

# US 93 Corridor Study

Missoula to Florence

## 1.0 INTRODUCTION

### 1.1 Background

In the fall of 2005, the Montana Department of Transportation (MDT) initiated a corridor planning process along US Highway 93 (US 93) from Florence to Missoula. The study was initiated to identify future transportation needs, prioritize transportation projects, and foster cooperative state and local transportation planning efforts. The US 93 Corridor Study is part of MDT's corridor planning process, which is a relatively new tool within MDT emphasizing public involvement and early consideration of environmental constraints. This planning process is intended to save the state time and money by giving a context to later planning and environmental documents and helping to analyze the feasibility of various improvement options within existing and future funding constraints.


### 1.2 Study Area

The US 93 Corridor study area encompasses the general travel corridor between Florence and Missoula, including the existing US 93 transportation facility and the Montana Rail Link (MRL) railroad facility, which generally parallels US 93 to the east. US 93 runs in a north-south direction through the Bitterroot valley in western Montana. The specific portion of the highway chosen for this study extends from Mile Post (MP) 74± in Florence to MP 91± located at the south side of the intersection of US 93 and Reserve Street in Missoula, as shown in Figure 1-1.

Figure 1-1 Study Area



# US 93 Corridor Study

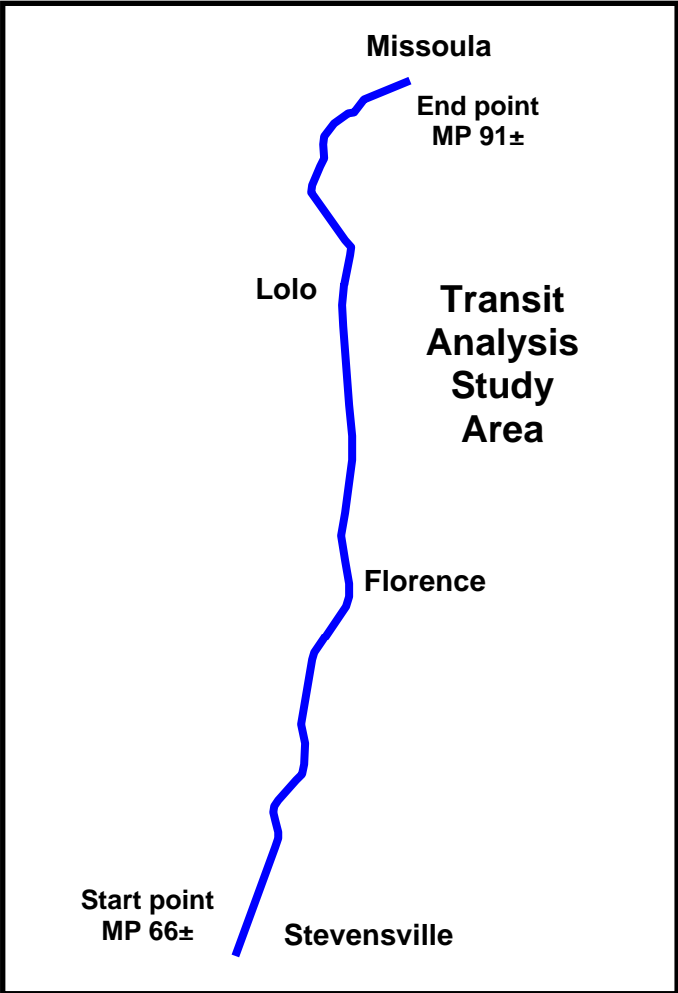


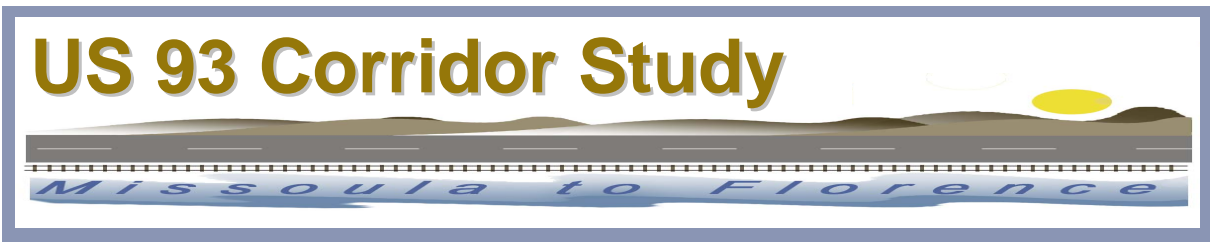
Missoula to Florence

Originally, the study area was defined as the portion of the corridor between Lolo and Missoula. At the time the US 93 Corridor Study termini were defined, there were no adopted plans for this portion of the corridor, although the Access Control Report (covering MP 83.2± to 86± and completed in 2006) and the Miller Creek Road EIS (covering MP 86± to 91± and completed in 2008) were ongoing. As improvement options were proposed early in the study process, the southern limit of the US 93 Corridor Study boundaries was extended south to Florence so that an East Side Bypass option could be considered in the study. The study boundaries were not extended farther south to Hamilton because the Hamilton to Lolo EIS (1997) examined alternatives and identified a preferred alternative for this portion of the corridor. The Hamilton to Lolo EIS is discussed in greater detail in Section 3.3.

For the purpose of the Transit Analysis conducted for this Corridor Study, the study area was extended south to Stevensville to account for potential transit riders commuting between this population center and Missoula. The Transit Analysis study area is presented in Figure 1-2.

Figure 1-2 Transit Analysis Study Area



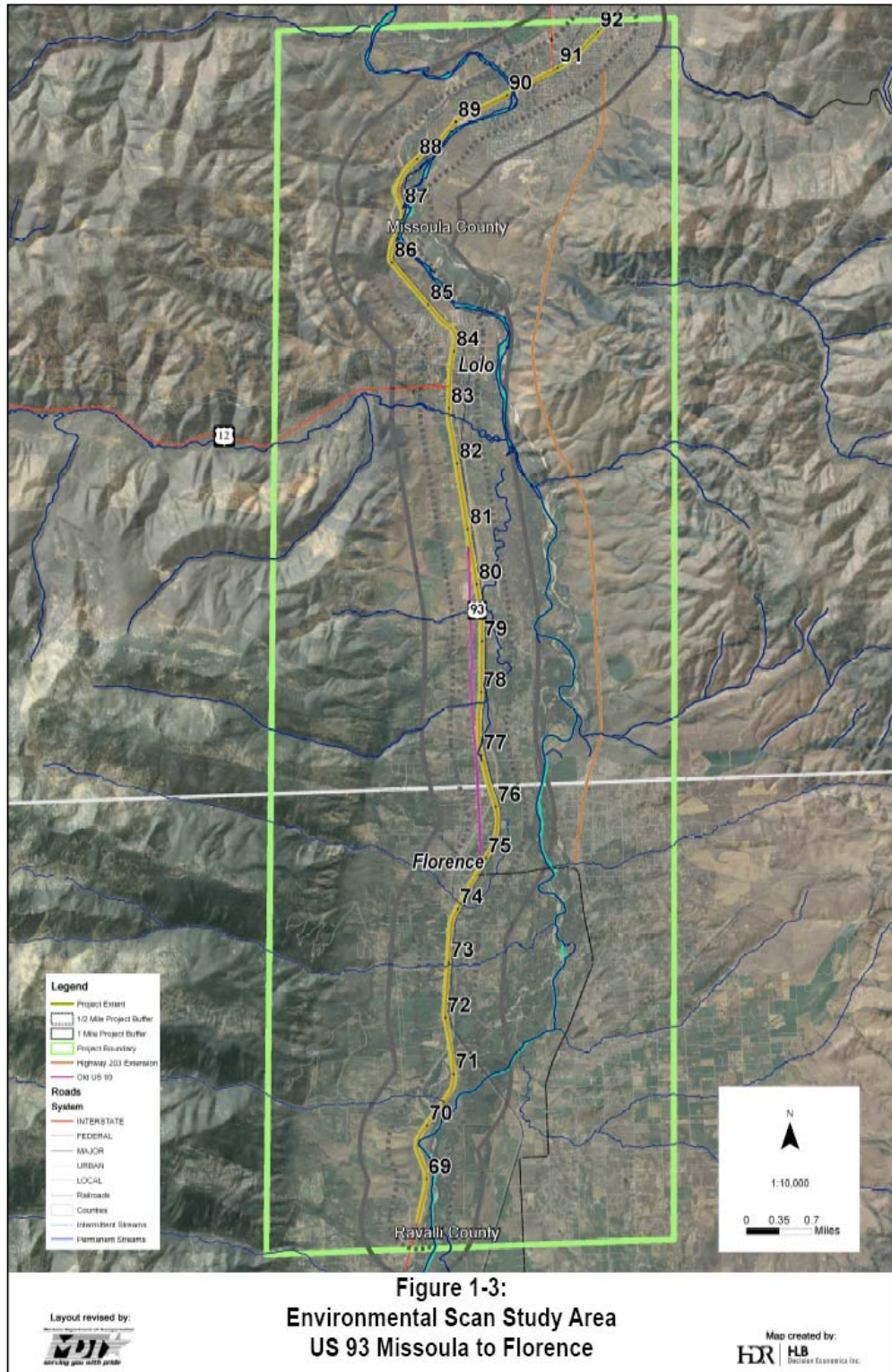


For the purpose of the Environmental Scan conducted for this Corridor Study, the study area was extended farther south into Ravalli County to approximately MP 68± in order to obtain a comprehensive understanding of environmental constraints in the region. The Environmental Scan study area is presented in Figure 1-3.

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Figure 1-3 Environmental Scan Study Area





### **1.3 Classification of US 93**

US 93 is part of the National Highway System (NHS). The NHS includes highways Congress has determined to have the greatest national importance to transportation, commerce, and defense.

Functional classification is a process that groups public roads and highways in accordance with Federal Highway Administration (FHWA) guidelines by the character of service they provide as part of the overall highway system and their corresponding level of travel mobility and access to property. US 93 is functionally classified as a rural principal arterial. Arterials provide the highest level of mobility, at the highest speed, for long uninterrupted travel. Arterials generally have higher design standards than other roads and many principal arterials have multiple lanes with some degree of access control.

### **1.4 Purpose of the US 93 Corridor Study**

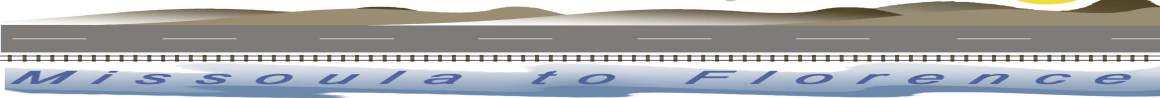
Corridor planning is a collaborative process involving resource agencies, local governments, and the public. The process is designed to derive a planning-level analysis of the existing transportation system within the corridor and determine how it could be improved to meet user needs over the planning horizon. A corridor study is a document that defines a comprehensive package of recommendations for managing and improving a transportation system within available funding. The study provides an assessment of existing roadway conditions; an overview of the social, economic, and environmental constraints; an analysis of improvement options for the corridor that are intended to make the roadway safer and improve operations with consideration of the constraints; and an assessment of the financial feasibility of these options. This document provides recommendations regarding how to prioritize these projects and a comparison of the costs of various improvements.

Pursuant to guidance on linking transportation planning and project development described in 23 CFR 450.212, this corridor study document is intended to provide the following information to be used by MDT, FHWA, and the Federal Transit Administration (FTA) in future transportation projects:

1. Purpose and Need and/or goals and objectives statement(s);
2. General travel corridor and/or general mode(s) definition;
3. Preliminary screening of alternatives and elimination of unreasonable alternatives;
4. Basic description of the environmental setting; and/or
5. Preliminary identification of environmental impacts and environmental mitigation.

The information described above and as outlined throughout this document may be incorporated into future National Environmental Policy Act (NEPA) and Montana Environmental Policy Act (MEPA) documents in accordance with 40 CFR 1502.21. This corridor study thereby links transportation and environmental planning in a way that is intended to improve the efficiency of the project development process by identifying and addressing issues earlier in the process.

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This study provides a planning-level consideration of existing conditions from operations, geometric, social, economic, and environmental standpoints. The assessment of these existing conditions is intended to be brief and only detailed enough to guide future project development when specific projects are proposed. It is also intended to determine whether improvement concepts can clearly be removed from further consideration due to failure to satisfy current safety and design standards and failure to meet cost and constructability targets. The study is not intended to meet the requirements of NEPA/MEPA or to provide design-level detail of proposed improvements.

## 1.5 Goals and Objectives of the US 93 Corridor Study

Corridor goals and objectives were developed in cooperation with MDT, FHWA, local agencies, stakeholder groups, and the public. These goals and objectives were formulated to help identify and screen potential improvement options and help in developing a Purpose and Need for future projects.

This study presents a set of improvement options that are intended to meet the following corridor goals:

- **Improve Corridor Operation and Design**

There are three main operational problems within the US 93 Corridor that currently occur or are projected to occur during the AM and PM peak hours of travel over the 2030 planning horizon. First, the northern portion of US 93 is currently experiencing some degree of congestion during peak hours and is projected to approach capacity by 2030, as described in detail in Chapters 4 and 5 of this document. Although vehicles can move relatively smoothly through the corridor under ideal conditions, any disruption of flow from a crash, inclement weather, or a slow-moving vehicle could create delays. Secondly, given high mainline volumes, there are relatively small gaps on the mainline. Accordingly, it is currently difficult to access US 93 from side streets, as evidenced by LOS ratings of D, E, and F at the worst approach of several stop-controlled intersections. Lastly, if no improvements are made to US 93, mainline delays are projected at signalized intersections in Lolo and at the northern and southern ends of the corridor by 2030 due to relatively large numbers of vehicles on side streets attempting to access US 93 during peak hours. When side street volumes are allowed to proceed at these signalized intersections, mainline volumes will be delayed. Options proposed in this study are intended to provide operational and design improvements at intersections and throughout the corridor to address these problems. Data supporting these qualitative problem descriptions are provided in Chapters 4 and 5 of this document.

- **Improve Corridor Safety**

There are scattered locations throughout the rural portion of the US 93 corridor (MP 74± to MP 90±) with higher numbers of crashes per half-mile segment as compared to the



projected number of crashes expected to occur based on the statewide average crash rate for similar facilities. These segments cover approximately 37 percent of the study area. Improvement options proposed in this report are intended to improve and maintain corridor safety for all modes of travel.

In addition to the above goals, improvement options proposed in this study are intended to meet the following corridor objectives:

- **Minimize Impacts to the Environment**  
There are a number of important natural and cultural resources within the US 93 corridor, including surface water bodies, wetlands, biological resources, and historic sites. Improvement options proposed in this study are intended to incorporate context-sensitive design and minimize impacts to these resources where practicable.
- **Ensure Cost Effectiveness and Fundability**  
An analysis of the feasibility of an improvement option must consider both fundability concerns and cost-effectiveness as compared to other improvement options. This study assesses both of these measures with respect to proposed improvement options.
- **Enhance Multi-Modal Transportation**  
National policy trends are moving toward greater investment in multi-modal transportation options. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which was enacted in 2005, specifically encourages intermodal connectivity and the use of innovative modes of transportation. Improvement options proposed in this report are intended to optimize the use of alternative transportation modes throughout the corridor.

The list of recommended improvement options presented in this study is greatly constrained by funding availability over the planning horizon. This study attempts to realistically identify those options that will help to address corridor-wide issues and meet corridor goals and objectives while considering potential funding mechanisms.

## **1.6 Organization of the Document**

This document is separated into seven chapters, as described below.

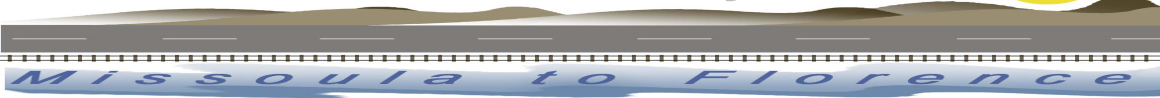
### *1.0 Introduction*

Chapter 1 describes the background for the study and introduces the purpose of the study, corridor goals, and provides an overview of the contents of the study.

### *2.0 Public Process and Agency Coordination*

Chapter 2 reviews the outreach efforts that were conducted for this study.

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### 3.0 *Existing Social, Economic, and Environmental Conditions*

This chapter presents an inventory of existing social, economic, and environmental constraints along the US 93 corridor.

### 4.0 *Existing Transportation System*

This chapter discusses present transportation conditions in the corridor. Inventories of roadway geometrics, structural conditions, traffic conditions, crash statistics, and the availability of alternative transportation modes are included in this section.

### 5.0 *Transportation Forecasts*

Chapter 5 describes projected population and traffic conditions for the year 2030.

### 6.0 *Improvement Options Analysis*

This chapter provides a description of proposed improvement options and analyzes these options through an identified screening process.

### 7.0 *Discussion and Recommendations*

The final chapter of the study discusses recommended improvement options based on the analysis presented in Chapter 6. Purpose and need statements, estimated costs, implementation timeframes, and potential funding sources for each improvement option are also presented in this chapter.