MT 78 Corridor Study

August 2007 **Project Newsletter No. 3**

What is the MT 78 Corridor Study?

The Montana Department of Transportation (MDT) has completed a corridor planning process along the MT 78 corridor in order to comprehensively assess future transportation needs, prioritize future transportation projects, provide opportunities for early public input and resource agency coordination, and foster cooperative state and local transportation planning efforts.

MT 78 is a two-lane highway that begins at the town of Red Lodge and runs through Roscoe, Absarokee, and Columbus before intersecting with Interstate 90. The portion of the highway chosen for this study begins at milepost 5.0± northwest of Red Lodge and extends to milepost (MP) 20.0± southeast of Roscoe.

The study presents a set of improvement options that:

- Improve safety conditions and address accident concentrations within the corridor.
- Improve geometric elements within the corridor, including horizontal alignment, vertical alignment, and sight distance.

What issues were identified?

The investigation of the existing MT 78 transportation system identified a number of issues. These existing corridor deficiencies and issues are described in the following list.

1. Steep grades exist over a large portion of the corridor.
2. Sharp curves exist at the southern and northern ends of the corridor and at a few scattered locations within the middle portion of the corridor.
3. Passing and stopping sight distances are limited not only due to poor horizontal and vertical alignment, but also due to steep side slopes in several locations.
4. Shoulder widths throughout the corridor are not wide enough to safely accommodate vehicle stops or bicycle travel.
5. There are a number of poorly-aligned access points along the corridor.
6. Accident concentrations are located between MP 5 to 9.5 and from MP 18.5 to 20, as well as in scattered locations between MP 12 to 14 and MP 17 to 18.

An inventory of existing social, economic, and environmental conditions was conducted for the study. Because the proposed improvements are either on or close to the existing alignment and are limited to minor widening and alignment shifts, impacts to resources are not anticipated to be significant for the purpose of future environmental compliance.

Summary of Improvement Options

In response to geometric and operational analyses and public input, a set of short-term and long-term improvement options was developed for the corridor. Efforts were made to avoid or minimize impacts to known constraints, such as wetlands and historic resources, within the corridor. The following provides a summary of these options.

Short Term Improvement Options

Short-term improvement options were ranked based on the following criteria: cost, ability to improve safety in a crash concentration location, and near- and long-term benefits. Based on their respective rankings under these criteria, each of the spot improvements were then assigned a priority ranking as follows.

High Priority Improvement Options

- Update school bus stop signing at MP 6.9, 10.7, 12.1, 13.1, 13.9, and 15.1.
- Trim vegetation for intersection visibility at MP 13.0.

Moderate Priority Improvement Options

- Realign Upper Luther Road and build a school bus pullout / Park and Ride at MP 8.2.
- Realign Lower Luther Road and build a school bus pullout at MP 13.0.
- Shave side slopes to improve sight distance at MP 9.3 and MP 7.4, and from MP 8.0 through 8.2.

Low Priority Improvement Options

- Shave side slopes to improve sight distance at MP 15.8 and MP 16.8.

Short Term Improvement Option Costs

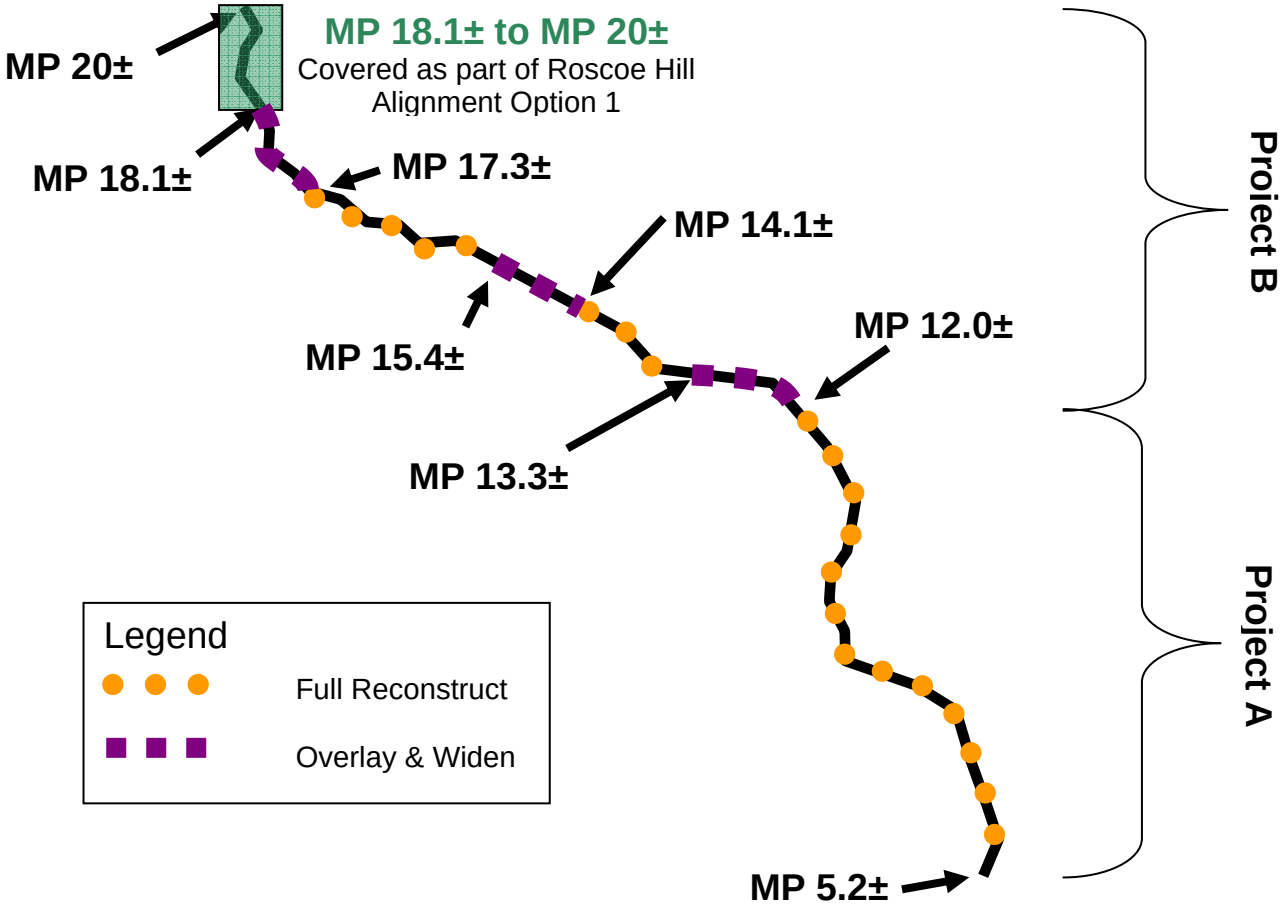
Ranking Group	Approximate MP	Potential Spot Improvement	Estimated Cost (2006 dollars)
1	6.9, 10.7, 12.1, 13.1, 13.9, 15.1	Update school bus stop signing	$6,700
2	13.0	Trim vegetation for intersection visibility	$2,800
3	8.2	Realign Upper Luther Road and build a school bus pullout / Park and Ride	$151,000
3	13.0	Realign Lower Luther Road and build a school bus pullout	$164,000
4	9.3	Shave side slopes to improve sight distance	$906,000
5	7.4	Shave side slopes to improve sight distance	$107,000
5	8.0 – 8.2	Shave side slopes to improve sight distance	$178,000
6	15.8	Shave side slopes to improve sight distance	$720,000
6	16.8	Shave side slopes to improve sight distance	$1,108,000

Long Term Improvement Options

Existing roadway conditions were evaluated to determine the minimum level of improvement necessary to upgrade the roadway to improve safety. Over much of the corridor, full reconstruction is necessary to satisfy this goal. Two long-term improvement options were identified.

Project A involves full reconstruction from MP 5.2± to MP 12.0±.

Project B involves full reconstruction from MP12.0± through the end of the corridor. Additionally, Project B includes Roscoe Hill, located at the far northern part of the corridor (MP 18.1± to 20.0±), where three possible alignments were investigated. Based on cost estimates, the recommended option is Alignment Option 1, an overlay and widen scenario where minor changes would be made to the vertical curves to provide minimum sight distance. Substandard grades would not be addressed under this option and a design exception would be required.



As shown in the figure above, within the Project B segment there are areas requiring full reconstruction and other areas that can be improved using an overlay and widen scenario. MDT has determined that it is not cost effective to utilize an overlay and widen concept when more than 25 percent of the proposed project requires full reconstruction. Because nearly half of Project B requires full reconstruction, the overlay and widen concept is not recommended. The ultimate improvement strategy for the entire corridor is full reconstruction in the long-term.

Long Term Improvement Option Costs

Project	Improvement Option	Total Estimated Cost (2006 dollars)
Project A		$17,900,000
Project B	Roscoe Hill Alignment Option 1	$16,800,000

How Can I Review the Report?

The Draft Plan is available for public review and comment. You may either review the report online at the MT 78 project web site at www.mdt.mt.gov/pubinvolve/mt78corridor/ or request a copy of the report by contacting Darryl James at the phone number and address provided to the right.

How Can I Submit My Comments?

Comments may be submitted in writing at the final public meeting on **Wednesday, August 22, 2007** from **7 p.m. to 9 p.m.** at the **Roscoe Community Center** located on MT 78.

Comments may also be submitted by mail to project consultant Darryl James of HKM Engineering Inc. at P.O. Box 1009, Helena, MT 59624; or they may be submitted online at the MT 78 project web site at www.mdt.mt.gov/pubinvolve/mt78corridor/

Please indicate comments are for the MT 78 Corridor Study and submit comments by **September 24, 2007**.

For more information, please contact:

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MDT attempts to provide accommodations for any known disability that may interfere with a person participating in any service, program, or activity of the Department. Alternative accessible formats of this information will be provided upon request. For further information, please call Darryl James at (406) **442-0370** or TTY (800) 335-7592, or by calling Montana Relay at 711. Accommodation requests must be made within 48 hours of a public meeting.