the purchasing of buses for fleet and service expansion; bus maintenance and administrative facilities; transfer facilities; bus malls; transportation centers; intermodal terminals; park-and-ride stations; acquisition of replacement vehicles; bus rebuilds; bus preventive maintenance; passenger amenities such as passenger shelters and bus stop signs; and accessory and miscellaneous equipment such as mobile radio units, supervisory vehicles, fare boxes, computers, and shop and garage equipment. Eligible recipients for capital investment funds are public bodies and agencies (transit authorities and other state and local public bodies and agencies thereof) including states, municipalities, other political subdivisions of states; public agencies and instrumentalities of one or more states; and certain public corporations, boards and commissions established under state law. Funds are allocated by USDOT or Congress.

Highway Safety Improvement Program (HSIP)

HSIP is a new core Federal transportation funding program. HSIP funds are federally apportioned to Montana and allocated to safety improvement projects identified in the strategic highway safety improvement plan by the Montana Transportation Commission. Projects described in the state strategic highway safety plan must correct or improve a hazardous road location or feature, or address a highway safety problem. The Montana Transportation Commission approves and awards the projects which are let through a competitive bidding process. Generally, the federal share for the HSIP projects is 91.24 percent and the state is responsible for 8.76 percent.

There are two set aside programs that receive HSIP funding: the Highway – Railway Crossing Program (which is not applicable in this corridor as there are no railroad crossings on US 93) and the High Risk Rural Roads Program.

> High Risk Rural Roads Program (HRRRP)
> Funds are set aside from the Highway Safety Improvement Program funds apportioned to Montana for construction and operational improvements on high-risk rural roads. The US 93 Corridor Study area is within an identified High Crash Corridor. These funds are allocated to HRRRP projects by the Montana Transportation Commission. If Montana certifies that it has met all of the needs on high risk rural roads, these set aside funds may be used on any safety improvement project under the HSIP. Montana's set aside requirement for HRRRP is approximately $700,000 per year.

Surface Transportation Program – Secondary (STPS)*

The STPS is a sub-allocation of the larger Surface Transportation Program.[1] 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 highways that have been functionally classified by the MDT as either rural minor arterials or rural major collectors and that have been selected by the Montana Transportation Commission in cooperation with the boards of county commissioners, to be placed on the secondary highway system [MCA § 60-2-125(4)].

Secondary funds are distributed statewide (MCA § 60-3-206) to each of five financial districts, including the Missoula District, based on a formula which takes into account the land area, population, road mileage, and bridge square footage within the district. Federal funds for secondary highways must be matched by non-federal funds. Of the total received, 86.58 percent is federal and 13.42 federal is non-federal match. The match on these funds is from the Highway State Special Revenue Account.

Eligible activities for the use of Secondary funds fall under three major types of improvements: Reconstruction, Rehabilitation, and Pavement Preservation. The Reconstruction and Rehabilitation categories are allocated a minimum of 65 percent of the program funds with the remaining 35 percent dedicated to Pavement Preservation. MCA § 60-2-127(c) allows funds to also be used for any project that is eligible for STP under Title 23, U.S.C. including but not

* State funding programs developed to distribute federal funding within Montana.

[1] Surface Transportation Program (STP) funds are federally apportioned to Montana and allocated by the Montana Transportation Commission to various programs including the Surface Transportation Program Primary for improvements to the Primary Highway System, the Surface Transportation Program Secondary for improvements to the Secondary Highway System, the Surface Transportation Program Urban for improvements to the Urban Highway System, and the Surface Transportation Program Enhancements for Community Transportation Enhancement Program projects.

limited to highway projects, capital costs for transit projects, carpool projects, and non-motorized projects. Projects not on the state designated highway system would require matching funds from the local or transit agencies.

MDT and county commissions determine Secondary capital construction priorities for each district with final project approval by the Montana Transportation Commission. By state law, the individual counties in a district and the state vote on Secondary funding priorities presented to the Montana Transportation Commission. The counties and MDT take input from citizens, small cities, and tribal governments during the annual priorities process. Projects are let through a competitive bidding process. *Note: This funding category would be applicable for a project involving the intersection of Secondary 203 and US 93 only.*

Surface Transportation Program – Urban (STPU)*

The STPU is a sub-allocation of the Surface Transportation Program.[2] The federal and state funds available under this program are used to finance transportation projects on the state-designated Urban Highway System. The Urban Highway System is described under MCA § 60-2-125(6) as those highways and streets that are in and near incorporated cities with populations of over 5,000 and within urban boundaries established by the MDT, that have been functionally classified as either urban arterials or collectors, and that have been selected by the Montana Transportation Commission, in cooperation with local government authorities, to be placed on the Urban Highway System.

State law [MCA § 60-3-211] guides the allocation of Urban funds to projects on the Urban Highway System in the fifteen urban areas through a statutory formula based on each area's population compared to the total population in all urban areas. Of the total received, 86.58 percent is federal and 13.42 percent is non-federal match typically provided from the Highway State Special Revenue Account for highway projects.

Urban funds are used primarily for major street construction, reconstruction, and traffic operation projects on the 390 miles of the state-designated Urban Highway System. Although the US 93 Corridor is not on the designated Urban Highway System, MCA § 60-2-127(c) allows funds to also be used for any project that is eligible for STPU under Title 23, U.S.C. including but not limited to highway projects, capital costs for transit projects, carpool projects, and non-motorized projects. Projects not on the state designated highway system would require matching funds from the local or transit agencies. Priorities for the use of Urban funds are established at the

* State funding programs developed to distribute federal funding within Montana.

[2] Surface Transportation Program (STP) funds are federally apportioned to Montana and allocated by the Montana Transportation Commission to various programs including the Surface Transportation Program Primary for improvements to the Primary Highway System, the Surface Transportation Program Secondary for improvements to the Secondary Highway System, the Surface Transportation Program Urban for improvements to the Urban Highway System, and the Surface Transportation Program Enhancements for Community Transportation Enhancement Program projects.

local level through local planning processes with final approval by the Montana Transportation Commission.

Because the Urban Highway System includes transportation infrastructure that crosses between incorporated and unincorporated areas, it is important that city and county governments work together to identify and address Urban Highway needs. Consideration of cooperative efforts between city and county governments to address urban highways (roads and bridges) should be incorporated into the planning and implementation of the county CIP as appropriate. *Note: Missoula's annual STPU allocation is $1.8 million. Russell Street is the Missoula Metropolitan Planning Organization's (MPO's) current STPU priority.*

Community Transportation Enhancement Program (CTEP)*

Federal law requires that at least 10 percent of STP funds must be spent on transportation enhancement projects. The Montana Transportation Commission created the Community Transportation Enhancement Program in cooperation with the Montana Association of Counties (MACo) and the League of Cities and Towns to comply with the federal requirement. CTEP is a unique program that distributes funding to local and tribal governments based on a population formula and provides project selection authority to local and tribal governments. The Montana Transportation Commission provides final approval for CTEP projects within the state's right-of-way. The federal share for CTEP projects is 86.58 percent and the state, local, and tribal governments are responsible for providing the remaining 13.42 percent.

Local governments within the study corridor receive annual CTEP allocations as follows:

Ravalli County – $152,813
Missoula County – $182,955
City of Missoula – $269,370

This is a potential funding source for improvements including but not limited to pedestrian and bicycle facilities within the corridor, wildlife habitat connectivity, and preservation of abandoned railway corridors (including the conversion and use for bicycle or pedestrian trails).

Safe Routes to School (SRTS) Program

As a new program under SAFETEA-LU, SRTS funds are used to improve student safety within two miles of K-8 schools. Montana receives a minimum apportionment of $1 million annually. Funding is available primarily in two principle categories, infrastructure and non-infrastructure activities. The infrastructure component (70 percent of funding) funds a state STRS Coordinator and improvements such as pedestrian/bicycle routes, crosswalks, signing and sidewalk improvements. The non-infrastructure-related activities (30 percent of funding) include encouraging walking/bicycling to school, traffic education, and pedestrian safety training and enforcement components. SRTS funding is coordinated with local CTEP efforts for

* State funding programs developed to distribute federal funding within Montana.

infrastructure projects for bike and pedestrian facilities close to schools. All school districts and local governments in Montana may participate in SRTS grant applications. The federal share for this program is 100 percent. SRTS grant applications are due December 31st of each year.

Congestion Mitigation & Air Quality Improvement Program (CMAQ)

CMAQ funds are federally apportioned to Montana and allocated to various eligible programs by federal formula and the Montana Transportation Commission. As a minimum apportionments state with Missoula as the only formula-directed recipient of these funds, non-formula funds are directed to areas of the state with emerging air quality issues. The Montana Transportation Commission approves CMAQ and MACI projects on MDT right-of-way. Infrastructure and capital equipment projects are let through a competitive bidding process. The federal share is 86.58 percent with a match of 13.42 percent. For project within MDT right-of-way, the state is responsible for the remaining 13.42 percent.

> CMAQ
> Mandatory CMAQ funds that come to Montana based on a federal formula and are directed to Missoula, Montana's only moderate CO non-attainment area. Projects are prioritized through the MPO process. *These funds are applicable to projects within the MPO boundary only.*
>
> Montana Air & Congestion Initiative (MACI) – Discretionary Program*
> The MACI – Discretionary Program provides funding for projects in areas designated non-attainment or recognized as being "high-risk" for becoming non-attainment. District Administrators and local governments nominate projects cooperatively. Projects are prioritized and selected based on air quality benefits and other factors. *This funding source is dependent upon the study area being designated as a non-attainment or "high-risk" area.*

Transportation & Community System Preservation Discretionary Program

This program is funded by the Federal Highway Administration (FHWA) to provide discretionary grants to develop strategic transportation plans for local governments and communities. The goal of the program is to promote livable neighborhoods. Grants may be used to improve the safety and efficiency of the transportation system; reduce adverse environmental impacts caused by transportation; and encourage economic development through access to jobs, services, and centers of trade. This program is often used to fund capital expenditures. The TCSP Program federal share is 80 percent or subject to the sliding scale rate in accordance with 23 U.S.C. 120 (b).

The recent trend for projects funded through federal discretionary programs such as this has been U.S. Department of Transportation (USDOT) and FHWA funding projects consistent with the

* State funding programs developed to distribute federal funding within Montana.

federal Congestion Initiative to fight traffic gridlock. Therefore, recent years have seen funding directed to large urbanized communities in a limited number of urban-type states. If this trend continues, it may be difficult for Montana communities to compete for these types of funds.

Recreational Trails Program

The Recreational Trails Program (RTP) is authorized under SAFETEA-LU. The RTP is a federal-aid assistance program to help the states provide and maintain recreational trails for both motorized and non-motorized recreational trail uses. Funds are available to develop, construct, maintain, and rehabilitate trails and trail facilities. Trail uses include hiking, bicycling, in-line skating, equestrian use, cross-country skiing, snowmobiling, off-road motorcycling, all-terrain vehicle riding, four-wheel driving, or using other off-road motorized vehicles.

Eligible activities include:

- Maintenance and restoration of trails
- Development and rehabilitation of trailside and trailhead facilities
- Purchase and lease of trail construction and maintenance equipment
- Construction of new trails (with some limits on federal lands)
- Acquisition of easements and fee simple title to property
- Assessment of trail conditions for accessibility and maintenance
- Development and dissemination of publications and operation of trail safety and trail environmental protection programs (including non-law enforcement monitoring and patrol programs and trail-related training), not to exceed 5 percent of the annual apportionment
- State costs for administering the program, not to exceed 7 percent of the annual apportionment
- Assessment of trail conditions for accessibility and maintenance
- Education funds may be used for publications, monitoring, and patrol programs and for trail-related training

Each state develops its own procedures to solicit projects from project sponsors and to select projects for funding in response to recreational trail needs within the state. Montana Fish, Wildlife and Parks (FWP) administers the program. A State Trails Advisory Committee (STAC) advises FWP on the administration and expenditure of funds allocated to the state. FWP relies on the 2001 State Trails Plan and input from the STAC to identify recreational trail needs and to set priorities for funding. Application for RTP funds can be obtained from the FWP web page at htpp://fwp.mt.gov/parks/grants/rtp or by contacting Clint Blackwood, Trails Program Coordinator, PO Box 200701, Helena, MT 59620-0701.

New Starts

New Starts funding grants are available for major transit capital investment projects of $75 million or more. The statutory local match for New Starts funding is 80 percent federal, 20 percent local. However, FTA continues to encourage project sponsors to request a federal New Starts funding share that is as low as possible in all of the funding categories. To pursue New

Starts funding, an alternatives analysis must be completed in accordance with FTA guidelines, which includes consideration of a baseline alternative, as well as cost effectiveness of the proposed alternative. Detailed guidance regarding this program can be found at http://www.fta.dot.gov/planning/newstarts/planning_environment_213.html.

Small Starts

Small Starts funding grants are available for capital costs associated with transit projects, including new fixed guideway systems, extensions, and bus corridor improvements for under $75 million, with the total amount of the project not to exceed $250 million. Although this program includes a streamlined approval process with fewer criteria as compared to the New Starts program, the transit project must have the following elements to be considered for funding:

- Substantial transit stations,
- Traffic signal priority/pre-emption, to the extent, if any, that there are traffic signals on the corridor,
- Low-floor vehicles or level boarding,
- Branding of the proposed service, and
- 10-minute peak/15 minute off peak headways or better while operating at least 14 hours per weekday.

Detailed guidance regarding this program can be found at http://www.fta.dot.gov/planning/newstarts/planning_environment_222.html.

Very Small Starts

Very Small Starts projects are simple, low-risk transit projects that, based on their characteristics and the context in which they are proposed to operate, qualify for a highly simplified project evaluation and rating process. Capital investment grants must be less than $25 million with a total project cost not to exceed $50 million and $3 million per mile (excluding vehicles). Very Small Starts must include the following features:

- Substantial transit stations,
- Traffic signal priority/pre-emption, to the extent, if any, that there are traffic signals on the corridor,
- Low-floor vehicles or level boarding,
- Branding of the proposed service,
- 10 minute peak/15 minute off peak headways or better while operating at least 14 hours per weekday (not required for commuter rail or ferries),
- Are in corridors with existing riders who will benefit from the proposed project that exceed 3,000 per average weekday.

Detailed guidance regarding this program can be found at http://www.fta.dot.gov/planning/newstarts/planning_environment_222.html

Local Funding Sources

The City of Missoula receives funds from a number of local sources including impact fees, general funds, special improvement district funds, mill levy funds, and passenger revenue funds ranging from $50,000 to $1,000,000 annually. The City of Missoula and Missoula County also receive annual gas tax funds of $1,080,000 and $322,000, respectively. Ravalli County also receives annual gas tax funds. These funds are collectively used for maintenance of existing facilities and to support existing transportation programs. The City of Missoula and Missoula County do not anticipate that funds from these sources would be available for future improvement projects within the US 93 corridor.

Local funding for transit projects may be available through implementation of the following programs:

Special Farebox
Fares and bulk sale passes to employers, convention centers, and universities can contribute to the overall revenue for a transit system, which can be used for ongoing operations.

Special Assessment District
Special assessment districts can be created to fund services or to construct capital infrastructure. This funding source is most effective if the district primarily includes retail properties and there are vacant or underutilized properties close to the transit project.

Impact Fees
Local governments can require impact fees as a condition of subdivision approval for developments projected to impact local roadways or intersections, with the level of impact defined according to local regulations. Impact fees from several developments can then be pooled to fund improvements to local infrastructure, including frontage roadways / connecting local roadway networks or grade-separated access structures.

Local Sales Tax
Local sales tax measures can be considered where voters are willing to support transit projects.

Advertising and Sponsorship
Revenue can be used to support operations through the sale of advertising at stations, and sponsorship of stations and/or vehicles.

Private Funding Sources

In some cases, funds for transportation improvements in the US 93 corridor may be available through public / private partnerships in connection with private development adjacent to the US 93 facility. For example, private developers may be willing to contribute funds toward local connecting roadways or grade separated intersections to ensure adequate access to US 93 from private residential developments.

7.2 Options Currently Not Advanced

As noted at the beginning of this chapter, fully meeting the corridor goal of improving corridor operation and design would require a major construction project providing additional capacity and/or limiting access and providing connecting local roadways and grade separation at several locations throughout the US 93 corridor. These options would be able to fully address the congestion, delay, and access problems projected over the 2030 planning horizon.

Section 7.1 notes that estimated costs for current Missoula District priority projects already exceed the expected NH funds to be received over the course of the planning horizon. Given this funding picture, it will most likely not be possible to finance any major construction project within the US 93 corridor over the 2030 planning horizon using NH funds. Local governments are encouraged to consider enacting impact fee requirements for new developments in areas that would affect traffic volumes on US 93. Funds generated from impact fees could be used toward access or capacity improvements.

In the event that funding sources are identified for major reconstruction projects beyond the 2030 planning horizon, this study recommends reconsideration of the following set of improvement options:

- Center Reversible Travel Lane within Existing Lane Structure
- Grade Separated Intersections throughout the Corridor
- Frontage Roads / Connecting Local Roadway Networks
- Lolo Options

The center reversible travel lane would provide additional peak-direction capacity without adding lanes, thereby decreasing congestion while minimizing costs and impacts to the environment. In order to function properly, this option would require construction of grade-separated access points and a local roadway network. These features would allow access to and from side streets without degrading mainline operations. Implementation of one of the Lolo Options would provide additional capacity in Lolo, thereby reducing the in-town bottle-neck effect and improving mainline LOS over this portion of the corridor. Additional study would need to be conducted to determine which of these options might be feasible in Lolo. This package of options would provide the most comprehensive solution to the current and projected congestion, delay, and access problems within the corridor.

Under optimum conditions, the Passenger Rail option could also reduce congestion and delay on US 93. In order to be cost effective, however, this option would require a combination of densification of population and employment throughout the US 93 corridor, and a higher mode share than is projected over the 2030 planning horizon. Additionally, implementation of passenger rail would require local / private funding sources.

7.3 Recommended Near-Term Options

Despite the current lack of funding for large-scale construction projects within the US 93 corridor, progress towards addressing operational and design needs can be achieved through implementation of spot improvements, transit options, and policy tools over the 2030 planning horizon. Additionally, these options may help fulfill other corridor goals and objectives, as discussed later in this section.

Recommended near-term options are discussed in this section according to the following option categories: Transit / Multi-Modal Options, Spot Improvements, and Policy Tools. Options within each category are ranked in order of recommendation, although there is no ranking relating to the option categories. Implementation of options within each of the three categories should occur concurrently, as funding allows. Although no funding has been allocated to date for recommended options, potential sources of funding are identified in this section. Planning-level cost estimates are only intended to show order of magnitude differences in cost relative to each improvement option.

Transit / Multi-Modal Options

Purpose and Need

The purpose of transit / multi-modal projects is to provide options for alternative modes of transportation within the US 93 corridor and potentially reduce the number of single-occupant vehicles on the roadway. Transit / multi-modal projects are needed to satisfy the strong public desire for increased mode choice.

Fulfillment of Corridor Goals and Objectives

Near-term transit / multi-modal options would fulfill the goal of enhancing multi-modal transportation. Enhanced vanpool / rideshare programs and improved park and ride facilities would encourage use of existing transit programs. A continuous separated bicycle / pedestrian path would provide additional mode choice.

Discussion

There are three transit / multi-modal options that could be implemented over the near-term. Near-term transit options were identified in the transit analysis conducted for this study as those that could be implemented within the next one to five years.

Transit / multi-modal options are ranked in Table 7.1 in order of recommendation. Ranking group 1, for example, represents the transit options that are recommended for implementation first, ranking group 2 represents those transit options that should be implemented second, and so on. Transit / multi-modal options were ranked based on cost of implementation. Costs listed in Table 7.1 are in 2007 dollars.

Table 7.1 Recommended Near-Term Transit / Multi-Modal Options

Category	Rank	Option	Estimated Cost
Transit / Multi-Modal Options	1	Enhanced Vanpool / Rideshare Programs	$5,000 to $40,000
	2	Improved Park and Ride Facilities	$150,000 per location
	3	Separated Bike / Pedestrian Path	$2,200,000

Table 7.2 provides a summary of spot improvement costs over the 20-year planning horizon and includes yearly inflation costs of three percent. Detailed calculations are included in Appendix G.

Table 7.2 Planning-Level Cost Estimates for Near-Term Transit / Multi-Modal Options over 20-Year Planning Horizon

		Total Estimated Cost			
Category	Option	2012	2018	2024	2030
Transit / Multi-Modal Options	Enhanced Vanpool / Rideshare Programs	$6,500 to $52,000	$8,000 to $62,000	$9,500 to $74,000	$11,000 to $ 89,000
	Improved Park and Ride Facilities	$195,000	$233,000	$278,000	$332,000
	Separated Bike / Pedestrian Path	$2,900,000	$3,400,000	$4,000,000	$4,900,000

Potential Funding Sources

As noted in Section 7.1, there are several transit capital and operating assistance funding sources, including Public Mass Transportation (Section 5307), Public Transportation for Rural Areas Program (Section 5311), Metropolitan Planning / State Planning & Research Programs (Section 5303/5304), Job Access and Reverse Commute Program (Section 5316), and New Freedom (Section 5317). These programs may be potential funding sources for the enhancement of vanpool and rideshare programs and improved park and ride facilities. CTEP and the Recreational Trails Program may be sources of funds for a separated bicycle / pedestrian path. It should be noted that no funds have been dedicated through these programs for any of the improvement options noted above.

Spot Improvements

Purpose and Need

The purpose of spot improvement projects is to improve operation, design, and safety in discrete locations over the length of the US 93 corridor, thereby improving these characteristics corridor-wide. Spot improvements are needed to provide greater pedestrian comfort and access, and to address animal-vehicle conflicts and poorly operating intersections resulting in long mainline and side street delays. Spot improvements are also needed to improve communication regarding incidents and to provide safe locations for vehicles stops within the corridor.

Fulfillment of Corridor Goals and Objectives

Spot improvement options would address the goals of improving corridor operation and design, improving corridor safety, and improving mode choice in localized areas. Improved pedestrian crossings would provide greater pedestrian comfort and access, as well as additional mode choice. Improved animal crossings would reduce the opportunity for animal-vehicle conflicts, thereby improving safety for drivers. A transportation communication system would improve operation within the corridor in the event of an incident. Improved pullout locations would allow for emergency vehicle staging, as well as other vehicle stops, thereby improving safety for drivers. Intersection improvements would improve operations by addressing capacity and delay issues at existing intersections, thereby potentially improving safety performance in these locations.

Discussion

There are five spot improvement ranking groups that can be implemented in the near-term. Table 7.3 lists each of these spot improvements in order of recommendation with Ranking Group 1 recommended for implementation first and Ranking Group 5 recommended for implementation last. Spot improvements were ranked by cost of implementation, assuming the low end of cost estimate ranges. Costs listed in Table 7.3 are in 2007 dollars.

Table 7.3 Recommended Spot Improvements

Category	Rank	Option	Estimated Cost
Spot Improvements	1	Improved Pedestrian Crossings	$2,500 to $1,500,000 per location
	2	Improved Animal Crossings	$300,000 to $2,000,000* per location
	3	Improved Pullout Locations	$300,000 per location
	4	Transportation Communication System	$350,000 per location
	5	Intersection Improvements at Blue Mountain Road and Highway 203	$450,000 per location

*Cost based on estimate from the People's Way (US 93) - Evaro to Polson project.

Table 7.4 provides a summary of spot improvement costs over the 20-year planning horizon and includes yearly inflation costs of three percent. Detailed calculations are included in Appendix G.

Table 7.4 Planning-Level Cost Estimates for Spot Improvements over 20-Year Planning Horizon

		Total Estimated Cost			
Category	**Option**	**2012**	**2018**	**2024**	**2030**
Spot Improvements	Improved Pedestrian Crossings	$3,000 to $1,700,000	$4,000 to $2,400,000	$4,500 to $2,800,000	$5,500 to $3,400,000
	Improved Animal Crossings	$390,000 to $2,600,000	$465,000 to $3,100,000	$555,000 to $3,700,000	$663,000 to $4,400,000
	Improved Pullout Locations	$390,000	$465,000	$555,000	$663,000
	Transportation Communication System	$455,000	$543,000	$648,000	$774,000
	Intersection Improvements at Blue Mountain Road and Highway 203	$584,000	$698,000	$833,000	$995,000

Potential Funding Sources

A number of programs noted in Section 7.1 may be potential funding sources for the spot improvements discussed above. The Safe Routes to School (SRTS) Program may be a potential source of funds for a pedestrian crossing associated with one of the schools in the US 93 corridor. Improved animal crossings could be funded with safety projects monies from the Highway Safety Improvement Program (HSIP) and the High Risk Rural Roads Program (HRRP). Intersection improvements may also be eligible for these funds if it were demonstrated that congestion and delays are related to safety issues in these locations. Improvements to the intersection of US 93 and Highway 203 could potentially be funded through the Surface Transportation Program – Secondary (STPS) program. Additionally, a transportation communication system could be funded in conjunction with the development of any federal –aid eligible project (with the exception of pavement preservation projects) if the communication system were intended to serve incident, traffic, or transit management purposes, or to provide traveler information. It should be noted that no funds have been dedicated through these programs for any of the improvement options noted above.

Policy Tools

Purpose and Need

Implementation of policy tools is intended to accomplish the following: 1) Preserve future transportation corridors by preventing development in identified areas; 2) Create land use development patterns that preserve open spaces and support transit usage; 3) Reduce the number of access points on US 93 and direct traffic to designated access locations; 4) Encourage ridesharing and discourage single-occupancy; and 5) Effectively address incidents within the US 93 corridor.

Implementation of policy tools is a critical step in moving forward with future transportation improvement projects. Some improvement projects will not be possible without prior planning and implementation of supportive policies.

Fulfillment of Corridor Goals and Objectives
Implementation of corridor-wide zoning and access management policies would improve corridor operation and design. Policies intended to preserve pedestrian and bicycle corridors and certain incentive / disincentive programs may help improve mode choice. Incident management policies could improve safety performance in the US 93 corridor.

Discussion
Policies from each of the five policy tool categories can be implemented in the near-term. Table 7.5 lists each of these policy tool categories in order of recommendation with Ranking Group 1 recommended for implementation first and Ranking Group 2 recommended for implementation last. Policy tool categories with a higher ranking are those that must be implemented prior to implementation of future improvement projects. Cost estimates associated with the implementation of policy tools have not been developed for this study.

It should be noted that implementation of corridor preservation, incident management, and access management policies would need to be a cooperative effort between MDT, local governing bodies, and various other parties. MDT would not play a role in the implementation process for zoning policies and the majority of incentive / disincentive programs, however. Please refer to Table 6.8 for a complete list of policies and the parties responsible for their implementation.

Table 7.5 Recommended Policy Tools

Category	Rank	Option	Estimated Cost
Policy Tools	1	Zoning	NA*
	1	Corridor Preservation	
	1	Access Management	
	2	Incentive / Disincentive Programs	
	2	Incident Management	

* Minimal costs associated with implementation of policy tools were not estimated for this Study

7.4 Recommended Mid-Term Options

Transit Options

Purpose and Need
The purpose of transit / multi-modal projects is to provide options for alternative modes of transportation within the US 93 corridor and potentially reduce the number of single-occupant vehicles on the roadway. Transit / multi-modal projects are needed to satisfy the strong public desire for increased mode choice.

Fulfillment of Corridor Goals and Objectives

The recommended mid-term transit option would fulfill the goal of enhancing multi-modal transportation. A peak hour fixed route bus service would provide additional mode choice within the corridor.

Discussion

The transit analysis conducted for this study determined that peak hour bus service could be implemented during the next three to seven years. Table 7.6 lists this mid-term option and the cost for implementation in 2007 dollars.

Table 7.6 Recommended Mid-Term Transit Option

Category	Rank	Option	Estimated Cost
Transit / Multi-Modal Options	1	Peak Hour Fixed Route Bus Service	$400,000 to $8,000,000

Table 7.7 provides the cost for peak hour bus service over the 20-year planning horizon and includes yearly inflation costs of three percent. Detailed calculations are included in Appendix G.

Table 7.7 Planning-Level Cost Estimates for Mid-Term Transit Option over 20-Year Planning Horizon

		Total Estimated Cost			
Category	Option	2012	2018	2024	2030
Transit / Multi-Modal Options	Peak Hour Fixed Route Bus Service	$519,000 to $10,400,000	$620,000 to $12,400,000	$740,000 to $14,800,000	$884,000 to $17,700,000

Potential Funding Sources

As noted in Section 7.1, there are several transit capital and operating assistance funding sources, including Public Mass Transportation (Section 5307), Public Transportation for Rural Areas Program (Section 5311), Metropolitan Planning / State Planning & Research Programs (Section 5303/5304), Job Access and Reverse Commute Program (Section 5316), and New Freedom (Section 5317), as well as the Discretionary Program (Section 5309). These programs may be potential funding sources for capital and operating costs associated with a peak hour fixed route bus service.

The peak hour fixed route bus service option would likely qualify for Small Starts funding if amenities such as developed stations, branding, and signal priority were included in the project. In order to pursue Small Starts funding for this option, a formal Alternatives Analysis would need to be initiated as per FTA guidelines. Because very little ridership presently exists in the corridor, bus projects would not likely be eligible for Very Small Starts funding.

Local sources noted in Section 7.1 may also be available to help fund a bus service in the US 93 corridor, including special fareboxes, special assessment districts, a local sales tax, and/or advertising and sponsorship.

It should be noted that no funds have been dedicated through these programs for the peak hour fixed route bus service option.

7.5 Recommended Long-Term Options

Transit Options

Purpose and Need

The purpose of transit / multi-modal projects is to provide options for alternative modes of transportation within the US 93 corridor and potentially reduce the number of single-occupant vehicles on the roadway. Transit / multi-modal projects are needed to satisfy the strong public desire for increased mode choice.

Fulfillment of Corridor Goals and Objectives

The recommended long-term transit option would fulfill the goal of enhancing multi-modal transportation. A peak hour fixed route bus service would provide additional mode choice within the corridor.

Discussion

If peak hour bus service is implemented in the mid-term, this option could be expanded to provide all-day service over the long-term. The transit analysis conducted for this study determined that all day bus service could be implemented during the next five to ten years. There would be no additional capital costs to extend the hours of operation under this option. Operating costs would rise from $180,000 for peak hour service to $610,000 for all day service, in 2007 dollars.

Potential Funding Sources

Programs noted in Section 7.4 may be potential funding sources for the additional operating costs associated with an all-day fixed route bus service.

7.6 Summary of Recommendations

Table 7.8 lists the full set of recommended improvement options, notes the lead party that would be responsible for project initiation, and presents potential timeframes for implementation of the options. Timeframes were developed based on the relative cost of each option. Detailed cost information is presented in Appendix G.

Table 7.8 Summary of Recommended Improvement Options

Option		Lead Party Responsible for Coordination and Implementation	Other Key Players	Time Frame for Implementation	Cost
Transit / Multi-Modal Options	Enhanced Vanpool / Rideshare Programs	Missoula and Ravalli Counties; MR TMA; MIM	MDT	Near-Term	$5,000 to $40,000
	Improved Park and Ride Facilities				$150,000 per location
	Separated Bike / Pedestrian Path				$2,200,000
	Fixed Route Bus Service			Mid- to Long-Term	$400,000 to $8,000,000
Spot Improvements	Intersection Improvements at Blue Mountain Road and Highway 203	MDT	None identified	Near-Term	$450,000 per location
	Improved Pedestrian Crossings	MDT	School District; Missoula and Ravalli Counties		$2,500 to $1,500,000 per location
	Improved Animal Crossings	MDT	Missoula and Ravalli Counties		$300,000 to $2,000,000 per location
	Transportation Communication System	MDT	None identified		$350,000 per location
	Improved Pullout Locations	MDT			$300,000 per location
Policy Tools	Incentive / Disincentive Programs	MDT; City of Missoula; Missoula and Ravalli Counties; MIM; MR TMA; Employers	Missoula Parking Commission; School Districts	Near-Term	NA
	Zoning				
	Corridor Preservation				
	Incident Management				
	Access Management				