

BRIDGER CANYON
Corridor Planning Study

APPENDIX A

Public and Agency Participation Materials

March 2015

Prepared for:



Prepared by:



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BRIDGER CANYON
Corridor Planning Study

Public and Agency Involvement Plan

July 2014

Prepared for:



Prepared by:



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1.0 Introduction

The Montana Department of Transportation (MDT) has initiated a corridor planning study on MT 86. The limits of the study will begin at reference post (RP) 1.95 at the intersection of MT 86 and Story Mill Road, and extend northeasterly to the intersection of MT 86 and US 89 (RP 37.5) for an approximate length of 35.5 miles. This roadway is located in Gallatin and Park Counties beginning just east of Bozeman and ending approximately one mile north of Wilsall, MT.

This corridor planning study will examine the geometric characteristics, crash history, and existing and projected operational characteristics of the corridor, as well as physical conditions, land uses, and environmental resources within the planning corridor. The planning effort will recommend short-term and long-term improvement options to address corridor needs and objectives. These recommendations will assist MDT in targeting the most critical highway needs and allocating resources appropriately.

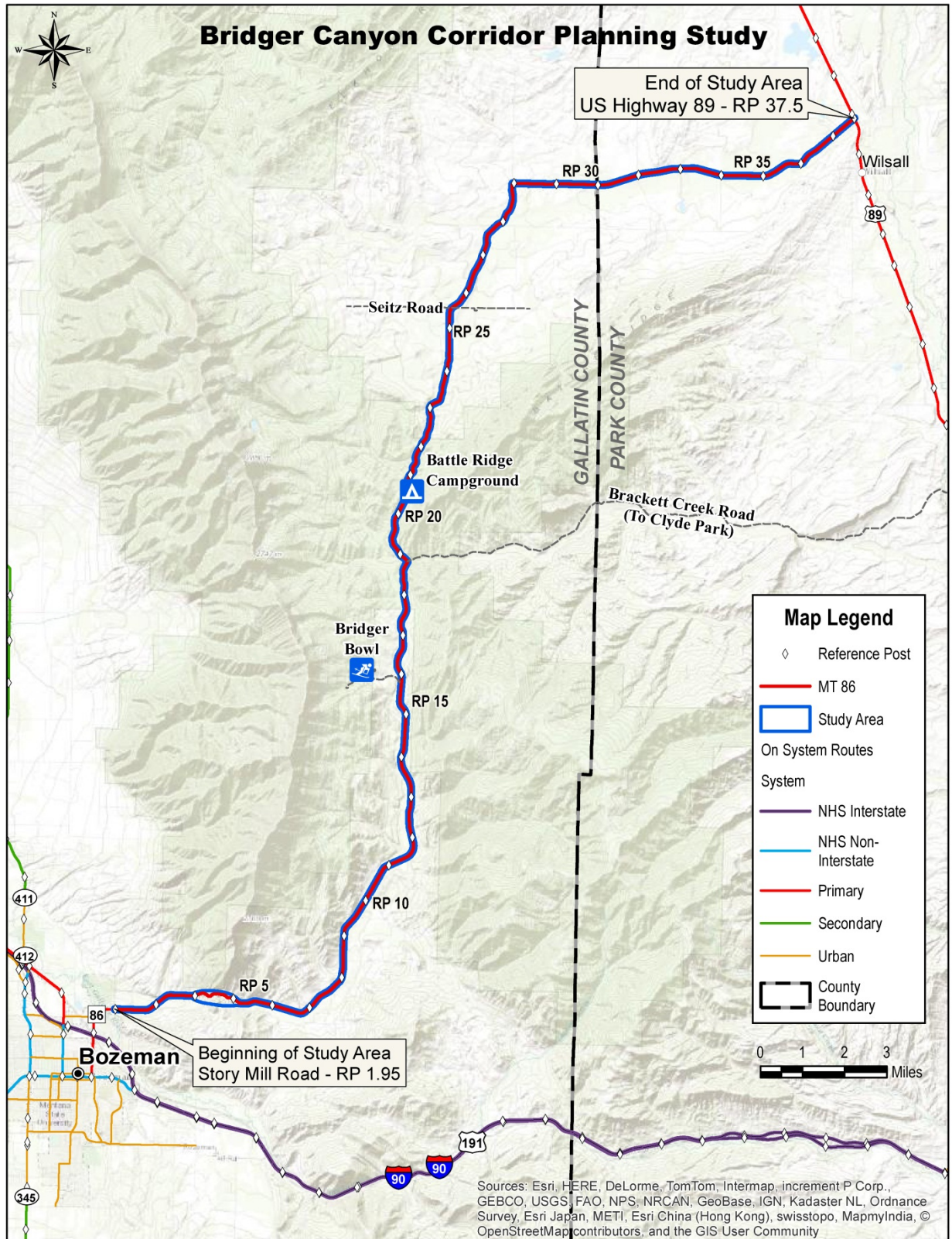
1.1. Study Area

Figure 1 illustrates the study area. The corridor includes private ranches and homes; Gallatin National Forest; amenities such as trailheads and campgrounds; the Bridger Bowl alpine ski area; Bohart Ranch cross-country ski center; and small streams. These features create a diverse travel demographic and vehicle type using the corridor. From Bozeman to Bridger Bowl (approximately 16 miles), the roadway is 25 to 30 feet wide with limited physical constraints. Beyond Bridger Bowl, the roadway narrows with roadway widths of 22 feet in some locations.

1.2. Goal of Public and Agency Involvement Plan

The primary goal of this plan is to provide opportunities for members of the public, stakeholders, and resource agency representatives to learn about the process, review information about the corridor planning study, and provide input throughout the planning effort. In support of this goal, the following sections identify procedures that will guide the public and agency involvement effort.

Figure 1 Study Area



2.0 Study Contacts

Contact information for MDT and the consultant will be provided in all published materials.

Jeff Ebert, MDT District Administrator

Montana Department of Transportation (MDT)
Butte District Office
3751 Wynne
PO Box 3068
Butte, MT 59702-3068
406.494.9625
jebert@mt.gov

Katie Potts, MDT Project Manager

Montana Department of Transportation (MDT)
Statewide and Urban Planning
2960 Prospect Avenue
PO Box 201001
Helena, MT 59620-1001
406.444.9238
kpotts@mt.gov

Sarah Nicolai, Consultant Project Manager

DOWL HKM
1300 Cedar Street
Helena, MT 59601
406.442.0370
snicolai@dowlhkm.com

3.0 Media Coordination

Announcements will be developed by DOWL HKM and advertised by MDT at least three weeks before informational meetings. Advertisements will announce the meeting location, time, and date; the format and purpose of the meetings; and the locations where documents may be reviewed. The *Bozeman Daily Chronicle*, the *Belgrade News* and the *Livingston Enterprise* may carry display advertisements.

MDT may also issue press releases to local radio and television stations announcing informational meetings. Specific media outlets will be identified during the course of the study as appropriate.

4.0 Study Website

DOWL HKM will develop content for a website to be hosted by MDT. The website will provide a description of the planning effort, a description of public involvement opportunities, study contacts, links to available documents, and an anticipated study schedule.

5.0 Document Availability

5.1 Newsletters and Meeting Materials

DOWL HKM will develop two newsletters for the study. The first newsletter will be issued at the time of the first informational meeting and will introduce the study and describe its purpose, illustrate the study area and study components, and describe key findings from the existing and projected conditions report. The second newsletter will be distributed at the time of the second informational meeting and will present proposed improvement options and potential impacts and mitigation strategies. DOWL HKM will also develop meeting materials for each informational meeting, including agendas, static exhibits, and other presentation materials. Print copies of newsletters and meeting materials will be available at each of the two informational meetings hosted for this study. MDT will publish electronic versions of newsletters and meeting materials on the study website at <http://www.mdt.mt.gov/pubinvolve/bridger/> following the meetings. Print and/or electronic copies of newsletters will also be distributed to the study mailing list.

5.2 Reports

MDT will publish electronic versions of reports on the study website. Print copies of the environmental scan report, existing and projected conditions report and the study report will be available at the MDT Rail, Transit, and Planning Division Office (2960 Prospect Avenue; Helena, MT). Print copies of these reports may also be made available at the following locations.

- MDT Bozeman Office (907 North Rouse Avenue; Bozeman, MT)
- Gallatin County Department of Planning and Community Development (Gallatin County Courthouse, 311 West Main Room 108; Bozeman, MT)
- Park County Planning Department (414 East Callender St; Livingston MT)
- Bozeman Department of Community Development (20 East Olive St #202; Bozeman, MT)
- Gallatin National Forest Field Office (3710 Fallon St., Suite C; Bozeman, MT)

6.0 Meetings

6.1 Advisory Committee Meetings

Advisory committee (AC) meetings will generally be scheduled every four weeks for the duration of the study period. AC members will discuss study progress, analysis methodologies, and any issues or concerns that arise during the study. The AC will also review study documentation before publication. Representatives from MDT, FHWA, Gallatin County, Park County, and Gallatin National Forest will be invited to participate in the advisory committee.

6.2 Informational Meetings

Two informational meetings will be held during the course of the study. The first informational meeting will be held part-way through the planning process after the consultant has evaluated environmental, social, and land use conditions and conducted

crash and operational analyses within the study area. During the first meeting, the consultant will introduce the study, present findings from the existing and projected conditions report, and discuss issues and concerns in the study area. Members of the public will be asked to provide feedback on potential improvement options at the second informational meeting.

Comments will be considered throughout the planning process. A public and agency comment period will occur following publication of the draft study report. All comments will be considered before the report is finalized.

6.3 Resource Agency Meeting

MDT will host a single resource agency meeting at the MDT offices in Helena, with conference call arrangements at the MDT Butte District Office and at the Bozeman Department of Community Development, as appropriate. The purpose of the meeting will be to present findings from the draft environmental scan report and existing and projected conditions report. Resource agencies will be asked to identify initial avoidance areas, mitigation needs, and opportunities.

6.4 Stakeholder Meetings

DOWL HKM will be available to meet with stakeholder groups as needed during the planning process.

7.0 Public, Agency, and Stakeholder Comments

Public, resource agency, and stakeholder comments are welcome throughout the planning process. Written comments may be submitted by mail to Sarah Nicolai, DOWL HKM, P.O. Box 1009, Helena, MT 59624; by email to snicolai@dowlhkm.com; or online at <http://www.mdt.mt.gov/pubinvolve/missoulabridges/comments.shtml>

8.0 Accessibility

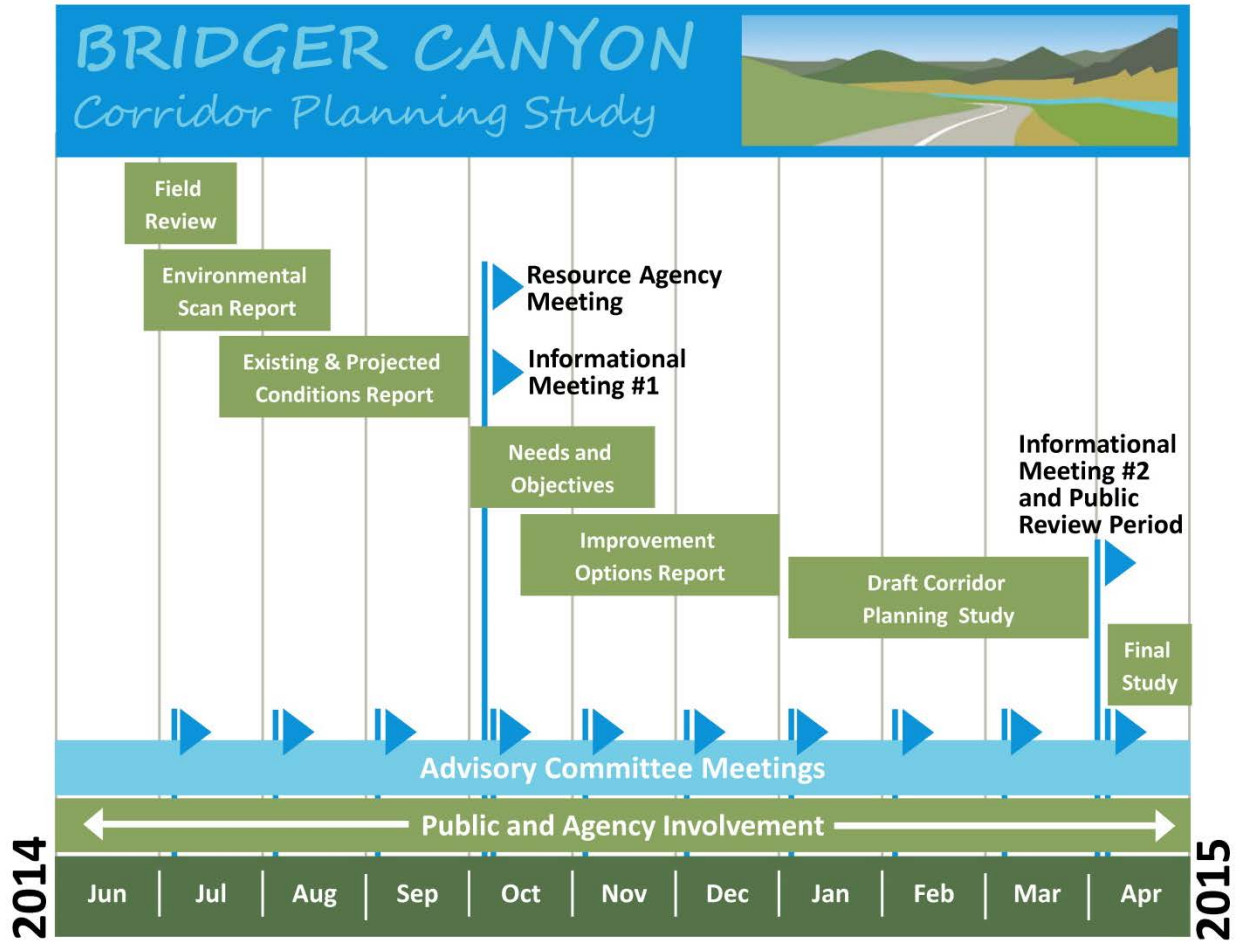
The State of Montana attempts to provide accessible information and services to all individuals. MDT will employ the following measures for the Bridger Canyon Corridor Planning Study.

- MDT will host informational meetings in locations that are accessible and compliant with the Americans with Disabilities Act (ADA).
- MDT and the consultant will confer with community leaders and representative organizations about how best to involve traditionally-underserved populations.
- MDT and the consultant will communicate effectively at the informational meetings by avoiding technical jargon and exercising appropriate conduct and judgment. Alternative accessible formats of study materials will be provided upon request.

9.0 Study Schedule

The Bridger Canyon Corridor Planning Study began in June 2014 and is expected to be completed by the end of April 2015. Figure 2 illustrates the anticipated study schedule.

Figure 2 Anticipated Study Schedule





Memorandum

Physical Address:
1300 Cedar Street
Helena, Montana 59601
Phone: (406) 442 - 0370

Mailing Address:
P.O. Box 1009
Helena, Montana 59624
Fax: (406) 442 - 0377

To: Katie Potts
MDT Project Manager

From: Sarah Nicolai
DOWL HKM Project Manager

Date: October 15, 2014

Subject: **Bridger Canyon Corridor Planning Study
Resource Agency Meeting on October 15, 2014**

A resource agency meeting for the Bridger Canyon Corridor Planning Study was held on October 15, 2014, at the Montana Department of Transportation (MDT) Planning Division Conference Room A in Helena at 8:30 a.m. Attendees also participated in the meeting from the MDT Butte and Bozeman District Offices. Meeting attendees are listed below.

Katie Potts	MDT – Rail, Transit and Planning Division
Jean Riley	MDT – Rail, Transit and Planning Division
Vicki Crnich	MDT – Rail, Transit and Planning Division
Deb Wambach	MDT – Environmental Services Bureau
Doug Lieb	MDT – Environmental Services Bureau
Joe Walsh	MDT – Butte District
Mike McGrath	USFWS
Julie Cunningham	MTFWP
Beau Downing	MTFWP
Chris Scott	Gallatin County Planning Department
Sarah Nicolai	DOWL HKM
Will Trimbath	DOWL HKM
David Stoner	DOWL HKM

Resource Agency Coordination

An invitation letter was sent to the resource agency distribution list on September 24, 2014. A copy of the letter is provided at the end of this memorandum. DOWL HKM conducted follow-up phone calls to the distribution list on October 9, 2014, to confirm attendance at the meeting.

Meeting Format

Sarah Nicolai, DOWL HKM Project Manager, and Will Trimbath, DOWL HKM Environmental Specialist, provided an overview of the planning study process, study area, and key findings from the Draft Existing and Projected Conditions Report and the Draft Environmental Scan Report. Meeting attendees provided comments throughout the meeting. Discussion items are noted below. A copy of the meeting presentation is provided at the end of this memorandum.

Discussion Items

- Sarah began the meeting by providing an overview of the planning study process and noting the study is a pre-NEPA, planning-level study and there are no nominated projects at this time. The study team will develop a list of needs and objectives for the corridor based on input from agencies and members of the public.
- Sarah presented key findings from the Draft Existing and Projected Conditions Report, including bridge conditions, bicycle/pedestrian facilities, drainage/pavement conditions, rockfall hazards, speed limits, geometric roadway conditions, traffic volumes and operations, and crash history.
 - Mike McGrath asked about a planned bicycle/pedestrian path from Bozeman to the “M” trail. Katie Potts explained the project is programmed for 2015.
- Will presented key findings from the Draft Environmental Scan Report, including surface waters/wetlands, hazardous materials, fish and wildlife, threatened and endangered species, recreational resources, and cultural resources.
 - Chris Scott requested an explanation of Section 4(f) and Section 6(f) properties. Sarah explained that public parks, recreation areas, wildlife refuges, and historic sites are afforded protection under Section 4(f) of the Department of Transportation Act. Potential Section 4(f) sites occur within the study area. Section 6(f) refers to sites funded through the Land and Water Conservation Fund Act. No Section 6(f) sites were identified within the study area.
 - Mike asked what percentage of crashes involved a wild animal and how that percentage relates to other corridors with similar characteristics. Sarah noted approximately 10 percent of the reported crashes involved a wild animal. Deb Wambach and Julie Cunningham noted other corridors with similar characteristics have a higher percentage of wild animal crashes. Deb offered to conduct a query of other corridors to compare crash statistics. Julie responded a query would not be necessary.
 - Attendees discussed strategies for wildlife mitigation within the corridor. Mike McGrath stated a 10 percent wild animal crash statistic may justify wildlife crossing mitigation. Attendees agreed funding should be prioritized based upon corridors with the greatest need. Julie Cunningham and Deb Wambach noted other corridors including US 89 may present greater need due to greater relative wildlife/vehicle conflicts. Deb explained there are numerous wildlife mitigation strategies that may be more cost effective than a wildlife crossing structure while still improving conditions. Jean Riley noted private land abuts

the corridor and implementing wildlife mitigation on private land can be difficult. Julie noted the public may advocate for wildlife crossing structures. Julie recommended explaining the range of wildlife mitigation strategies at the informational meeting.

- Attendees discussed potential fish crossing structures in the corridor. Beau Downing explained there is a Fish, Wildlife and Parks restoration management plan to protect Yellowstone cutthroat trout in the Shields River Valley system. Beau added he would share the report and contact the authors to provide additional input for the study.
- Joe Walsh asked what the term “resolved” means in reference to the four leaking underground storage tank sites. Jean explained the term “resolved” indicates the site has been mitigated to the satisfaction of the Montana Department of Environmental Quality (DEQ).
 - Following the meeting, Will contacted DEQ personnel and confirmed that the four tanks have been removed.
- Chris noted the Western Transportation (WTI) Institute has conducted research in the corridor and it may benefit the study to include them in the planning process. Deb noted MDT and WTI have a good working relationship.

Written Responses

The U.S. Army Corps of Engineers and Montana Fish, Wildlife and Parks provided written comments, which are attached to this memorandum.

Bridger Canyon Corridor Planning Study Resource Agency Meeting

Wednesday, October 15, 2014

Name	Organization/Title	Address	City, State, ZIP Code	E-mail
Will Trimbath	DOWL HKM	1300 CEDAR STREET	HELENA, MT 59601	wtrimbath@dowlhkm.com
VICKI CRNICH	MDT		HELENA, MT 59601	VCRNICH@mt.gov
DOUG LIEB	MDT STATEWIDE PDE		"	dlieb@mt.gov
Kati Potts	MDT		" "	kpotts@mt.gov
Sarah Nicolai	DOWL HKM	1300 Cedar Street	Helena	
David Spier	DOWL HKM	1300 Cedar Street	Helena	
Deb Wambach	MDT-Env		Helena	dwambach@mt.gov
Mike McGrath	USFWS	585 Shepard Way, Suite 1	Helena, MT 59601	mike-mcgrath@rus.gov
Jean Riley	MDT		Helena	jriley@mt.gov
Beau Downing	FWP	1420 E. 6th Ave	Helena MT 59601	bdowning@mt.gov
JULIE CUNNINGHAM				
CHRIS SCOTT				





September 22, 2014

To: Resource Agency Distribution

Subject: Bridger Canyon Corridor Planning Study

The Montana Department of Transportation (MDT), in partnership with the Federal Highway Administration (FHWA) and Gallatin and Park Counties, has initiated a corridor planning study to explore the potential need for improvements along Montana Highway 86 (MT 86). The study will focus on the portion of MT 86 beginning at Reference Post (RP) 1.95 at the intersection of Story Mill Road and ending at the junction with United States Route 89 (US 89) at RP 37.50. The study area includes the MT 86 corridor and a 300-foot buffer on both sides of the roadway (for a total buffer width of 600 feet) throughout the majority of the corridor. A buffer width ranging up to approximately 1,700 feet is included from approximate RP 4.0 to RP 5.0 to include a landslide and historic quarry at approximate RP 4.4.

MDT invites you to attend a resource agency meeting to discuss environmental conditions in the study area, and identify any issues or concerns regarding environmental resources that may be affected by potential future improvement options.

When: **Wednesday, October 15, 2014 from 8:30 a.m. to 12:30 p.m.**

Where: MDT Planning Division	MDT Butte District	MDT Bozeman Area Office
Conference Room A	or Conference Room	or Conference Room
2960 Prospect Avenue	3751 Wynne	907 North Rouse Avenue
Helena, MT 59601	Butte, MT 59702	Bozeman, MT 59771

Please review the draft environmental scan report in advance of the meeting. An electronic version of this document (with attachments) is provided on the enclosed CD. If you are unable to attend the resource agency meeting, please forward these files to an appropriate agency designee.

Please provide written comments on the enclosed report by **October 24, 2014**, to Katie Potts at the address indicated on the letterhead. Additional information about the study is available at the study website (<http://www.mdt.mt.gov/pubinvolve/bridger/>).

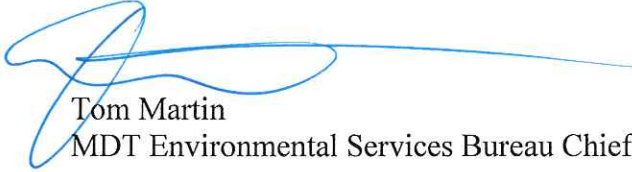
Please contact Sarah Nicolai, Consultant Project Manager, by **October 8, 2014**, to confirm your participation in the resource agency meeting.

Sarah Nicolai
DOWL HKM
P.O. Box 1009
Helena, MT 59624
406.324.7412
snicolai@dowlhkm.com

Thank you in advance for your agency's input.



Sincerely,



Tom Martin
MDT Environmental Services Bureau Chief

Enclosure

Resource Agency Distribution:

Julie Dalsoglio, U.S. Environmental Protection Agency
Mick McGrath, U.S. Fish and Wildlife Service
Todd Tillinger, U.S. Army Corps of Engineers
Travis Horton, MT Fish, Wildlife, and Parks
Kevin Hughes, MT Fish, Wildlife, and Parks
Howard Burt, MT Fish, Wildlife, and Parks
Mike Vaughn, MT Fish, Wildlife, and Parks
Scott Opitz, MT Fish, Wildlife, and Parks
Julie Cunningham, MT Fish, Wildlife, and Parks
Karen Loveless, MT Fish, Wildlife, and Parks
Mike Inman, Park County Planning Department
Chris Scott, Gallatin County Planning Department
William Inman, Park County Planning Department
Robert Ray, MT Department of Environmental Quality
Paul Skubinna, MT Department of Environmental Quality
Beau Downing, MT Fish, Wildlife, and Parks
Allan Kuser, MT Fish, Wildlife, and Parks
Lisa Stoeffler, U.S. Forest Service

Copies (without enclosure):

Katie Potts, MDT
File



Bridger Canyon Corridor Planning Study **Resource Agency Meeting**

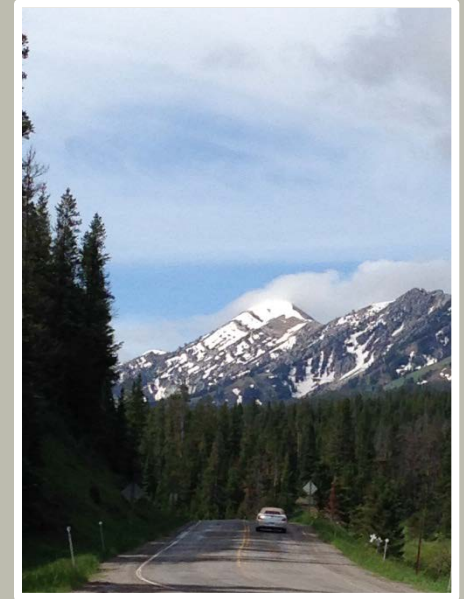
October 2014



Welcome and Introductions

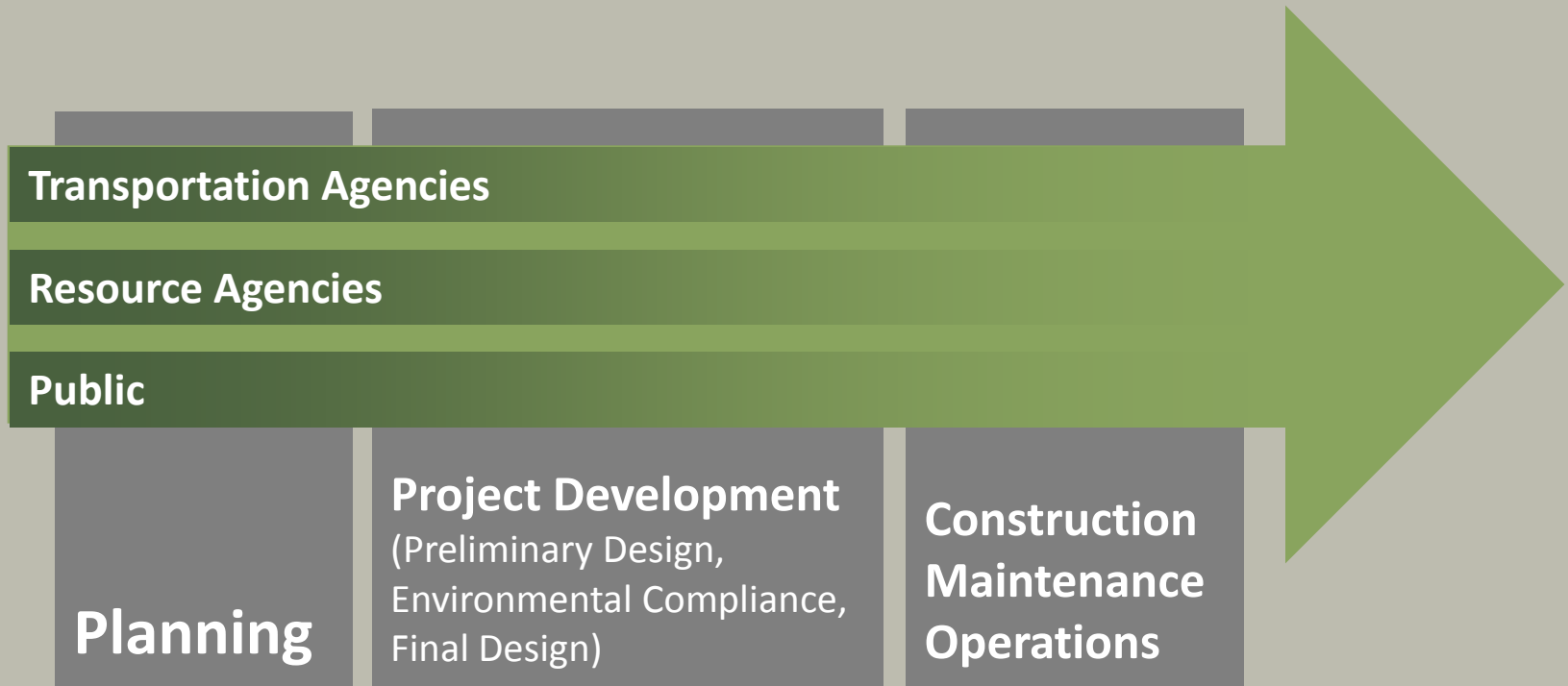
Presentation

- Overview of planning study process
- Key findings from draft existing and projected conditions report
 - Transportation Conditions
 - Environmental Conditions



Discussion Period

What is a Planning Study?

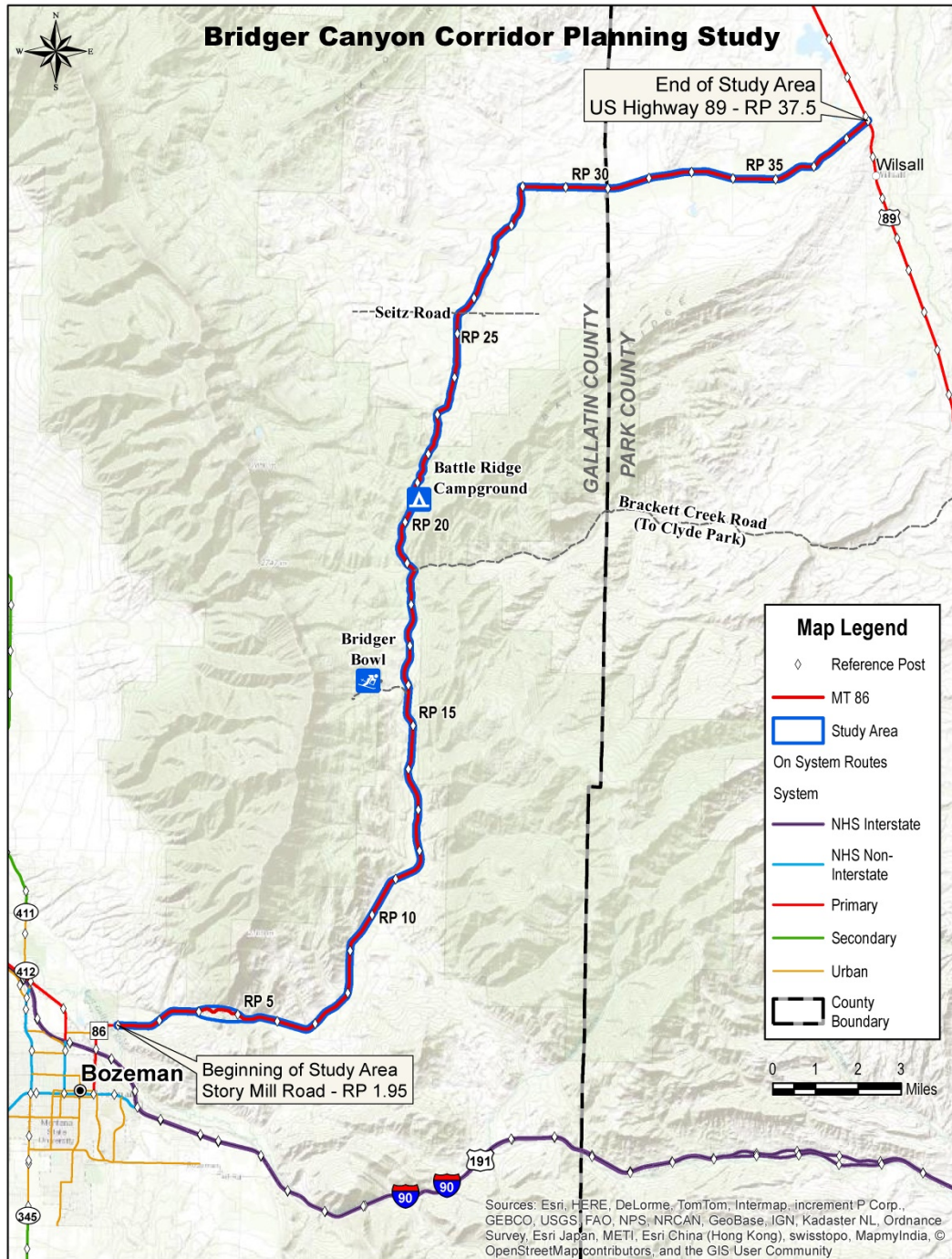


A planning study is conducted before design, right-of-way acquisition, and construction for an individual project.

- Existing and Projected Conditions
- **Resource Agency Meeting**
- Informational Meeting # 1
- Needs and Objectives
- Improvement Options
- Draft Study Report
- Informational Meeting # 2
- Public/Agency Review Period
- Final Study Report



We Are Here



Study Area

**Start: Story Mill Road
Road
(RP 1.95)**

**End: US 89
(RP 37.5)**



Transportation System

- Two-lane highway
- Rural minor arterial
- Paved width varies from 24 feet to 35 feet
- Right-of-way widths vary from 30 feet to 200 feet from centerline
- Rolling and mountainous terrain



RP	Feature Crossed	Year Built	Structure Condition
3.1	Bridger Creek	2005	Good
6.7	Drainage	1939	Good
7.8	Stock Pass	1939	Fair
8.1	Drainage	1939	Good
8.9	Drainage	1939	Good
9.5	Stock Pass/Drainage	1939	Good
18.8	Brackett Creek	1953	Good
24.4	Cache Creek	1939	Fair
26.8	Carrol Creek	1986	Fair
28.0	Flathead Creek	1939	Good

3 of 10 bridges are candidates for repair (Fair Condition)



Bicycle/Pedestrian Facilities



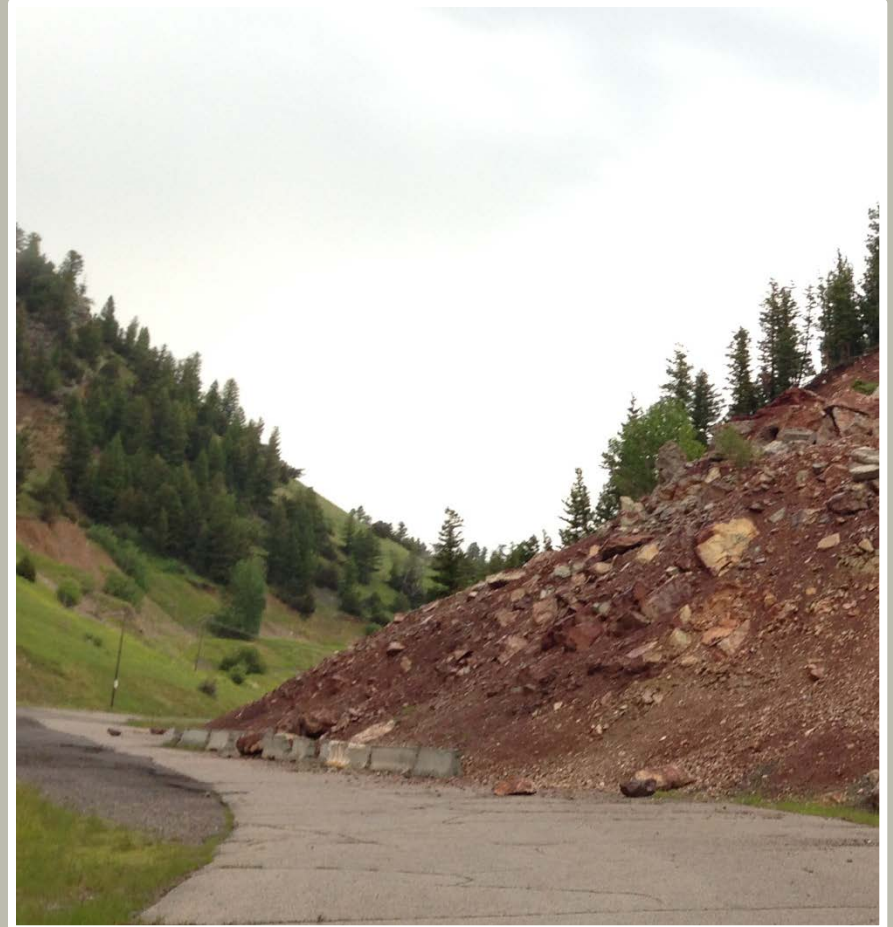
- MT 86 provides connections to “M” Trail System and Drinking Horse Mountain Trails
- No dedicated facilities on MT 86
- Shoulders range from 0 feet to 5 feet

Drainage/Pavement Conditions



- Pavement deterioration due to saturated subgrade on MT 86.
- Areas with standing water near roadway, plugged culverts
- Areas with cracking and pavement failure

- 1975 slide covered portion of MT 86 near RP 4.4
- MT 86 rerouted to north
- Slide area unstable; earthquake or precipitation could trigger another event



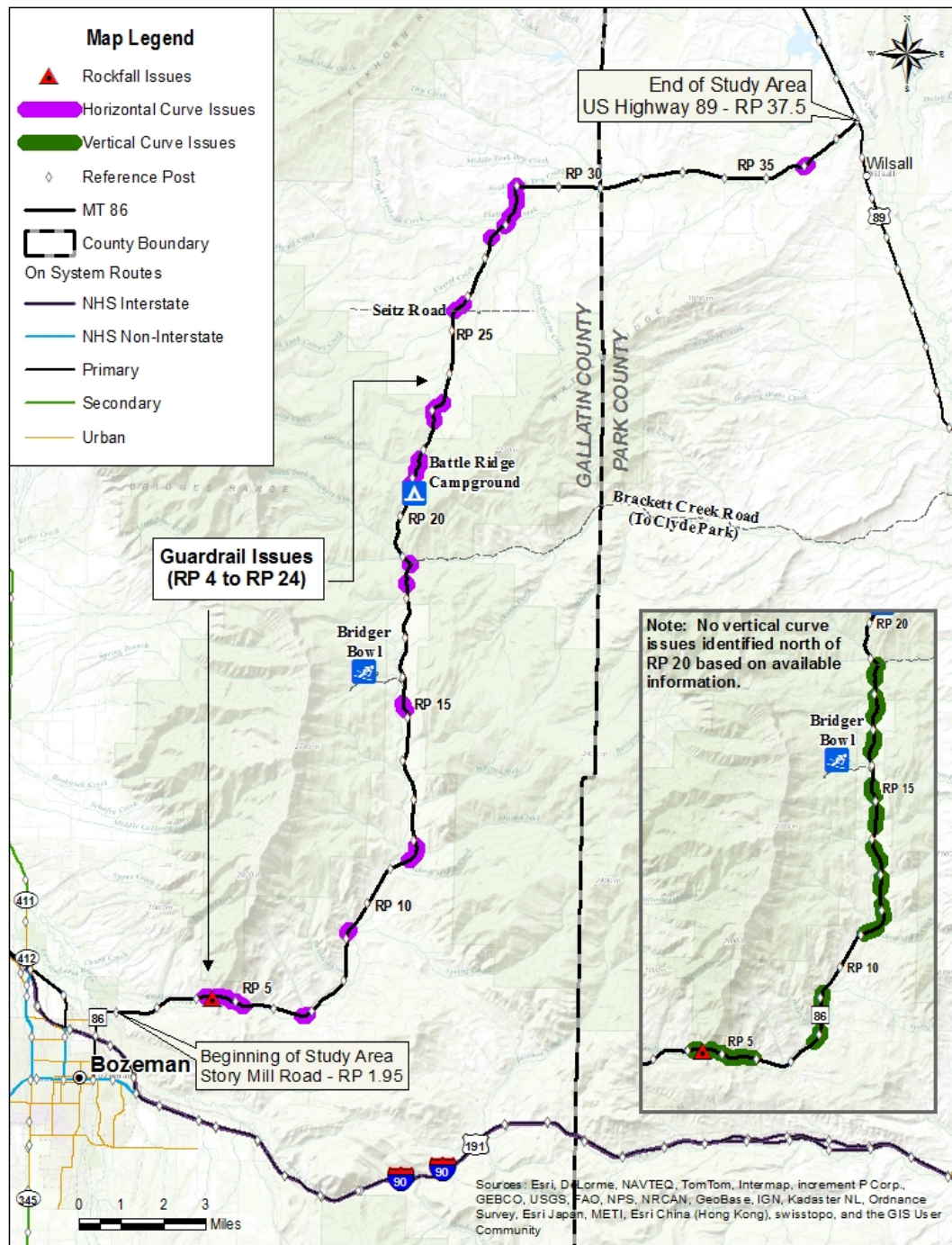


- Statutory speed limit is 70 mph
- Posted/advisory speeds range from 25 mph to 60 mph
 - Speeds reflect recommendations from 2014 speed study requested by Gallatin County
- Our study will not result in changes to speeds in the corridor

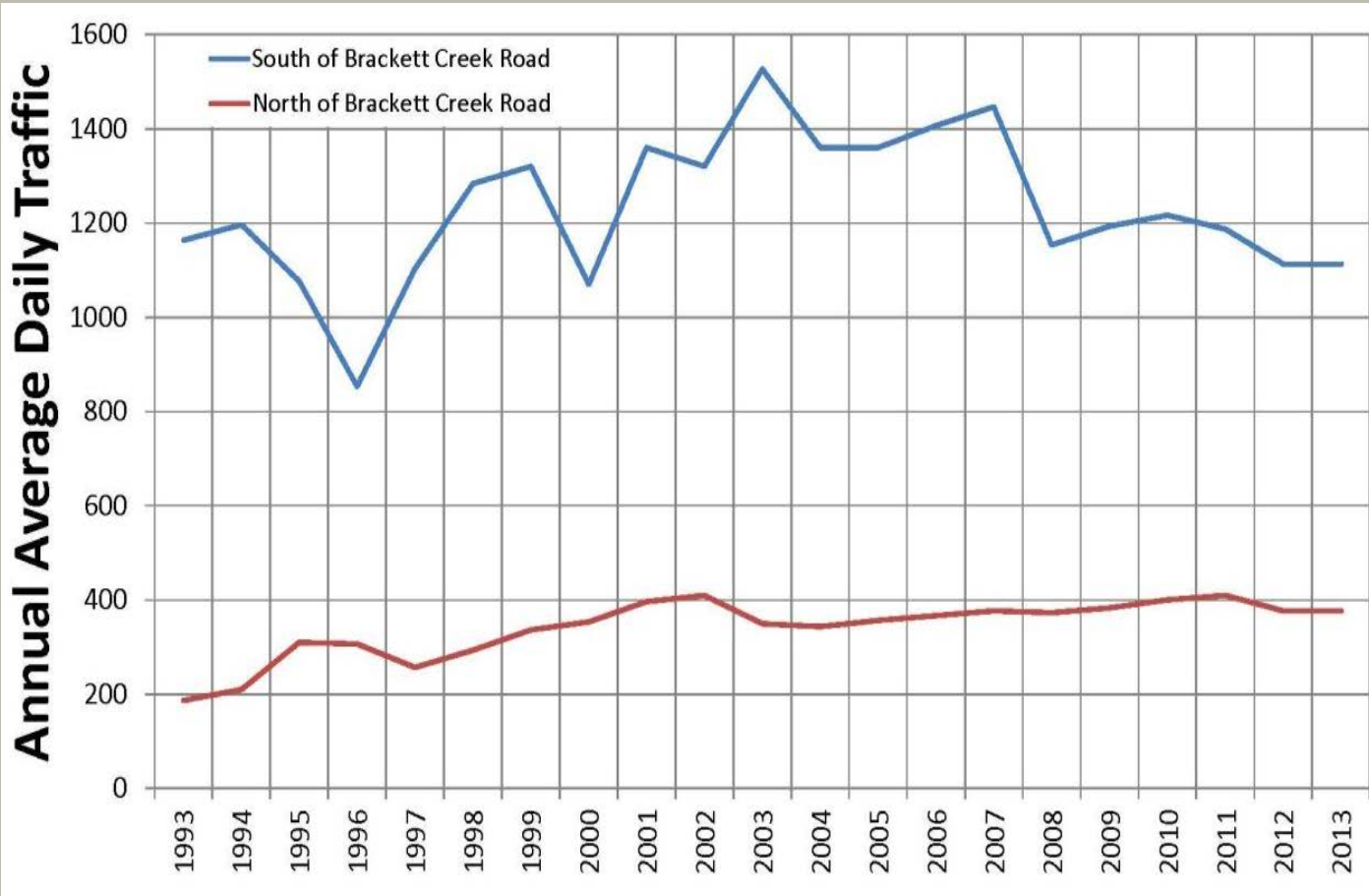


Areas not meeting current MDT design criteria:

- 36 of 120 horizontal curves
- 38 of 95 vertical curves
- RP 4.0 to RP 24.0 lacks slope protection



Geometrics



Higher volumes south of Brackett Creek Road (RP 18.8)

Northbound Segment		Start RP	End RP	Segment Length (mi)	Peak Hour Volume		LOS	
					2014	2035	2014	2035
1	Story Mill Rd to Bridger Bowl Rd	1.95	15.7	13.75	77	95	B	B
2	Bridger Bowl Rd to Seitz Rd	15.7	25.3	9.6	54	67	A	A
3	Seitz Rd to US 89	25.3	37.5	12.2	29	60	A	A
Southbound Segment		Start RP	End RP	Segment Length (mi)	Peak Hour Volume		LOS	
					2014	2035	2014	2035
1	Story Mill Rd to Bridger Bowl Rd	15.7	1.95	13.75	72	89	B	B
2	Bridger Bowl Rd to Seitz Rd	25.3	15.7	9.6	56	69	A	B
3	Seitz Rd to US 89	37.5	25.3	12.2	27	56	A	A

Desirable level of service (LOS) for minor arterial:
 Rolling terrain: **LOS B** Mountainous terrain: **LOS C**

Crash History (2009-2013)



- 173 crashes, 59 injuries, and 6 fatalities
- Roll-over and fixed-object type crashes were highest number of crashes and injuries
- Head-on crashes resulted in 50% of fatalities



Environmental Conditions

Surface Water/Wetlands



- 18 named streams in study area
- Bridger Creek, East Gallatin River, and Stone Creek listed as impaired by DEQ
- Wetlands observed throughout the study area
- Five mapped floodplain zones exist within the study area

Hazardous Materials



- 4 leaking underground storage tank (LUST) sites within corridor
- Abandoned quarry at RP 4.4
- 1 hazardous waste handler (USFWS Fish Technology Center)



- Elk observed on road in winter months
- Whitetail and mule deer are common throughout corridor
- Moose and black bear habitat (RP 5 to RP 22)
- Streams support multiple fish species; Brackett Creek and Flathead Creek contain genetically-pure Yellowstone cutthroat trout

Threatened/Endangered & Species of Concern

Threatened/Endangered Species		Federal Status
Wildlife Species	Greater sage-grouse	Candidate
	Sprague's pipit	Candidate
	Grizzly bear	Threatened
	Canada lynx	Threatened
Plant Species	Whitebark pine	Candidate
	Ute ladies'-tresses	Threatened

- Only known habitat for Warm Spring Zaitzevian riffle beetle occurs along Bridger Creek within the USFWS Bozeman Fish Technology Center property
- Bald eagles and other raptors may occur in study area
- 21 species of concern may occur in study area

Recreational Resources



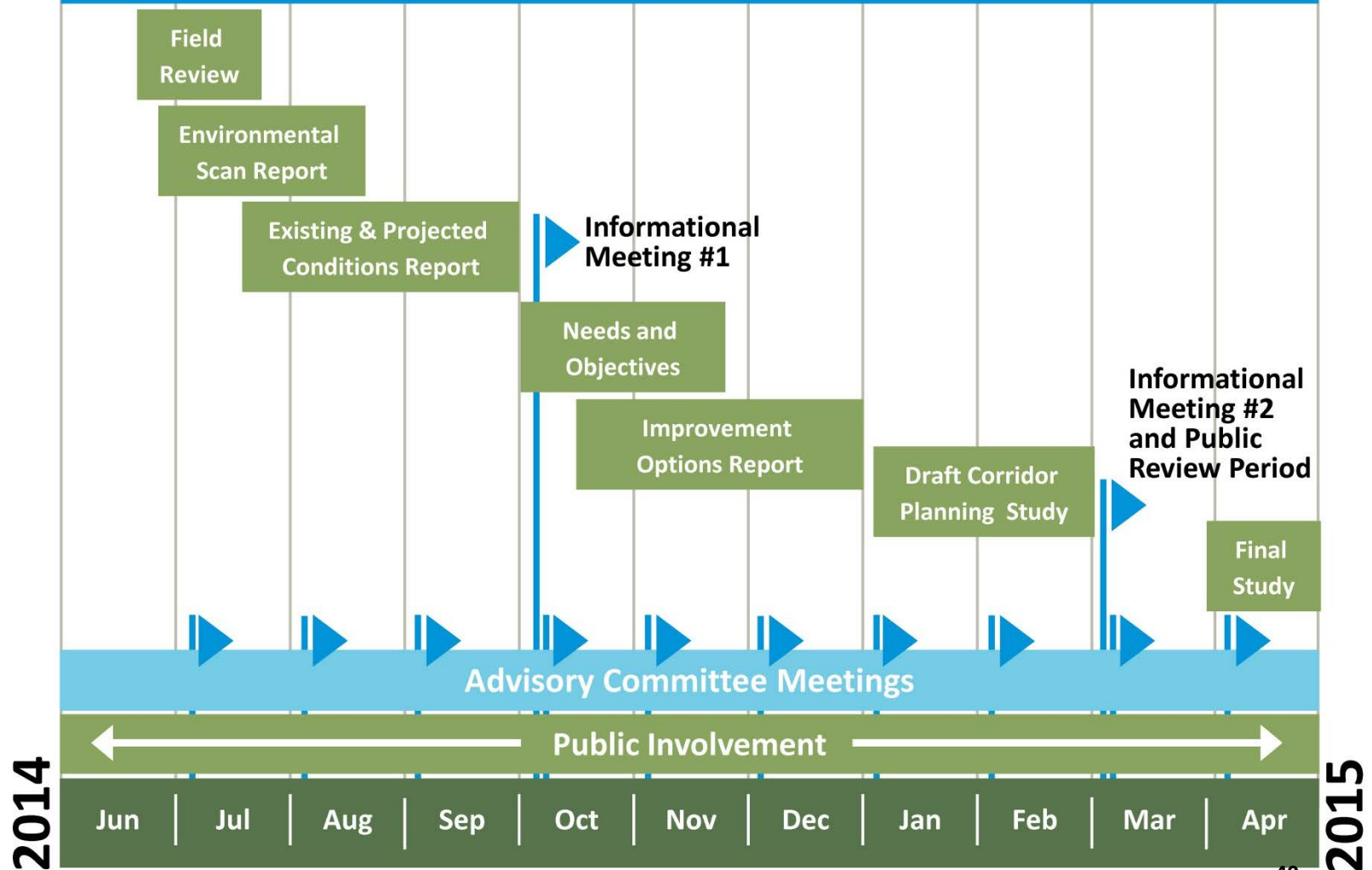
- Numerous recreational opportunities
- Several potential Section 4(f) recreational sites within corridor
- No Section 6(f) sites



- 2 sites listed on the National Register of Historic Places
- Unrecorded sites likely occur within corridor

BRIDGER CANYON

Corridor Planning Study



- **Please submit comments by October 24, 2014**
- **Mail/e-mail comments to:**

Katie Potts
Montana Department of Transportation
2701 Prospect Avenue
PO Box 201001
Helena, MT 59620-1001
kpotts@mt.gov





Discussion Period



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
HELENA REGULATORY OFFICE
10 WEST 15TH STREET, SUITE 2200
HELENA MT 59626

October 9, 2014

Regulatory Branch
Montana State Program
Corps No. NWO-2014-02266-MTH

Subject: Bridger Canyon Corridor Planning Study M86 - Various Waters

Sarah Nicolai
DOWL HKM
P.O. Box 1009
Helena, Montana 59624

Dear Ms. Nicolai:

We have reviewed your letter requesting information concerning the above-referenced project, which was delivered to our Helena office and dated September 22, 2014. The proposed work is located in Section 33, Township 1 South, Range 6 East, in Gallatin County, Montana.

The mission of the U.S. Corps of Engineers (Corps) Regulatory Program is to protect the Nation's aquatic resources while allowing reasonable development through fair, flexible and balanced permit decisions. In particular, under Section 404 of the Clean Water Act, we work to protect the biological, physical, and chemical integrity of the Nation's aquatic resources. Projects are evaluated on a case-by-case basis to determine the potential benefits and detriments that may occur as a result of the proposal. In all cases an applicant must avoid and minimize impacts to aquatic resources to the greatest extent practicable.

Under the authority of Section 404 of the Clean Water Act, Department of the Army (DA) permits are required for the discharge of fill material into waters of the U.S. Waters of the U.S. include the area below the ordinary high water mark of stream channels and lakes or ponds connected to the tributary system, and wetlands adjacent to these waters. Isolated waters and wetlands, as well as man-made channels, may be waters of the U.S. in certain circumstances, which must be determined on a case-by-case basis. If no waters of the U.S. will be impacted by the project, no DA permit is required.

Waters of the U.S. appear to be present in or near the project area identified on the map provided. The Corps offers the following comments in planning your project:

- a. Make every reasonable effort to prosecute the construction or work authorized herein in a manner so as to minimize any adverse impacts on the aquatic environment.
- b. All dredged or excavated materials shall be placed above the ordinary high water line in an upland area to prevent the return of such materials to the waterway.

c. Limit clearing of riparian or wetland vegetation to the absolute minimum necessary. Where temporary riparian or wetland vegetation impacts are unavoidable, it must be mowed or cut off above the ground and the topsoil and root mass must be left intact. The ground must then be restored to its original contours. Utilize seeding and planting as necessary to re-establish desirable vegetative cover, utilizing native species in areas where native species were impacted.

d. All new culverts, bridges, structures, and adjacent channels in waters of the U.S. must not disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the water body, including those species that normally migrate through the area.

Note that this letter only informs you of your need to obtain a DA permit if dredged or fill material will be discharged in waters of the U.S. It is not an authorization to proceed. Any other applicable Federal, tribal or local permits should be obtained as required.

The project area identified on the map provided should be evaluated for the presence of wetlands or waters of the U.S. If wetlands are identified within the project area, they must be delineated in accordance with the Corps' 1987 Wetland Delineation Manual and appropriate Regional Supplement. The wetland delineation report and mapping should be prepared in accordance with the enclosed Wetland Delineation Checklist.

Thank you for the opportunity to provide comments on this proposed activity. Please contact me at (406) 441-1365 if you have questions and reference Corps File Number NWO-2014-02266-MTH.

Sincerely,



Jess J. Davies
Natural Resources Specialist

Enclosure:

Wetland Delineation Checklist



US Army Corps of Engineers
BUILDING STRONG_®

Montana Wetland Boundary Verification Checklist

Montana Regulatory Program - Updated November 2013

Montana Regulatory Program

All applications for Permits from the U.S. Army Corps of Engineers must include a delineation of special aquatic sites, including delineations of wetland boundaries. The content of acceptable wetland delineations is listed below. The same information is required if you are requesting verification of a wetland boundary in conjunction with pre-application reviews.

1. Contact information for the property owner and written permission from the property owner for the Corps to enter the property.
2. Contact information for the individual(s) performing the wetland delineation.
3. Location of the site:
 1. Latitude/Longitude
 2. Written directions
 3. Location map showing the limits of the study area
4. Reference Information
 1. Color photographs with labels
 2. Aerial photograph with study area shown
 3. National Wetland Inventory (NWI) maps (where available) with study area shown
 4. Soil Surveys with study area shown
 5. Topographic maps/USGS Quadrangle maps
 6. Floodplain/FEMA Flood Insurance Rate Maps maps if applicable
5. Describe methodologies used, including Regional Delineation Supplements, and the rationale for the choice of methodology (routine, comprehensive, difficult wetland situations).
6. Completed data forms for wetland and upland sampling points
7. Results of field investigation and summary of findings
 1. Name each aquatic resource and provide size in acres or square feet of wetlands, as well as lakes, ponds, and linear feet of stream/tributary (i.e. Wetland A, Pond B, Trib-1, Miller Creek).
8. Site map with clearly marked wetland boundaries and all other aquatic resources (streams, ponds, lakes, ditches, etc.)
 1. Appropriate scale (1"=50' or 1"=100' is recommended)
 2. Wetland boundary flag numbers
 3. Title block with north arrow, date, scale, legend, drawing name, revision dates
9. Stream drainage area at the site, stream size, qualitative environmental assessment of aquatic resources on site, Cowardin classification of wetland areas, etc.
10. In the Field:
 1. Wetland boundaries marked with numbered flags corresponding to numbers on the map.
 2. Recommend all other aquatic resources are marked in the field with flagging.

Contact:

Nicolai, Sarah

From: Nicolai, Sarah
Sent: Wednesday, November 05, 2014 7:37 PM
To: Nicolai, Sarah
Subject: FW: Bridger Canyon Corridor Study

From: Downing, Beau [<mailto:bdowning@mt.gov>]
Sent: Monday, October 27, 2014 12:17 PM
To: Potts, Katie
Cc: Trimbath, William; Opitz, Scott; Wambach, Deborah
Subject: Bridger Canyon Corridor Study

FWP Bridger Canyon Corridor Planning Study Comments

There are a number of streams that support Yellowstone cutthroat trout populations in the Bridger Canyon Corridor Study area. These include Brackett Creek (including the North, Middle, and South Forks), Cache Creek, Fairy Creek, Carrol Creek, and Flathead Creek. FWP does not have enough fisheries information on Dry or Muddy Creeks to verify if Yellowstone cutthroat are present or use these streams, however they do have the potential to support aquatic life within the study area.

The upper Shields River Basin represents a highly valuable conservation area for Yellowstone cutthroat trout both in Montana as well as the multi-state range of Yellowstone cutthroat. All of the streams listed above lie within a conservation priority area for the Yellowstone Geographical Management Unit (GMU) and are listed as a conservation priority in FWP's State-wide Fisheries Management Plan.

Yellowstone cutthroat trout conservation measures in the Upper Shields are being developed and evaluated on a continual basis. At this time FWP cannot predict individual site priorities (improve or maintain fish passage or create a migration barrier) for each stream crossing included in the Bridger Canyon Corridor Study. As such FWP would like to make a general comment that as projects within the corridor are developed we may request either option (passage or barrier) based on conservation priorities within this GMU.

Thank you for the opportunity to comment.

Beau Downing

Stream Protection Act Coordinator
Montana Fish, Wildlife & Parks
Fisheries Division
1420 East 6th Ave
PO Box 200701
Helena, MT 59620
(406) 444-3175
(406) 475-2511 (cell)

"We must let the river teach us.
Not just a few of us.
Let the river teach all of us."
- Luna Leopold



MEMORANDUM

Physical Address:
1300 Cedar Street
Helena, Montana 59601
Phone: (406) 442 - 0370

Mailing Address:
P.O. Box 1009
Helena, Montana 59624
Fax: (406) 442 - 0377

To: Katie Potts
MDT Project Manager

From: Sarah Nicolai
DOWL HKM Project Manager

Date: December 15, 2014

Subject: **Bridger Canyon Corridor Planning Study
Informational Meeting – October 23, 2014**

Introduction

An informational meeting for the Bridger Canyon Corridor Planning Study was held on October 23, 2014, at the Bridger Canyon Fire Hall located at 8081 Bridger Canyon Road, Bozeman, MT. The following MDT representatives and advisory committee members attended the meeting.

Katie Potts	MDT – Rail, Transit and Planning Division
Rob Bukvich	MDT – Butte District
Joe Walsh	MDT – Butte District
Jeff Patten	FHWA – Operations Engineer
Steve White	Gallatin County Commissioner
Chris Scott	Gallatin County Planning Department
Sarah Nicolai	DOWL HKM
Cody Salo	DOWL HKM
Will Trimbath	DOWL HKM
David Stoner	DOWL HKM

Forty-seven (47) members of the public attended the informational meeting. Meeting attendees included Karen Loveless, Wildlife Biologist for Montana Fish, Wildlife & Parks; Randy Elliott, Vice President of Operations for Bridger Bowl; Dylan Taylor, Vice President of the Gallatin Valley Bicycle Club; Renee Callahan, Attorney for Center for Large Landscape Conservation (CLLC)/Montanans for Safe Wildlife Passage (MSWP); Tom Fiddaman, Chair of the Bridger Canyon Property Owners' Association (BCPOA); John Shellenberger, Member of the BCPOA; Eunie Guentzel, Member of the BCPOA, Anne Trygstad, Member of the BCPOA; Cindy Crayton, Member of the BCPOA; Dennis Guentzel, Firefighter for the Bridger Canyon Rural Fire Department (BCRFD); Stephanie Adams, Yellowstone Program

Coordinator for the National Parks Conservation Association (NPCA); and Lance Craighead, Conservation Director for the Criaghead Institute.

Media Coordination and Newsletter

The informational meeting was advertised on October 5 and October 19, 2014, in the Bozeman Daily Chronicle. A news release was emailed to the Belgrade News; the Meagher County News; chambers of commerce for Bozeman, Belgrade, and White Sulphur Springs; as well as radio stations and other local media outlets on October 14, 2014. The study newsletter was posted to the study website. Copies of the display advertisement, press release, and newsletter are provided at the end of this memorandum.

Presentation

Sarah explained the corridor planning study process and benefits, emphasizing public involvement is an important component. The presentation continued with an overview of the study area. Sarah highlighted existing transportation system conditions from the existing and projected conditions report. Will highlighted existing environmental conditions from the environmental scan report. A copy of the presentation is provided at the end of this memorandum.

Discussion Period

A discussion period was held following the presentation. Discussion items are summarized below.

Geometrics and Roadway Elements

Attendees noted bringing curves up to current design criteria may result in increased speeds in the corridor. An attendee asked if regulations require MDT to address curves. Sarah explained that MDT would design curves to meet current criteria as part of a new reconstruction or major rehabilitation project, as funding is available, although curve improvements are not dictated by regulation. Centerline, shoulder, and transverse rumble strips, and left-turn bays at the intersections of Kelly Canyon Road, Jackson Creek Road, Bridger Bowl Road, and Brackett Creek Road were suggested. Attendees noted motorists can feel constrained within portions of the corridor with guardrail due to lack of shoulder width.

Safety

Meeting attendees noted near-miss crashes are a frequent occurrence in the corridor. Several attendees stated they perceive the posted speed limit in the corridor is too high and commented on unsafe driver behavior within the corridor. Sarah explained posted speed limits reflect 2014 speed study recommendations, which were approved by the Montana Transportation Commission on July 31, 2014. Suggestions were made to increase law enforcement through additional highway patrol, install additional highway signage (including advisory signs), and consider speed bumps in the corridor. An attendee asked how safety performance on MT 86 compares to other highway corridors. Sarah explained that MDT has modeled the MT 86 corridor, and identified areas with higher numbers of crashes and more severe crashes compared to similar facilities. These areas present high potential for crash reduction. An attendee asked about MDT's position regarding distracted driving in the corridor as cell coverage improves. Sarah noted MDT recognizes that distracted driving is a safety concern, although ordinances restricting use of mobile devices while driving are advanced at the local level. An

attendee requested that MDT pave a distance 20 feet back from MT 86 intersections because it is difficult to accelerate quickly to reach highway speeds from an intersecting gravel or dirt roadway. Attendees noted safety concerns at the MT 86 intersections with Kelly Canyon Road, Jackson Creek Road, and Brackett Creek Road; at the entrance to Bridger Bowl; and at the entrance to the Fire Station. In particular, drivers making left-turn movements worry about rear-end or side-swipe collisions caused by vehicles speeding or attempting to pass. Attendees noted that drivers behave as if there are three lanes near Story Mill Road, and pass inappropriately.

Wildlife and Livestock Conflicts

Meeting attendees noted wild animals cross the corridor in multiple locations, resulting in unsafe conditions for motorists and wildlife. An attendee noted that elk herds did not historically overwinter in Bridger Canyon, but that private development may now provide refuge. Additionally, open-range conditions in the northern portion of the corridor create potential conflicts with livestock; several head of cattle have been killed in recent years after being struck by a vehicle. Mitigation strategies were discussed including wildlife crossing structures, fencing, and additional signage. An attendee noted that the Gallatin Valley Land Trust conducted a wildlife study that may be relevant to the MDT planning study.

Bicycle Facilities

Safety concerns were expressed for cyclists in the corridor. Attendees explained that the presence of guardrail adjacent to narrow or non-existent roadway shoulders contributes to motorist/cyclist conflicts. Maintenance and roadway design strategies to mitigate glass and other debris along shoulders were discussed.

Oil and Gas Exploration

Meeting attendees expressed concern regarding impacts associated with potential oil and gas exploration. Advisory committee members stated they were not aware of any potential oil and gas exploration that would affect the corridor.

Written Comments

One written comment was received at the informational meeting, and 22 written comments were received following the meeting. Comment topics included concerns regarding bicycle and pedestrian safety, the rural character of the corridor, oil and gas development and potential growth in traffic volumes, mobile device usage, intersection safety, the slide area at RP 4.4, traffic speeds, guardrail, rumble strips, shoulders, wildlife movement and connectivity, and noise. A copy of the written comments is provided at the end of this memorandum.

Bridger Canyon Corridor Planning Study Informational Meeting #1

Thursday, October 23, 2014

Name	Organization/Title	Address	City, State, ZIP Code	E-mail
Nick Cooper		9999 Bridger Canyon Rd	Bozeman, MT 59715	wyodoge@mac.com
Tom Fiddaman	BCPOA	1070 Bridger Woods Rd	"	tom@metasd.com
Stephanie Adams	MPCA	215 E Main St Boz	Bozeman MT 59715	SAdams@npca.org
Erica Stuentzel	BCPOA	1640 Place Creek Rd	" "	dquentzel@latmt.com
John Shellberger	BCPOA	14541 Kelly Canyon Rd	Bozeman 59715	Jshell@ccafirm.com
Janielle Scharf		1311 Wildflower Way	Bozeman MT 59715	dscharf@sandersonstewart.com
Lance Craighead	ChI	201 S. Wallace Ave.	Bozeman MT 59715	lance@craigheadinstitute.org
Anne Thygstad	BCPOA	7890 BCR Boz	Bozeman 59715	anethygstad@gmail.com
Cyrdi Gaulton	BCPOA-President	4027 Bridger Canyon	Boz 59715	Cyrdi@bridgeband.com
Robert Steele	BC-Resident	4026 Bridger Canyon Rd	Bozeman 59715	rsteele@steelelawmt.com
Dennis Gwanzel	BCRFID	1640 Place Creek Rd	Bozeman 59715	dquentzel@latmt.com

Bridger Canyon Corridor Planning Study Informational Meeting #1

Thursday, October 23, 2014

Name	Organization/Title	Address	City, State, ZIP Code	E-mail
Cathy Rick Anderson		6560 Teepee Ridge Rd.	Bozeman	iamabusy2talk@gmail.com
ROB BUKVICH		MDT		
Jeff Patten		FHWA		
Mason Grahl / Charlene Krygier			Bozeman	mgraahl@earthlink.net
Paul Birkeland		8191 Bridger Canyon Rd.		paubl@montana.edu
Mark Theisen		7050 Bridger Can.	Bozeman	
ADDIE THEISEN		7850 Bridger Can.	Bozeman	atpockets@hotmail.com
JODY CHRISTIANSON		P.O. Box 3007	Bozeman 59712	
Ted & Phyllis Matuer		10109 BC Rd	Bozeman 59715	
Dave & Peggy Foster		1775 Bridger Shadow Rd	Bozeman 59715	defoster1mt@yahoo.com
Mary Martha Bahn		3185 Jackson Cr. Rd	Boz. 59715	
Mike Conn		1433 Bridger Woods Rd	BZN 59715	mconn47@gmail.com
DAVID KACIK		7007 JACKSON CR RD	BZN 59715	
Jim Wallace		1410 CHERRY DRIVE	BZN 59715	

Bridger Canyon Corridor Planning Study Informational Meeting #1

Thursday, October 23, 2014

Name	Organization/Title	Address	City, State, ZIP Code	E-mail
Ann and Bee Chase		7300 Teepee Ridge Rd	Bozeman MT 59715	annc7300@yahoo.com
Sharon Cepichau Kent Maden				
Jeri Hodgson				
Karen Lovelass	FWP			
Randy Elliott	Bridger Bowl			re@bridgerbowl.com
Dylan Taylor	Gallatin Valley Bike Club			dylantaylor@gmail.com
Laura Beecher				
Bob Bellows				
GARY SAGER				
Chris Scott	Gallatin County Planning			
Don Truysta				
Renee Callahan	CLLC/MSWP	Bozeman, MT		Renee@largeLandscapes.org
Katie Potts		Helena, MT		
Holly Woosley Vennes		30900 Bridger Canyon Rd	Wilson, MT 59080	
SERRI HALUE		99 RUNNING HORSE TRAIL -		
Keith Miller		15870 Bridger Canyon Rd.	Bozeman, MT 59715	



Informational Meeting

Discuss Bridger Canyon Corridor Planning Study

Thursday, October 23, 2014 6:00 P.M.

**Bridger Canyon Fire Hall
8081 Bridger Canyon Road
Bozeman, MT**

The Montana Department of Transportation (MDT) will discuss the proposal to identify issues, constraints, and opportunities within the Bridger Canyon Corridor Planning Study. The study area begins at the MT 86 intersection with Story Mill Road at Reference Post (RP) 1.95 just east of Bozeman, and ends at the intersection with U.S. 89 at RP 37.5 near Wilsall, MT. The Bridger Canyon Corridor Planning Study is a pre-environmental study that allows for early planning-level coordination with community members, stakeholders, environmental resource agencies, and other interested parties. The study will identify potential improvement options, if any, which will assist in facilitating a smooth and efficient transition from transportation planning to future project development/environmental review. Potential improvement options will be based on need and funding availability. The Bridger Canyon Corridor Planning Study is a planning-level study and is not a design or construction project.

The purpose of the meeting is to inform the public of the study process and solicit public input.

The meeting is open to the public and attendance is encouraged. MDT attempts to provide accommodations for any known disability that may interfere with a person's participation in any service, program or activity of our department. If you require reasonable accommodations to participate in this meeting, please call Sarah Nicolai at (406) 442-0370 at least two days before the meeting. For the hearing impaired, the TTY number is (406) 444-7696 or 1-800-335-7592, or call Montana Relay at 711. Alternative accessible formats of this information will be provided upon request.

Comments may also be submitted in writing at the meeting; by mail to Sarah Nicolai, DOWL HKM, P.O. Box 1009, Helena, MT 59624; by email to snicolai@dowlhkm.com; or online at www.mdt.mt.gov/pubinvolve/bridger

Please indicate comments are for the Bridger Canyon Corridor Planning Study. Interested parties are encouraged to join the study mailing list by submitting their name and contact information to Sarah Nicolai at snicolai@dowlhkm.com

Nicolai, Sarah

From: Grant, Paul <pgrant@mt.gov>
Sent: Tuesday, October 14, 2014 7:51 AM
To: BOZEMAN CHAMBER OF COMMERCE; Bozeman Daily Chronicle; communicationsnewsfeeds@ashto.org; Exponent; KBOZ - FM - Dia Johnson; KBOZ-AM/KBOZ-FM/KOBB-AM-FM/KPKX-FM/KOZB-FM/KZLO-FM/BOZEMAN; KBZK TV; KBZK-TV; KBZM; KGLT-FM; KKQX-FM/KBZM/K-SKY; KMMS-FM/KMMS-AM/KISS/KISN/KXLB-FM/KXMY-FM/KZMY-FM; KTVM-TV BOZEMAN; MAX MONTANA; Belgrade Chamber of Commerce; KGVW-AM/KCMM-FM; KISN-FM; MANHATTAN CHAMBER OF COMMERCE; The Belgrade News; All Seasons Inn & Suites (info@allseasonsinnandsuites.net); Meagher County News; Meagher County Public Television, Inc; pres@meagherchamber.org; WHITE SULPHUR SPRINGS CHAMBER OF COMMERCE
Cc: Potts, Katie; Nicolai, Sarah; Zanto, Lynn (MDT); Strizich, Carol; Riley, Jean; Grant, Paul; Marosok, Lauren; O'Brien, Anna; Ryan, Lori; David Fowler; Gallatin County Commissioners; Park County Commissioners
Subject: MDT schedules an informational meeting to discuss Bridger Canyon Corridor Planning Study
No UPN
Categories: Filed by Newforma

October 14, 2014

FOR IMMEDIATE RELEASE

For more information:

Lori Ryan, Public Information, MDT, (406) 444-6821

MDT schedules an informational meeting to discuss Bridger Canyon Corridor Planning Study

Bozeman - The Montana Department of Transportation (MDT) is conducting an informational meeting to discuss the Bridger Canyon Corridor Planning Study. The intent of the study is to identify issues, constraints, and opportunities within the study area. The study area begins at the MT 86 intersection with Story Mill Road at Reference Post (RP) 1.95 just east of Bozeman, and ends at the intersection with U.S. 89 at RP 37.5 near Wilsall, MT. The meeting will start at 6:00 pm on Thursday, October 23, 2014 at the Bridger Canyon Fire Hall, 8081 Bridger Canyon Road, Bozeman, MT 59715.

The Bridger Canyon Corridor Planning Study is a pre-environmental study that allows for early planning-level coordination with community members, stakeholders, environmental resource agencies, and other interested parties. The study will identify potential improvement options, if any, which will assist in facilitating a smooth and efficient transition from transportation planning to future project development/environmental review. Potential improvement options will be based on need and funding availability.

The purpose of the meeting is to explain the planning study process, present information about existing and projected conditions, and gather public feedback on issues and concerns within the Bridger Canyon Corridor.

Public participation is a very important part of the process, and the public is encouraged to attend. Comments may also be submitted in writing at the meeting; by mail to Sarah Nicolai, DOWL HKM, P.O. Box 1009, Helena, MT 59624; by email to snicolai@dowlhkm.com; or online at

www.mdt.mt.gov/pubinvolve/bridger

Please indicate comments are for the Bridger Canyon Corridor Planning Study. Interested parties are encouraged to join the study mailing list by submitting their name and contact information to Sarah Nicolai at

snicolai@dowlhkm.com

MDT attempts to provide accommodations for any known disability that may interfere with a person's participation in any service, program or activity of our department. If you require reasonable accommodations to participate in this meeting, please call Sarah Nicolai at (406) 442-0370 at least two days before the meeting. For the hearing impaired, the TTY number is (406) 444-7696 or 1-800-335-7592, or call Montana Relay at 711. Alternative accessible formats of this information will be provided upon request.

-----END-----

Project name: Bridger Canyon Corridor Planning Study Gallatin/Park counties



Bridger Canyon Corridor Planning Study

STUDY DESCRIPTION

The Montana Department of Transportation (MDT) has initiated the Bridger Canyon Corridor Planning Study to identify potential improvement options for the Montana Highway 86 (MT 86) corridor north of Bozeman.

The goal of the study is to identify short-term and long-term improvements that meet the needs and objectives identified for the corridor. The study process will document existing and projected conditions; analyze potential impacts; identify constraints and mitigations; gather public, resource agency and stakeholder input; and provide recommendations for corridor improvements.

This study is a planning-level evaluation of the corridor. It is not a design, maintenance, or construction project. Depending on need and funding availability, improvement options may be forwarded from this study and developed into projects at a later date.

INSIDE THIS ISSUE

- Study Description 1
- Study Area 2
- Existing & Projected Conditions..... 3
- Study Contacts..... 4
- Involvement Opportunities 4
- Anticipated Study Schedule 4

PLEASE JOIN US FOR AN INFORMATIONAL MEETING!

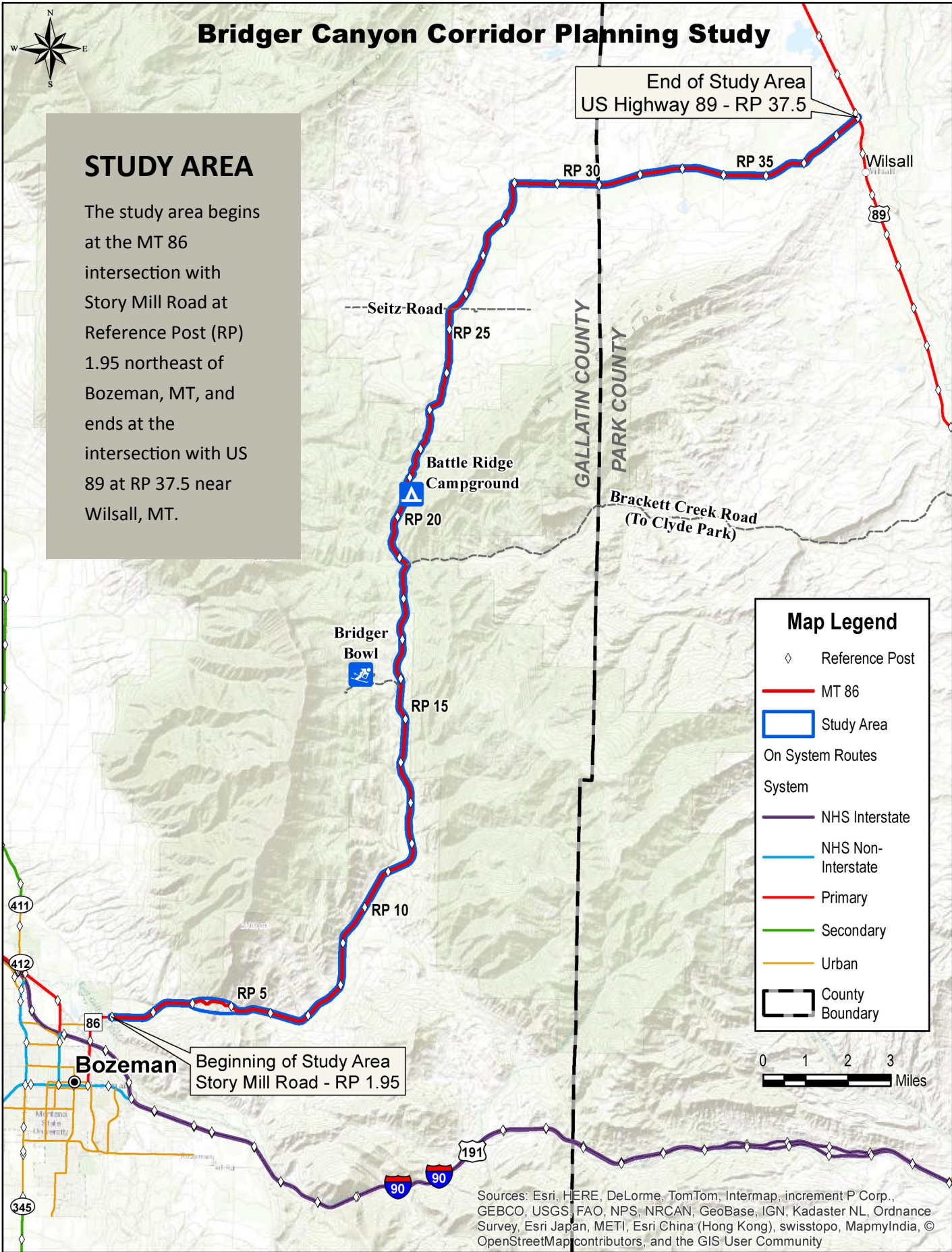
Thursday, October 23, 2014 at 6:00 p.m.
Bridger Canyon Fire Hall
8081 Bridger Canyon Rd.
Bozeman, MT

Bridger Canyon Corridor Planning Study



STUDY AREA

The study area begins at the MT 86 intersection with Story Mill Road at Reference Post (RP) 1.95 northeast of Bozeman, MT, and ends at the intersection with US 89 at RP 37.5 near Wilsall, MT.

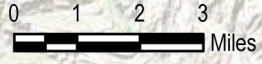


End of Study Area
US Highway 89 - RP 37.5

Beginning of Study Area
Story Mill Road - RP 1.95

Map Legend

- ◇ Reference Post
- MT 86
- ▭ Study Area
- On System Routes
- System
- NHS Interstate
- NHS Non-Interstate
- Primary
- Secondary
- Urban
- ▭ County Boundary

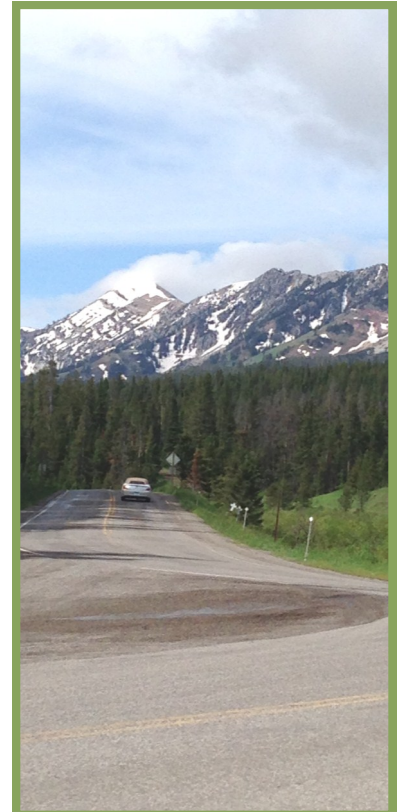


Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

EXISTING AND PROJECTED CONDITIONS

Findings presented in the tables below are drawn from the draft existing and projected conditions report and the draft environmental scan report for this study. Please visit the study website (<http://www.mdt.mt.gov/pubinvolve/bridger>) for more information.

Transportation System	Findings	
	Bridges	<ul style="list-style-type: none"> Three of the 10 bridges in the corridor are candidates for repair.
	Bicycle/Pedestrian Facilities	<ul style="list-style-type: none"> MT 86 provides connections to trail systems in the corridor; no dedicated bicycle/pedestrian facilities are provided adjacent to MT 86. Shoulders range from 0 to 5 feet.
	Drainage/Pavement Conditions	<ul style="list-style-type: none"> Areas of pavement deterioration due to excess water on roadway, poor drainage, and saturated subgrade.
	Rockfall Hazard	<ul style="list-style-type: none"> Slide near RP 4.4 is unstable; earthquake or heavy precipitation could trigger another event.
	Speed & Geometrics	<ul style="list-style-type: none"> 2014 speed study recommended reduced speeds ranging from 45 mph to 60 mph in some areas. 36 horizontal curves and 38 vertical curves do not meet current MDT design criteria. RP 4.0 to RP 24.0 lacks slope protection.
	Crash History	<ul style="list-style-type: none"> From 2009 to 2013, 173 crashes resulted in 59 injuries and 6 fatalities. Areas with high potential for crash reduction occur near RP 5, 9, 19, 21, 29, 30, and 36.
	Traffic Volumes & Operations	<ul style="list-style-type: none"> MT 86 has adequate roadway capacity to serve current and projected future traffic volumes.



Environmental Resources	Findings	
	Surface Waters/ Wetlands, & Floodplains	<ul style="list-style-type: none"> 18 named streams in study area. Bridger Creek, East Gallatin River, and Stone Creek are classified as impaired by DEQ. Wetlands/floodplain zones occur within study area.
	Fish & Wildlife	<ul style="list-style-type: none"> Elk and deer observed crossing roadway. Moose and black bear habitat within the corridor. Streams support multiple fish species.
	Sensitive Species	<ul style="list-style-type: none"> Multiple federally-listed species may occur in study area. Only known habitat for Warm Spring Zaitzevian riffle beetle along Bridger Creek.
	Recreational Resources	<ul style="list-style-type: none"> Numerous recreational opportunities. Several potential Section 4(f) resources.
	Cultural Resources	<ul style="list-style-type: none"> Two sites listed on National Register of Historic Places. Unrecorded sites likely occur within corridor.

STUDY CONTACTS

Jeff Ebert
MDT Butte District
Administrator
406-494-9625
jebert@mt.gov

Katie Potts
MDT Project Manager
406-444-9238
kpotts@mt.gov

Sarah Nicolai
DOWL HKM
Project Manager
406-324-7412
snicolai@dowlhkm.com

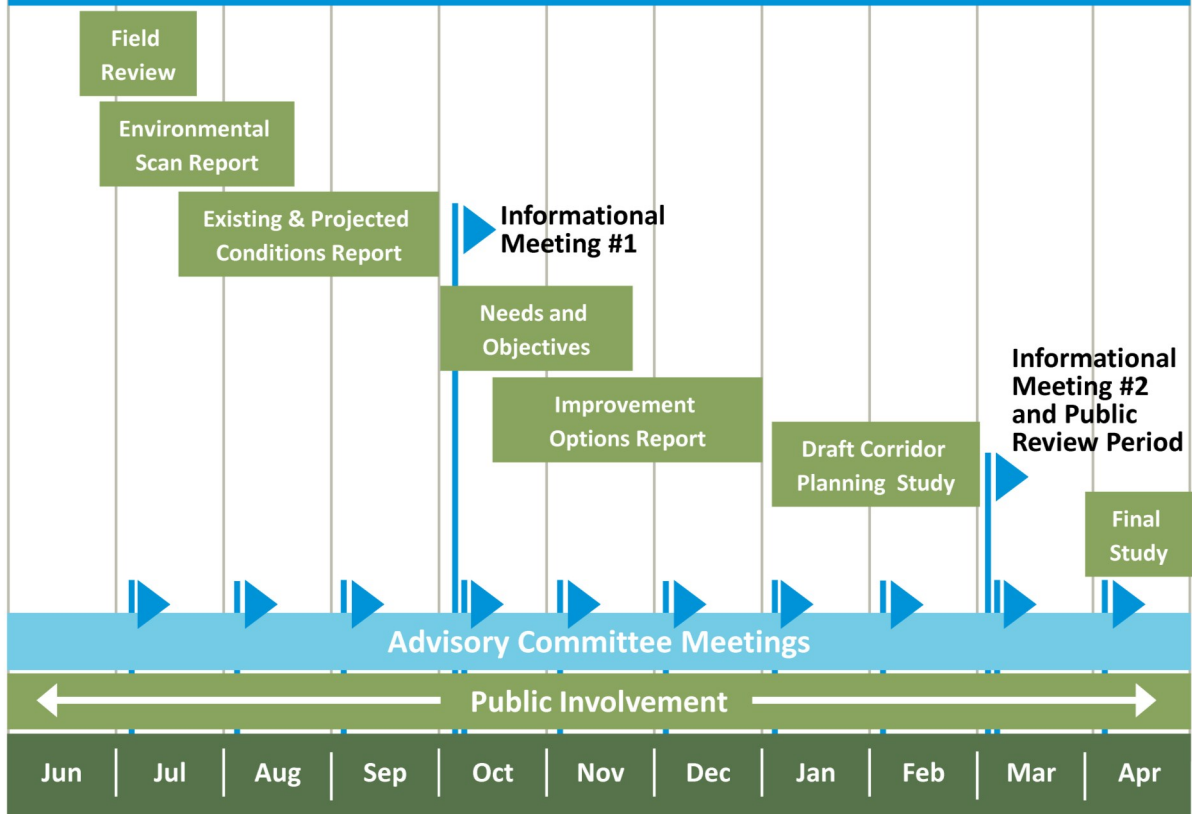
INVOLVEMENT OPPORTUNITIES

An informational meeting is scheduled for **Thursday, October 23, 2014**, at the Bridger Canyon Fire Hall, 8081 Bridger Canyon Road, from 6:00 p.m. to 8:00 p.m. We encourage you to attend and provide feedback about your issues and concerns for the corridor.

Please visit the study website (<http://www.mdt.mt.gov/pubinvolve/bridger>) for more information on upcoming involvement opportunities.

MDT attempts to provide accommodations for any known disability that may interfere with a person's participation in any service, program or activity of the department. Alternative accessible formats of this information will be provide upon request. For more information, please call Sarah Nicolai at (406) 324-7412 or Montana Relay at 711.

BRIDGER CANYON Corridor Planning Study





Bridger Canyon Corridor Planning Study Informational Meeting #1

October 2014



Welcome and Introductions



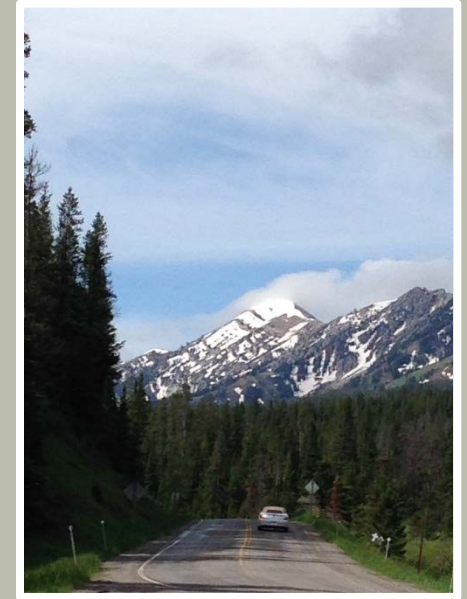
Title VI Considerations

This meeting is held pursuant to Title VI of the 1964 Civil Rights Act, which ensures that no person shall be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination on the basis of a protected status under any MDT program or activity.

Additional information is provided in Title VI pamphlets at the sign-in table.

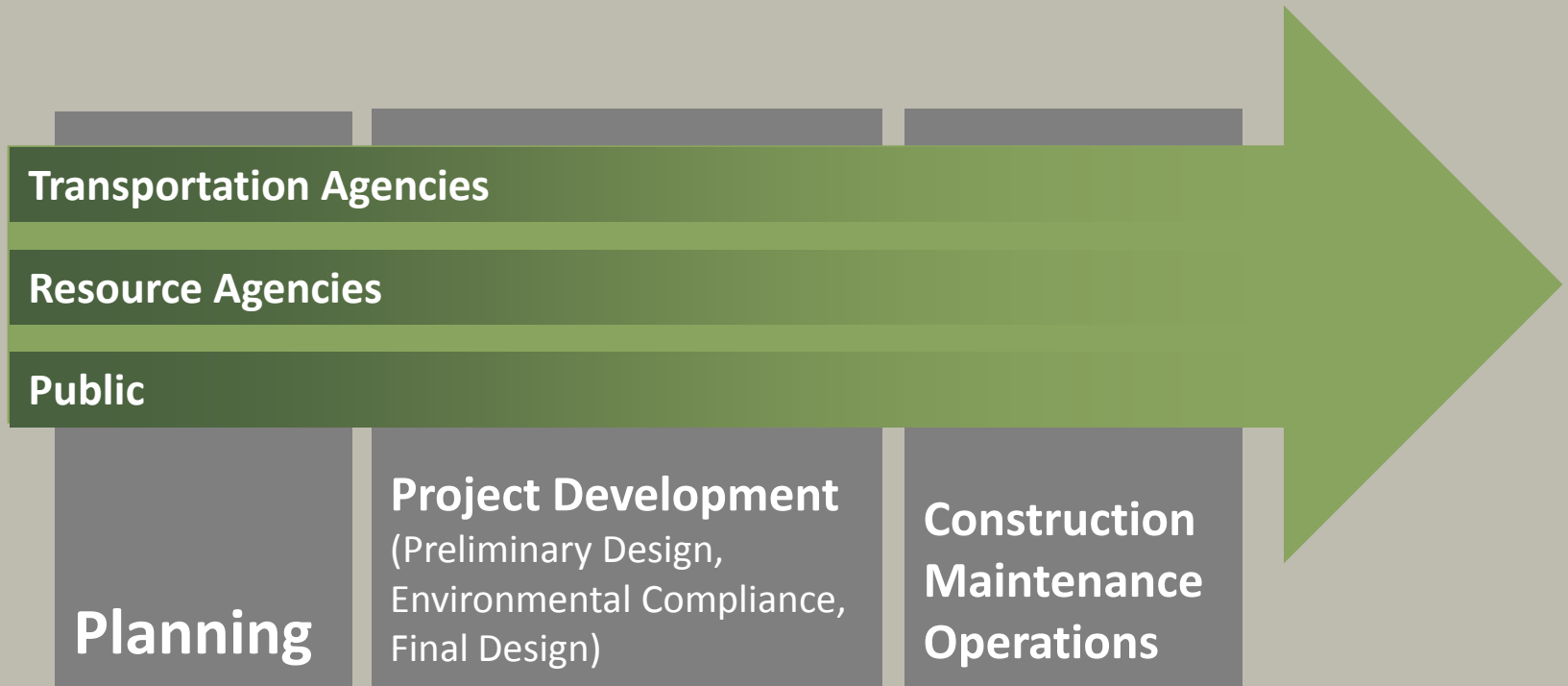
Presentation

- Overview of planning study process
- Key findings from draft existing and projected conditions report
 - Transportation Conditions
 - Environmental Conditions



Discussion Period

What is a Planning Study?

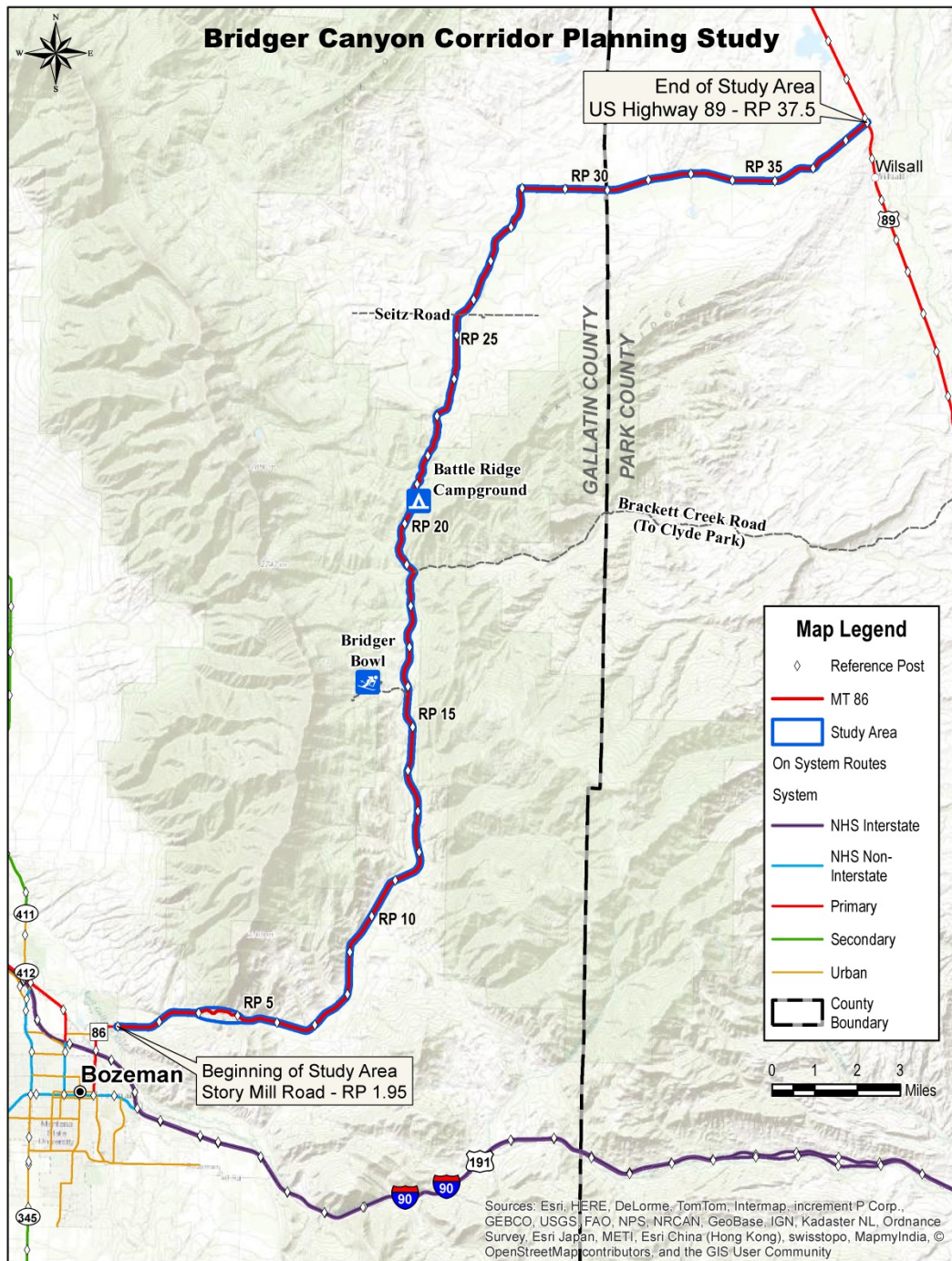


A planning study is conducted before design, right-of-way acquisition, and construction for an individual project.

- Existing and Projected Conditions
- Resource Agency Meeting
- **Informational Meeting # 1**
- Needs and Objectives
- Improvement Options
- Draft Study Report
- Informational Meeting # 2
- Public/Agency Review Period
- Final Study Report



We Are Here



Study Area

Start: Story Mill Road
Road
(RP 1.95)

End: US 89
(RP 37.5)



Transportation System

- Two-lane highway
- Rural minor arterial
- Paved width varies from 24 feet to 35 feet
- Right-of-way widths vary from 30 feet to 200 feet from centerline
- Rolling and mountainous terrain
- Mostly private land ownership; some state and federal lands



RP	Feature Crossed	Year Built	Structure Condition
3.1	Bridger Creek	2005	Good
6.7	Drainage	1939	Good
7.8	Stock Pass	1939	Fair
8.1	Drainage	1939	Good
8.9	Drainage	1939	Good
9.5	Stock Pass/Drainage	1939	Good
18.8	Brackett Creek	1953	Good
24.4	Cache Creek	1939	Fair
26.8	Carrol Creek	1986	Fair
28.0	Flathead Creek	1939	Good

3 of 10 bridges are candidates for repair (Fair Condition)



Bicycle/Pedestrian Facilities



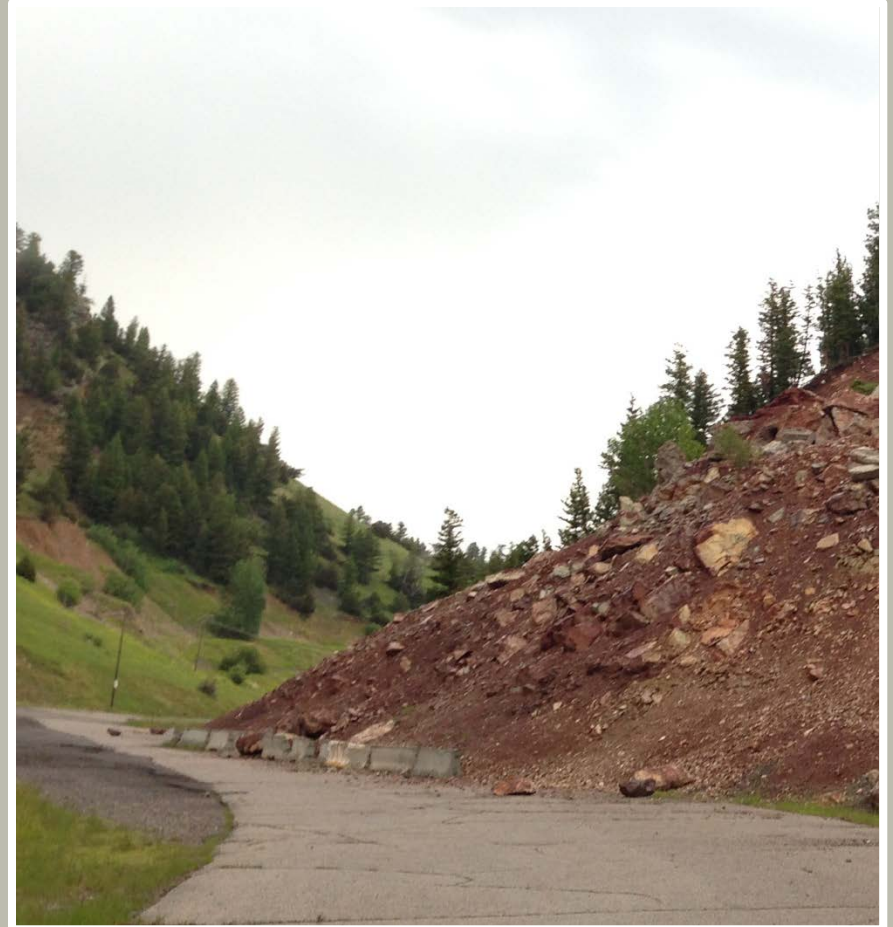
- MT 86 provides connections to “M” Trail System and Drinking Horse Mountain Trails
- No dedicated facilities on MT 86
- Shoulders range from 0 feet to 5 feet

Drainage/Pavement Conditions



- Pavement deterioration due to saturated subgrade on MT 86.
- Areas with standing water near roadway, plugged culverts
- Areas with cracking and pavement failure

- 1975 slide covered portion of MT 86 near RP 4.4
- MT 86 rerouted to north
- Slide area unstable; earthquake or precipitation could trigger another event



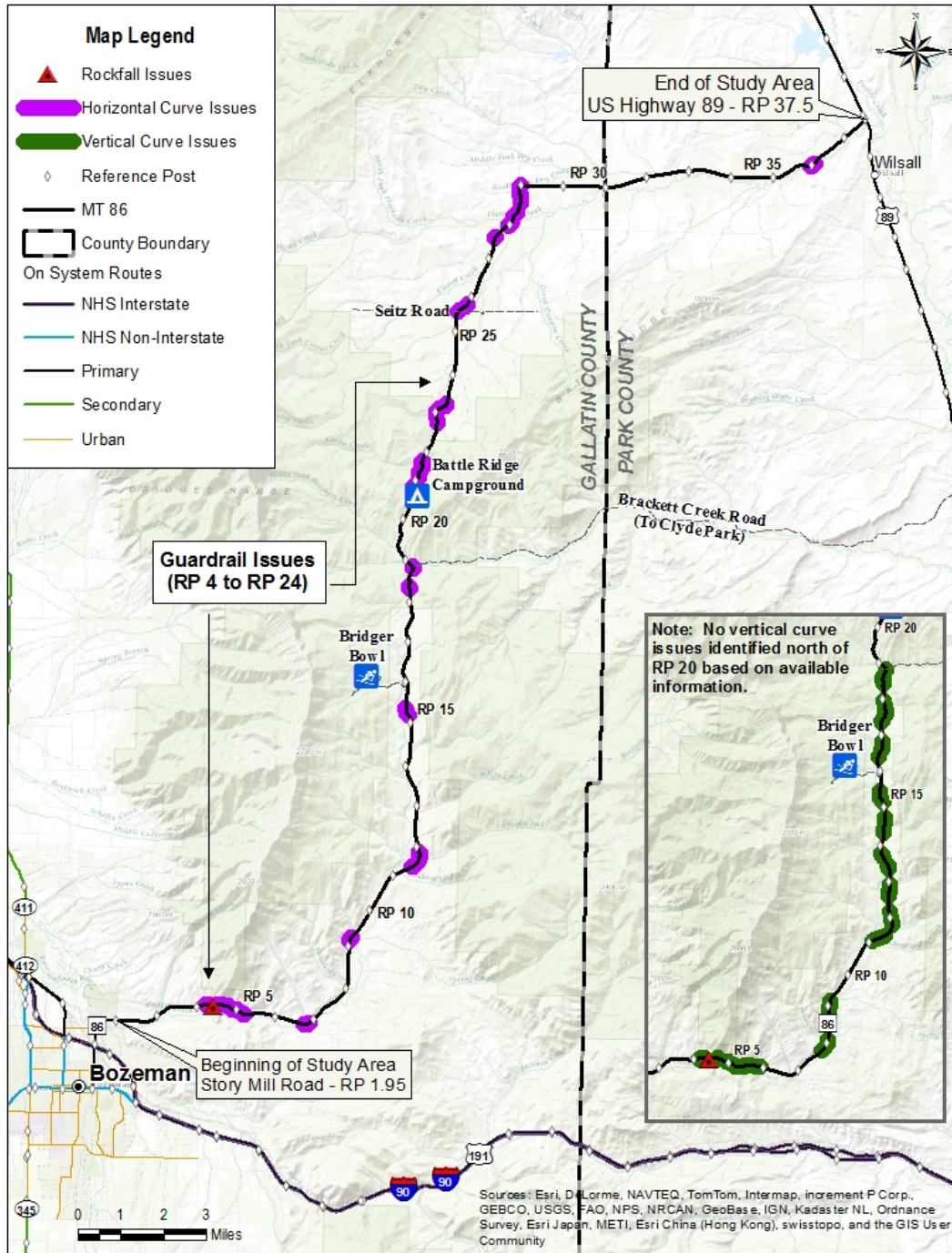


- Statutory speed limit is 70 mph
- Posted/advisory speeds range from 25 mph to 60 mph
 - Speeds reflect recommendations from 2014 speed study requested by Gallatin County
- Our study will not result in changes to speeds in the corridor



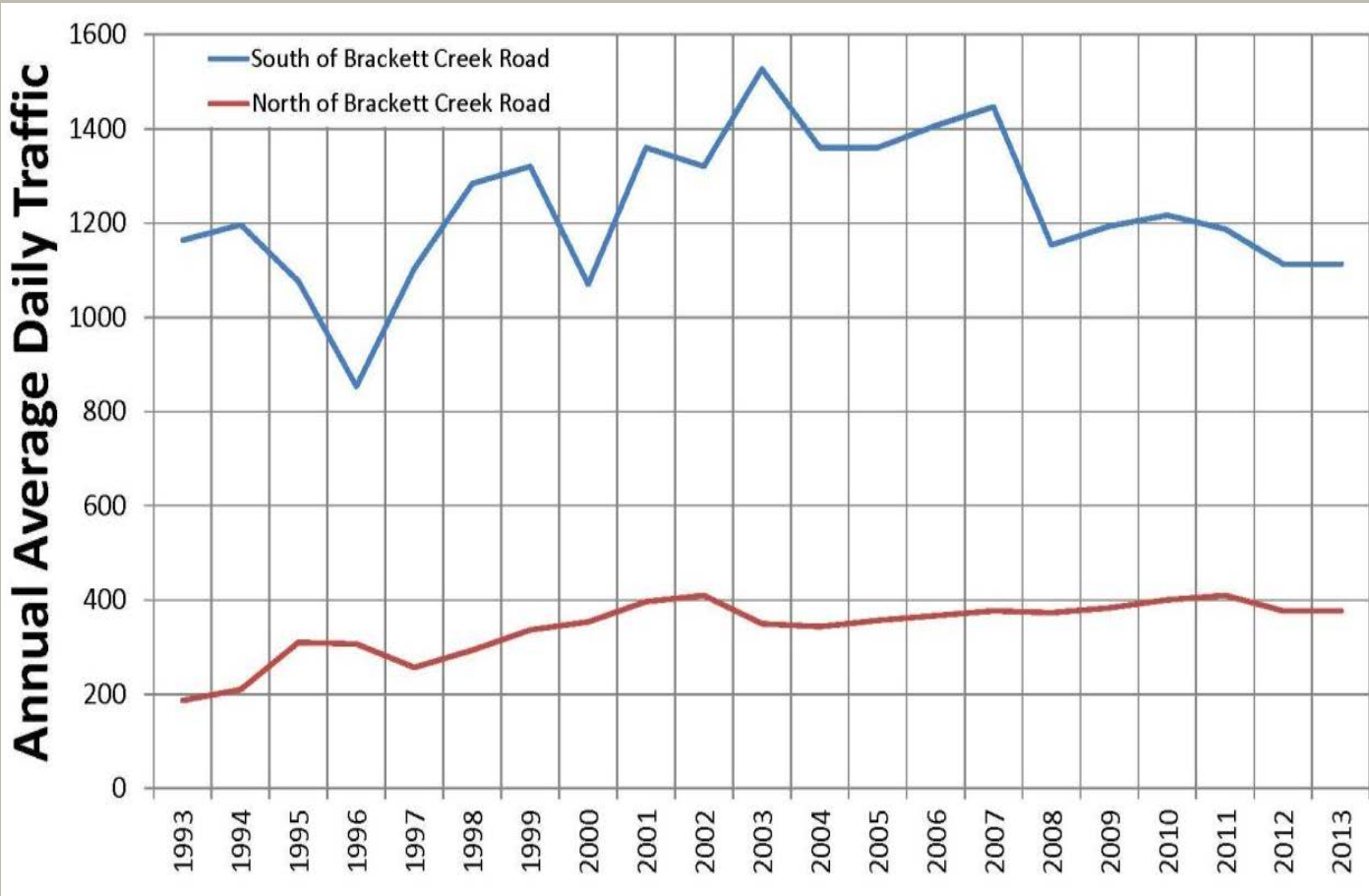
Areas not meeting current MDT design criteria:

- 36 of 120 horizontal curves
- 38 of 95 vertical curves
- RP 4.0 to RP 24.0 lacks slope protection



Geometrics

Traffic Volumes



Higher volumes south of Brackett Creek Road (RP 18.8)

Northbound Segment		Start RP	End RP	Segment Length (mi)	Peak Hour Volume		LOS	
					2014	2035	2014	2035
1	Story Mill Rd to Bridger Bowl Rd	1.95	15.7	13.75	77	95	B	B
2	Bridger Bowl Rd to Seitz Rd	15.7	25.3	9.6	54	67	A	A
3	Seitz Rd to US 89	25.3	37.5	12.2	29	60	A	A
Southbound Segment		Start RP	End RP	Segment Length (mi)	Peak Hour Volume		LOS	
					2014	2035	2014	2035
1	Story Mill Rd to Bridger Bowl Rd	15.7	1.95	13.75	72	89	B	B
2	Bridger Bowl Rd to Seitz Rd	25.3	15.7	9.6	56	69	A	B
3	Seitz Rd to US 89	37.5	25.3	12.2	27	56	A	A

Desirable level of service (LOS) for minor arterial:
 Rolling terrain: **LOS B** Mountainous terrain: **LOS C**

Crash History (2009-2013)



- 173 crashes, 59 injuries, and 6 fatalities
- Roll-over and fixed-object type crashes were highest number of crashes and injuries
- Head-on crashes resulted in 50% of fatalities
- Wild animals involved in 18 of 173 (10%) reported crashes; 10 of 18 occurred from RP 8 to 10



Environmental Conditions

Surface Water/Wetlands



- 18 named streams in study area
- Bridger Creek, East Gallatin River, and Stone Creek listed as impaired by DEQ
- Wetlands observed throughout the study area
- Five mapped floodplain zones exist within the study area

Hazardous Materials



- 4 leaking underground storage tank (LUST) sites within corridor
- Abandoned quarry at RP 4.4
- 1 hazardous waste handler (USFWS Fish Technology Center)



- Elk observed on road in winter months
- Whitetail and mule deer are common throughout corridor
- Moose and black bear habitat (RP 5 to RP 22)
- 44 animal carcasses collected from 2009-2013, concentrated from RP 1.75 to RP 12
- Streams support multiple fish species; Brackett Creek and Flathead Creek contain genetically-pure Yellowstone cutthroat trout

Threatened/Endangered Species		Federal Status
Wildlife Species	Greater sage-grouse	Candidate
	Sprague's pipit	Candidate
	Grizzly bear	Threatened
	Canada lynx	Threatened
Plant Species	Whitebark pine	Candidate
	Ute ladies'-tresses	Threatened

- Bald eagles and other raptors may occur in study area
- Only known habitat for Warm Spring Zaitzevian riffle beetle occurs along Bridger Creek within the USFWS Bozeman Fish Technology Center property
- 21 species of concern may occur in study area

Recreational Resources



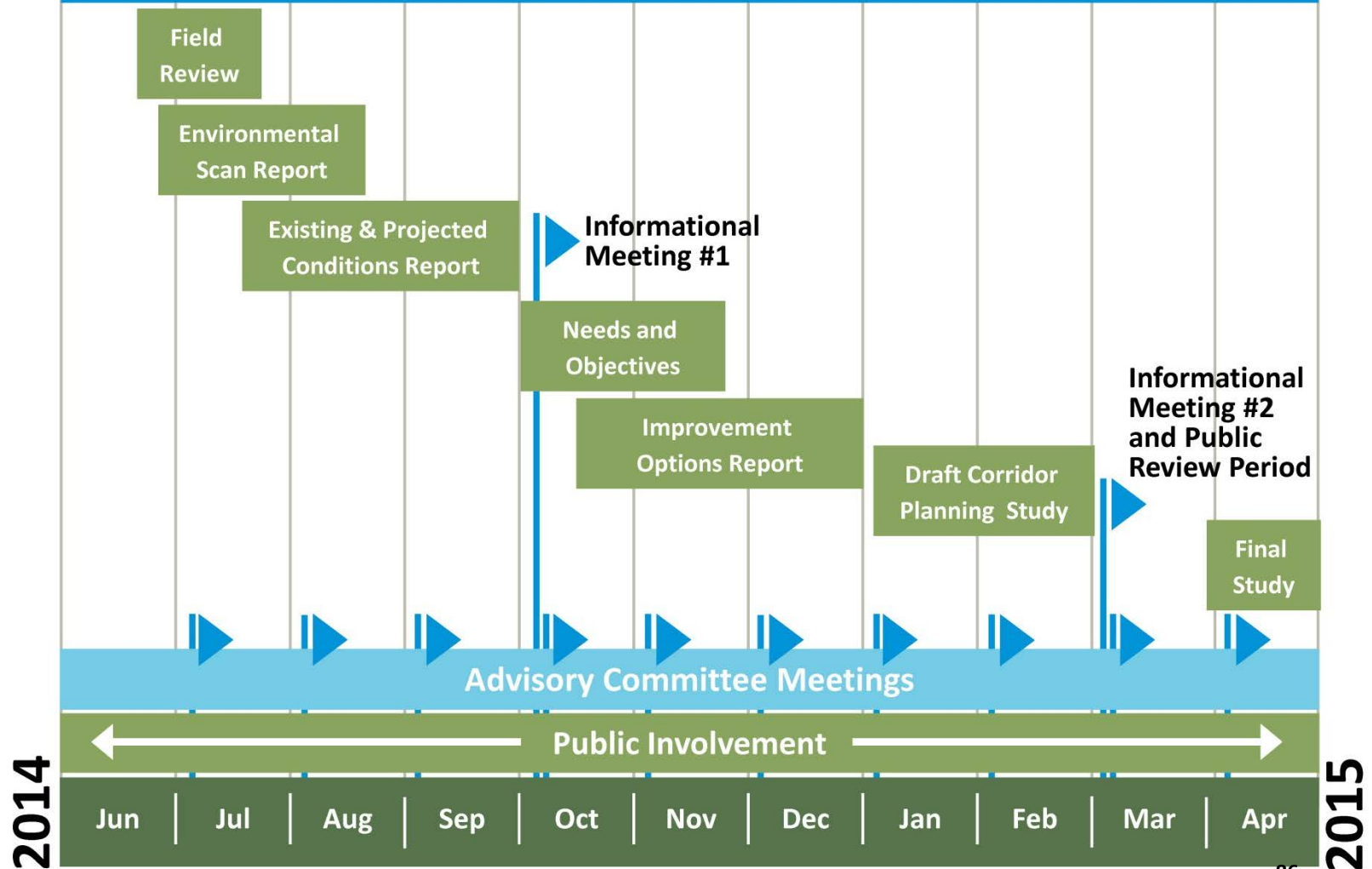
- Numerous recreational opportunities
- Several potential Section 4(f) recreational sites within corridor
- No Section 6(f) sites



- 2 sites listed on the National Register of Historic Places
- Unrecorded sites likely occur within corridor

BRIDGER CANYON

Corridor Planning Study



- **Leave a comment sheet with us tonight**
- **Please submit comments by December 1, 2014**
- **Website** (<http://www.mdt.mt.gov/pubinvolve/bridger>)
- **Mail/e-mail comments to:**

Sarah Nicolai
DOWL HKM
PO Box 1009
Helena, MT 59624
snicolai@dowlhkm.com





Discussion Period

Nicolai, Sarah

From: Gleason, Rebecca <rebecca.gleason@coe.montana.edu>
Sent: Thursday, July 17, 2014 4:25 PM
To: Nicolai, Sarah
Subject: Bridger Canyon Rd Corridor Study

Hi Sarah,

I'm interested in staying informed on the Bridger Canyon Rd Corridor study. This road receives high use for road biking and some mountain bikes, where people ride sections of Hwy 86 between trails. I hope the study can consider the safety of people that bike on this road. Please add me to the email list for project updates and meeting.

Thank you,

Rebecca

Rebecca Gleason, MS, PE

Research Engineer II

Small Urban and Rural Livability Center
Western Transportation Institute
Montana State University – Bozeman
PO Box 174250
Bozeman, MT 59717-4250
(406)-994-6541
Rebecca.Gleason@coe.montana.edu

Nicolai, Sarah

From: Taylor Lonsdale <bznbybike@gmail.com>
Sent: Friday, July 18, 2014 9:04 AM
To: Nicolai, Sarah
Subject: Bridger Canyon Corridor Planning Study

Categories: Public/Stakeholder Email

Please include me in the project mailing list for this corridor study. I have concerns regarding the accommodation of people on bicycles along this corridor and want to see the study address this directly. Thanks for including me.

Taylor Lonsdale
426 N 9th Ave
Bozeman

Nicolai, Sarah

From: Renee Callahan <renee@largelandscapes.org>
Sent: Thursday, July 24, 2014 9:29 PM
To: Nicolai, Sarah
Subject: Bridger Canyon Corridor Study - request to join mailing list

Dear Ms. Nicolai,

Would it be possible to add me to the mailing list for the Bridger Canyon Corridor Study?

Thank you very much!
Renee Callahan

Renee Callahan, MESM, JD
Senior Policy Officer
Center for Large Landscape Conservation
www.largelandscapes.org | 406.586.8082

Please note my new email address: renee@largelandscapes.org

Nicolai, Sarah

From: Nicolai, Sarah
Sent: Monday, October 06, 2014 12:16 PM
To: 'Jim Nallick'
Cc: 'Potts, Katie'; Stoner, David
Subject: RE: Bridger Canyon Corridor Planning Study
Attachments: NO-UPN-#-BRIDGER-CANYON-STUDY-DA-FINAL-09242014.PDF

Thanks Jim. We will add you to our contact list.

The first informational meeting is scheduled for Thursday, October 23rd. Please see the attached file for more information.

Thanks for your interest in this study.

Sarah

Sarah W. Nicolai, P.E.
Manager, Planning and Environmental Services
Direct: (406) 324-7412



406-442-0370 | 406-442-0377 (Fax) | 1300 Cedar Street | Helena, Montana 59601 | www.dowlhkm.com

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From: Jim Nallick [<mailto:jnallick@sandersonstewart.com>]
Sent: Wednesday, October 01, 2014 12:19 PM
To: Nicolai, Sarah
Subject: Bridger Canyon Corridor Planning Study

Sarah,
Please add me to your contact list for this project. Has the first public meeting been scheduled yet?
Thanks,
Jim



JIM NALLICK PE
SENIOR TRANSPORTATION ENGINEER

BILLINGS | BOZEMAN | PLAINS | DENVER | WILLISTON
DIRECT | 406.922.4321 PHONE | 406.522.9876
WWW.SANDERSONSTEWART.COM





Nicolai, Sarah

From: Nicolai, Sarah
Sent: Monday, October 06, 2014 12:54 PM
To: 'Lonsdale, Taylor'
Cc: Robert Bukvich (rbukvich@mt.gov); Gleason, Rebecca; Bill Cochran; Tom Keck (nrsoilandwater@gmail.com); 'Potts, Katie'
Subject: RE: Bridger Canyon Corridor study

Hi Taylor.

We will briefly summarize historic crash data for the corridor during the informational meeting on October 23rd. Additional information will be provided in the draft existing and projected conditions (E&P) report, which will be published on the MDT website following the informational meeting. The E&P report will outline crash type, resulting injuries and fatalities, and contributing factors for recorded crashes in the corridor during the analysis period.

Thanks again for your interest in the study.

Sarah W. Nicolai, P.E.
Manager, Planning and Environmental Services
Direct: (406) 324-7412



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From: Lonsdale, Taylor [<mailto:taylor.lonsdale@coe.montana.edu>]
Sent: Monday, October 06, 2014 10:17 AM
To: Nicolai, Sarah
Cc: Robert Bukvich (rbukvich@mt.gov); Gleason, Rebecca; Bill Cochran; Tom Keck (nrsoilandwater@gmail.com)
Subject: Bridger Canyon Corridor study

Hi Sarah. I plan to attend the public meeting scheduled for the 23rd. I am interested to know if the crash data for the corridor is or will be available for the study area. If so, how is it broken down? Crash type? Severity? Contributing factors? Mile maker ranges? Thank you and I look forward to hearing from you and attending the meeting.

Taylor Lonsdale, PE
Research Engineer

Small Urban and Rural Livability Center
Western Transportation Institute
Montana State University
(406) 994-7031

Nicolai, Sarah

From: Grant, Paul <pgrant@mt.gov>
Sent: Tuesday, October 14, 2014 11:14 AM
To: Potts, Katie; Nicolai, Sarah
Cc: Zanto, Lynn (MDT); Strizich, Carol
Subject: FW: Ask MDT A Question Submitted

-----Original Message-----

From: www@mdt.mt.gov [<mailto:www@mdt.mt.gov>]
Sent: Tuesday, October 14, 2014 11:04 AM
To: MDT Comments - Ask MDT
Subject: Ask MDT A Question Submitted

A question, comment or request has been submitted via the "Contact Us" web page.

Reason for Submission: Ask MDT A Question
Submitted: 10/14/2014 11:04:16
Name: Mitch Miller
Email Address: chugachpowder@gmail.com

Comment or Question:
I would like to join the Bridger Canyon study mailing list.
Email is preferable.

Reference Number = askmdt_612060546875

Nicolai, Sarah

From: Nicolai, Sarah
Sent: Tuesday, October 14, 2014 12:30 PM
To: 'Holley Woosley Vennes'
Cc: Potts, Katie
Subject: RE: mailing list about Bridger Canyon Study
Attachments: NO-UPN-#-BRIDGER-CANYON-STUDY-DA-FINAL-09242014.PDF

We have scheduled a single informational meeting at the Bridger Canyon Fire Hall on October 23rd. I am attaching the meeting announcement with additional information.

Thank you,

Sarah

From: Holley Woosley Vennes [<mailto:askihunny@gmail.com>]
Sent: Tuesday, October 14, 2014 12:08 PM
To: Nicolai, Sarah
Subject: Re: mailing list about Bridger Canyon Study

IS there still a meeting planned in Wilsall or is the one at the BC fire station the only one now?

On Tue, Oct 14, 2014 at 12:02 PM, Nicolai, Sarah <snicolai@dowlhkm.com> wrote:

Thanks Holley. We will add you to our contact list. Thanks for your interest in this study.

Sarah W. Nicolai, P.E.
Manager, Planning and Environmental Services
Direct: [406\) 324-7412](tel:4063247412)



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From: Holley Woosley Vennes [<mailto:askihunny@gmail.com>]
Sent: Tuesday, October 14, 2014 11:54 AM

To: Nicolai, Sarah

Subject: mailing list about Bridger Canyon Study

I would like to be added to the mailing list about the Bridger Canyon Highway study. Thanks.

--

Holley Woosley Vennes

30900 Bridger Canyon Rd

Wilsall, MT 59086

--

Holley Woosley Vennes

30900 Bridger Canyon Rd

Wilsall, MT 59086

Nicolai, Sarah

From: Nicolai, Sarah
Sent: Thursday, October 16, 2014 11:24 AM
To: 'renee@largelandscapes.org'
Cc: 'Potts, Katie'; Carol Strizich (cstrizich@mt.gov)
Subject: RE: Bridger Canyon Corridor Planning Study - Newsletter #1

Hi Renee.

Thanks for your e-mail.

We have prepared draft versions of the two reports you mention. We expect to post the reports to the study website by early next week. I will send an announcement to the study contact list once they are posted.

Sarah

From: Renee Callahan [<mailto:renee@largelandscapes.org>]
Sent: Wednesday, October 15, 2014 11:03 AM
To: Nicolai, Sarah
Subject: RE: Bridger Canyon Corridor Planning Study - Newsletter #1

Hi Sarah,

I noticed that the schedule says the Environmental Scan and Existing & Projected Conditions reports are done, but I can't find either on the website. Do you know whether they are available? Also, any chance there will be paper copies available to the public at the Bozeman MDT office on Rouse?

Thanks in advance for your help with this inquiry!

Best,
Renee

Renee Callahan, MESM, JD
Senior Policy Officer
Center for Large Landscape Conservation
www.largelandscapes.org | 406.586.8082

Please note my new email address: renee@largelandscapes.org

From: Nicolai, Sarah [<mailto:snicolai@dowlhkm.com>]
Sent: Tuesday, October 14, 2014 12:39 PM
To: Nicolai, Sarah
Cc: Potts, Katie
Subject: Bridger Canyon Corridor Planning Study - Newsletter #1

Good afternoon.

I am attaching our first newsletter for the Bridger Canyon Corridor Planning Study. Please view the study website (<http://mdt.mt.gov/pubinvolve/bridger/default.shtml>) for additional information.

Thank you for your interest in the study.

Sarah W. Nicolai, P.E.

Manager, Planning and Environmental Services

Direct: (406) 324-7412



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Please consider the **environment** before printing.

Nicolai, Sarah

From: Nolan Campbell <nolan@purewestproperties.com>
Sent: Wednesday, October 15, 2014 8:43 AM
To: Nicolai, Sarah
Subject: Bridger canyon

Can you add me to the email list please.

Nolan S. Campbell -Realtor
PureWest Christie's International Real Estate
1612 W Main St
Bozeman, MT 59715
(406)-209-2386

<http://www.purewestproperties.com/>

Nicolai, Sarah

From: Potts, Katie <kpotts@mt.gov>
Sent: Wednesday, October 15, 2014 12:06 PM
To: Nicolai, Sarah
Subject: FW: Bridger canyon drive

FYI

From: Diana Thornbrough [<mailto:dianathornbrough@bellsouth.net>]
Sent: Wednesday, October 15, 2014 12:05 PM
To: Potts, Katie
Subject: Bridger canyon drive

Hello,

We are part time residents of the canyon but will not be there for the meeting. One issue I would like for all to keep in mind – we have returned home in white outs on several occasions and feel we might not have made it without the aid of the reflectors on each side of the road. We literally pick our way from one to the next to make sure we stay between right and left and on the road. Under these conditions one cannot even pull over to wait it out because you don't know where you are and how much room there is on the shoulder. Feels safer to keep going. Thank you for keeping these shining, you have saved many lives!

Diana Thornbrough

Diana Stanton-Thornbrough
dianathornbrough@bellsouth.net
6007 Sunny Hillside Lane
Bozeman, Montana 59715

Nicolai, Sarah

From: Kent Madin <rett139@yahoo.com>
Sent: Thursday, October 16, 2014 2:02 PM
To: Nicolai, Sarah
Cc: Tom Fiddaman
Subject: MDT /Bridger Canyon Meeting

Dear Ms. Nicolai,

I'm a board member of the Bridger Canyon Property Owners Association (BCPOA) and have been asked by several residents in the canyon to contact you prior to the meeting and express some areas of concern.

First let me say that it is central to the spirit and practical application of the Bridger Canyon Zoning Regulations and the values they preserve that Highway 86 remain, forever, a two lane highway. That said, there are concerns that development of mining and gas and oil exploration taking place east of Bridger Canyon could create pressure to widen Highway 86. Please be prepared to address questions from the community around that subject.

Second, there are questions about whether or not fiber optic is going to be run up through the Canyon and potentially over to the areas of mineral exploration. There will be questions on that.

Third, (and this is my own Quixotic cause), please be prepared to address the question of MDT's support (in conjunction with the County Commission) of a law that makes use of a cellphone while driving, in any format, illegal from the "M" to Brackett Creek. Bridger Canyon, by virtue of its geography, has virtually no cell coverage which logically makes Highway 86 a safer roadway. However, cell coverage is coming fairly soon and my personal feeling is that all government agencies and elected officials charged with public safety need to address how to mitigate the increase in distracted driving that will occur.

Thanks and looking forward to meeting you on the 23rd.
(And thanks to MDT for the wireless flashing light system at the Firehouse!)

Kent Madin
406-587-4732

Nicolai, Sarah

From: Nicolai, Sarah
Sent: Tuesday, October 21, 2014 10:41 AM
To: 'Renee Callahan'
Cc: Potts, Katie
Subject: RE: Bridger Canyon Corridor Planning Study - Draft Reports

Renee,

MDT is only posting the draft reports electronically on the study website at this time. No printed reports will be produced.

Thanks,

Sarah

From: Renee Callahan [<mailto:renee@largelandscapes.org>]
Sent: Tuesday, October 21, 2014 8:59 AM
To: Nicolai, Sarah
Subject: RE: Bridger Canyon Corridor Planning Study - Draft Reports

Hi Sarah,

Do you know whether paper copies will be available at MDT's Bozeman office (on Rouse)?

Thanks,
Renee

Renee Callahan, MESM, JD
Senior Policy Officer
Center for Large Landscape Conservation
www.largelandscapes.org | 406.586.8082

Please note my new email address: renee@largelandscapes.org

From: Nicolai, Sarah [<mailto:snicolai@dowlhkm.com>]
Sent: Monday, October 20, 2014 1:44 PM
To: Nicolai, Sarah
Cc: Potts, Katie
Subject: Bridger Canyon Corridor Planning Study - Draft Reports

Good afternoon.

Draft versions of the Environmental Scan Report and the Existing and Projected Conditions Report are now posted to the study website: <http://www.mdt.mt.gov/pubinvolve/bridger/documents.shtml>. Please submit any comments on these draft reports to me by e-mail (snicolai@dowlhkm.com) or standard mail (P.O. Box 1009, Helena, MT 59624) by Monday, December 1, 2014.

Thank you,

Sarah

Sarah W. Nicolai, P.E.

Manager, Planning and Environmental Services

Direct: (406) 324-7412



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Nicolai, Sarah

From: Taylor Lonsdale <bnzbybike@gmail.com>
Sent: Wednesday, October 22, 2014 1:15 PM
To: Nicolai, Sarah
Cc: Robert Bukvich; dylanwtaylor@gmail.com; Rebecca Gleason; Bill Cochran; David Kack
Subject: Re: Bridger Canyon Corridor Planning Study - Draft Reports

Good afternoon Sarah. Thank you for sending out this report ahead of the meeting tomorrow night. I have a few questions/comments. Unfortunately I do not believe I will be able to attend the meeting. The crash analysis in the report does not break the crashes down by the focus areas in MDT's CHSP. Such things as occupant restraint usage, impairment, or road departure crashes. It seems critical that the crash analysis provide reference to CHSP particularly if the study is to identify objectives for improving safety for all road users. I believe the MT 86 is on a list of roadway to receive centerline only rumble strips and hopefully that is based on a prevalence of crashes that can be influenced with the use of centerline rumble strips. A minor note, I believe that it is the Gallatin Valley Bicycle Club and not the Gallatin Valley Land Trust that organizes the bicycle rides. Why are only three segments analyzed for access density? I would think the corridor has at least 4 segments with relatively unique access densities. It seems to me that perhaps segmenting it by speed zones would make sense. Additionally, is access type considered in this analysis? It makes sense to me that an access such as the "M" Trail parking lot or Bridger Bowl should be a larger consideration than a driveway to a single home. Bozeman's CTSP contains a focus area on bicycle and pedestrian safety. While none of the strategies directly mention Bridger Canyon Drive a focus on bicycle and pedestrian safety is crucial to note for this corridor study. I see this is noted under the section on the Bozeman Area Transportation Plan. Thanks for your time on this,

Taylor Lonsdale
426 N 9th Ave
Bozeman, MT

On Mon, Oct 20, 2014 at 1:43 PM, Nicolai, Sarah <snicolai@dowlhkm.com> wrote:

Good afternoon.

Draft versions of the Environmental Scan Report and the Existing and Projected Conditions Report are now posted to the study website: <http://www.mdt.mt.gov/pubinvolve/bridger/documents.shtml>. Please submit any comments on these draft reports to me by e-mail (snicolai@dowlhkm.com) or standard mail (P.O. Box 1009, Helena, MT 59624) by Monday, December 1, 2014.

Thank you,

Sarah

Sarah W. Nicolai, P.E.

Manager, Planning and Environmental Services

Direct: [\(406\) 324-7412](tel:4063247412)



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Bridger Canyon Corridor Planning Study Informational Meeting #1

Thursday, October 23, 2014

MDT Invites Your Comments:

The Kelly Canyon intersection with Highway 86 is very dangerous and must be given a turn lane.

Traffic of bicycles is a major hazard throughout the Canyon, but dangerously so from Jackson Creek and Kelly Canyon, both directions.

With Bridger Bowl expansion and proposed major expansion of residences, condos, etc. the traffic load for 86 will be much greater than some proposed models indicate.

The landslide areas at the Canyon mouth must be dealt with to eliminate the very dangerous corner at the Big Rock.

To receive further study information, please provide your name and address:

Name: Robert Bellows

Address: 15139 Kelly Canyon Rd
Bozeman, MT 59715

Email: rablmb@dishmail.net

Please leave your comments with staff at the meeting, or mail to:

Sarah Nicolai
DOWL HKM
PO Box 1009
Helena, MT 59624

Please indicate comments are for the Bridger Canyon Corridor Planning Study and submit comments by December 1, 2014.

Nicolai, Sarah

From: Nicolai, Sarah
Sent: Monday, December 01, 2014 10:28 AM
To: Nicolai, Sarah
Subject: FW: Planning Contact Us

From: ggettler@gmail.com [<mailto:ggettler@gmail.com>]

Sent: Monday, October 27, 2014 8:47 AM

To: Chris Saunders

Subject: Planning Contact Us

PlanningContactUsID: 278

First Name: Gail

Last Name: Gettler

Phone: (406) 586-3244

Email: ggettler@gmail.com

Message: Please consider a cross walk at Headlands and Northwoods crossing Bridger Drive. This is highly used for Headlands families to cross over to use the trail system in the Legends. Speed limit there is 45 mph, so a painted cross walk would be very helpful. Thank you.

Form inserted: 10/27/2014 8:46:47 AM

Form updated: 10/27/2014 8:46:47 AM

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Nicolai, Sarah

From: Grant, Paul <pgrant@mt.gov>
Sent: Thursday, November 13, 2014 8:49 AM
To: Potts, Katie; Nicolai, Sarah; Zanto, Lynn (MDT); Strizich, Carol
Subject: FW: Comment on a Project or Study Submitted

-----Original Message-----

From: www@mdt.mt.gov [<mailto:www@mdt.mt.gov>]
Sent: Wednesday, November 12, 2014 6:38 PM
To: MDT Comments - Project
Subject: Comment on a Project or Study Submitted

A question, comment or request has been submitted via the "Contact Us" web page.

Reason for Submission: Comment on a Project or Study
Submitted: 11/12/2014 18:37:39
Project/Study Commenting On: Bridger
Name: Joe Anderson
Email Address: joe.topeka@gmail.com

Comment or Question:

I just became aware that the Dept. of Transportation is presently studying the Bridger Canyon corridor. I am a resident of Bozeman and a frequent user of the canyon highway as both a motorist and a cyclist.

As safety is my chief concern, both in the car and on the bicycle, I find the speed limit of 70 mph to be too fast through the canyon.

In addition, I believe that the particular speed limit increase, when departing Bozeman but before entering the canyon, presents a danger. This forces vehicles to increase their speed when passing by "The M," a popular summer hiking area, and when entering the tight turn into the canyon.

My secondary concerns are as a cyclist. The following present unnecessary hazards to cyclists: (1) Narrow and, at times, inconsistent shoulder widths, (2) Presence of rumble strips, and (3) Guardrails without shoulders (for instance, when leaving Bozeman but before entering the canyon). Each of these hazards can, at times, present the cyclist with a choice - to either veer to the edge of the shoulder, if present, or veer onto the road and enter into the flow of traffic. The latter is usually the safer. That is not to say that the latter option is safe.

Generally, it is not.

I am grateful that the state is taking time to investigate this dangerous roadway and is listening to the concerns of the public. My hope is that the final results of this review will enhance safety for all users, including non-motorized users.

Reference Number = prjcomment_238983154296875

Nicolai, Sarah

From: Marosok, Lauren <Imarosok@mt.gov>
Sent: Friday, November 14, 2014 10:57 AM
To: Nicolai, Sarah
Subject: FW: Comment on a Project or Study Submitted

-----Original Message-----

From: www@mdt.mt.gov [<mailto:www@mdt.mt.gov>]
Sent: Wednesday, November 12, 2014 6:22 PM
To: MDT Comments - Project
Subject: Comment on a Project or Study Submitted

A question, comment or request has been submitted via the "Contact Us" web page.

Reason for Submission: Comment on a Project or Study
Submitted: 11/12/2014 18:22:10
Project/Study Commenting On: Bridger
Name: Paul Gingras
Email Address: spgingras@earthlink.net
Other Details: MT 86

Comment or Question:

Dear Sir or Madam:

I understand your department is studying improvements to the Bridger Canyon Road (MT 86) from Bozeman to north of Wilsall. I frequently ride a bicycle from Bozeman to the Bridger Ski Basin and back in the warm months and a few times a year all the way to Wilsall and return. As a cyclist my biggest concerns are:

1. A lack of shoulders for cyclists along many areas of the road. Existing shoulders are not of a uniform width and are not cleaned of debris on a regular basis, especially in the spring when large amount of gravel accumulate which makes travel on the shoulder difficult.
2. Some guardrails have been placed in areas without any shoulder (by the fish hatchery outside of Bozeman) and this is really dangerous to cyclists. Trucks pass me going 60-70 mph in this area and it is very scary and dangerous. Something needs to be done there to improve safety before deaths occur.
3. Placing rumble strips on the shoulder is a bad idea for cyclists. We can't ride on these things and if forces us onto the main roadway and this is very dangerous. Think about all the uses on your roads before you do things like this.

Remove existing rumble strips.

Thanks for allowing comments.

Reference Number = prjcomment_325286865234375

Nicolai, Sarah

From: Grant, Paul <pgrant@mt.gov>
Sent: Thursday, November 13, 2014 8:32 AM
To: Potts, Katie; Nicolai, Sarah; Zanto, Lynn (MDT); Strizich, Carol
Subject: FW: Comment on a Project or Study Submitted

-----Original Message-----

From: www.mdt.mt.gov [<mailto:www@mdt.mt.gov>]
Sent: Wednesday, November 12, 2014 7:36 PM
To: MDT Comments - Project
Subject: Comment on a Project or Study Submitted

A question, comment or request has been submitted via the "Contact Us" web page.

Reason for Submission: Comment on a Project or Study
Submitted: 11/12/2014 19:36:09
Project/Study Commenting On: Bridger
Name: Ross Snider
Email Address: rksnider@ece.montana.edu
Other Details: Bridger Canyon Corridor Planning Study

Comment or Question:

As a cyclist that rides Bridger Canyon keep in mind that the road should be safe for cyclists (wide shoulders, guardrails with shoulders, etc.)

Thanks,

Ross

Reference Number = prjcomment_826019287109375

Nicolai, Sarah

From: Grant, Paul <pgrant@mt.gov>
Sent: Friday, November 14, 2014 9:33 AM
To: Potts, Katie; Nicolai, Sarah; Zanto, Lynn (MDT); Strizich, Carol; Ebert, Jeff; Rouse, Dustin; Walsh, Joe
Subject: FW: Comment on a Project or Study Submitted

-----Original Message-----

From: www@mdt.mt.gov [<mailto:www@mdt.mt.gov>]
Sent: Thursday, November 13, 2014 10:32 AM
To: MDT Comments - Project
Subject: Comment on a Project or Study Submitted

A question, comment or request has been submitted via the "Contact Us" web page.

Reason for Submission: Comment on a Project or Study
Submitted: 11/13/2014 10:31:37
Project/Study Commenting On: Bridger
Name: John Preston
Email Address: jpreston345@gmail.com

Comment or Question:

I am pleased to hear that MDT is looking at the Bridger Canyon roadway. The road has seen increased bicycle use in recent years despite becoming less safe for motorists as well as cyclist. I feel that the current speed limit is too high and that lowering it would add to the overall safety of the road.

The new guardrail near the "M" has made for a very dangerous situation for cyclist, especially considering the speed limit on that stretch. I hope MDT can avoid creating any more situations where a guardrail exists without the safety of a shoulder.

I would also ask MDT to avoid putting rumble strips in locations that make it difficult or impossible for cyclist to ride to the right of the "fog line."

Thank you for the opportunity to comment on this project.

Reference Number = prjcomment_1365966796875

Nicolai, Sarah

From: Grant, Paul <pgrant@mt.gov>
Sent: Thursday, November 13, 2014 9:31 AM
To: Potts, Katie; Nicolai, Sarah; Zanto, Lynn (MDT); Strizich, Carol
Subject: FW: Comment on a Project or Study Submitted

-----Original Message-----

From: www.mdt.mt.gov [<mailto:www@mdt.mt.gov>]
Sent: Thursday, November 13, 2014 8:38 AM
To: MDT Comments - Project
Subject: Comment on a Project or Study Submitted

A question, comment or request has been submitted via the "Contact Us" web page.

Reason for Submission: Comment on a Project or Study
Submitted: 11/13/2014 08:37:53
Project/Study Commenting On: Bridger
Name: Dillon Warn
Email Address: dillon.warn@gmail.com
Other Details: HWY 86

Comment or Question:

I'm writing about the Bridger Canyon Corridor Planning Study. I am a frequent user of this road, both in my car, and on my bicycle. It is a fantastic road biking route, and I would encourage you to keep that foremost in mind! I know you'll need to consider all users, but in particular, could you please make sure of a few things as you redevelop this road:

My "dream come true" would be for a separated "bike highway" about 10 feet off the side of the road, such as is present along Hwy 93 between Missoula and Hamilton. That would be incredible if we could install that infrastructure everywhere!

Having a consistent, wide shoulder for the entire road would improve cyclist safety and comfort a great deal. Places where there is no shoulder, i.e. from Brackett Creek to Fairy Lake, are dicey dicey dicey! Lots of blind corners and fast moving cars, makes it a little sketchy for cyclists. I tend not to ride that far because of this.

Many bridges, culverts, etc, have narrow guardrails and no shoulder. Crossing these areas makes cyclists travel far too close to highway-speed vehicles. I'm sure there are other areas where guardrails are present without shoulders, as well.

If you put in rumble strips on the shoulder, could you put them right on the "white line" marking the edge of the lane? When they are in the shoulder, it's very uncomfortable to ride, and makes the road less safe for cyclists, as we either have to crowd to close to the edge, or too close to the traffic.

Anyways, thanks for your work. It's exciting to see new projects and improvements on our highways.

Kindest regards,

~Dillon Warn
406-431-7941

P.S. My father, Stephen Warn, was a road engineer for MDT for 30 years, so I'm definitely on your side. I know how hard it can be to balance need, interests, and cost-effectiveness! Thanks for your work.

Reference Number = prjcomment_29473876953125

Nicolai, Sarah

From: Grant, Paul <pgrant@mt.gov>
Sent: Friday, November 14, 2014 7:17 AM
To: Potts, Katie; Nicolai, Sarah; Zanto, Lynn (MDT); Strizich, Carol; Ebert, Jeff; Rouse, Dustin; Walsh, Joe
Subject: FW: Comment on a Project or Study Submitted

-----Original Message-----

From: www.mdt.mt.gov [<mailto:www@mdt.mt.gov>]
Sent: Friday, November 14, 2014 7:00 AM
To: MDT Comments - Project
Subject: Comment on a Project or Study Submitted

A question, comment or request has been submitted via the "Contact Us" web page.

Reason for Submission: Comment on a Project or Study
Submitted: 11/14/2014 07:00:29
Project/Study Commenting On: Bridger
Name: David Hoffman
Email Address: david.swick.hoffman@gmail.com
Other Details: Bridger Canyon Road (MT86)

Comment or Question:

I am writing to comment on the Bridger Canyon Road (MT86) corridor.

My primary means of transportation is a bicycle. It is therefore very important to me that you consider the safety of all vehicles, including bicycles, when planning upgrades to this road. Please leave reasonable shoulders that are safe for cyclists. Rumble-strips force cyclists to ride out in the lane, which can be dangerous when cars are passing in both directions.

Guard rails with no shoulder, such as the one on the hill near the 'M' trailhead, put cyclists in extreme danger and should be avoided. Such guard rails set up a very dangerous situation for cyclists and pedestrians, and are likely to cause an accident.

The current guard rail near the 'M' trail actually sticks out into the travel lane, impeding the flow of traffic. It should be removed as soon as possible to resolve the public safety hazard that has been created.

Best regards,

David Hoffman

Reference Number = prjcomment_13153076171875

Nicolai, Sarah

From: Grant, Paul <pgrant@mt.gov>
Sent: Monday, November 17, 2014 7:39 AM
To: Potts, Katie; Nicolai, Sarah; Zanto, Lynn (MDT); Strizich, Carol; Ebert, Jeff; Rouse, Dustin; Walsh, Joe
Subject: FW: Comment on a Project or Study Submitted

-----Original Message-----

From: www@mdt.mt.gov [<mailto:www@mdt.mt.gov>]
Sent: Monday, November 17, 2014 6:35 AM
To: MDT Comments - Project
Subject: Comment on a Project or Study Submitted

A question, comment or request has been submitted via the "Contact Us" web page.

Reason for Submission: Comment on a Project or Study
Submitted: 11/17/2014 06:35:00
Project/Study Commenting On: Bridger
Name: Linda Crump
Email Address: lcrump@gmail.com

Comment or Question:

I am commenting on the Bridger Canyon road project. The speed limit that is gummed down to 45 miles an hour, heading into Bozeman is ridiculous. There are several places in Bozeman proper that use the 45 mile an hour speed limit. West Main St., Oak St. and others. To have a limited speed limit on an open highway is unnecessary. If one is looking for an improvement, perhaps a good look at the sweeping turn, right past mile 7 heading up the canyon would be a wonderful idea. There is a passing zone there, going around a sweeping curve to the right.

There is NO WAY that you can see on coming traffic, coming around that curve when you are passing. This is exasperated when the trees are full. The no passing zone should be included in this whole section. A good look at this section of road would be worth someones time.

Reference Number = prjcomment_26885986328125

Nicolai, Sarah

From: Grant, Paul <pgrant@mt.gov>
Sent: Tuesday, November 18, 2014 9:25 AM
To: Nicolai, Sarah; Potts, Katie; Strizich, Carol; Zanto, Lynn (MDT); Ebert, Jeff; Rouse, Dustin; Walsh, Joe
Subject: FW: Comment on a Project or Study Submitted

-----Original Message-----

From: www@mdt.mt.gov [<mailto:www@mdt.mt.gov>]
Sent: Monday, November 17, 2014 8:00 PM
To: MDT Comments - Project
Subject: Comment on a Project or Study Submitted

A question, comment or request has been submitted via the "Contact Us" web page.

Reason for Submission: Comment on a Project or Study
Submitted: 11/17/2014 20:00:13
Project/Study Commenting On: Bridger
Name: george thompson
Email Address: gthompson.bozmt@gmail.com

Comment or Question:

There are hundreds of people riding their bikes on the Bridger Canyon road. The existing guard rails are placed tight to the traffic lanes with no paved shoulder for bike riders.
Paved shoulders are needed for bike riders.

Post signs stated Bike Riders on roads.

The partial paving of the Brackett Creek road (to the Gallatin/Park County line helps for bike riding, please consider paved extension over to Clyde Park.
thanks,
George Thompson
12 Hill St
Bozeman

Reference Number = prjcomment_592376708984375

Nicolai, Sarah

From: Nicolai, Sarah
Sent: Tuesday, November 18, 2014 5:06 PM
To: 'Carol Fifer'
Cc: 'Potts, Katie'
Subject: RE: Bridger Canyon Road Corridor

Hi Carol.

Katie Potts is the MDT project manager for this study. I spoke with Katie this morning before replying to your e-mail. She conveyed that MDT will consider comments at any time during the study. The December 1st deadline for initial public comments is intended to allow us to keep moving forward with upcoming tasks and maintain the overall study schedule.

You are welcome to contact Katie directly at 406.444.9238 or kpotts@mt.gov.

Thank you,

Sarah

From: Carol Fifer [<mailto:catfifer@gmail.com>]
Sent: Tuesday, November 18, 2014 4:57 PM
To: Nicolai, Sarah
Subject: Re: Bridger Canyon Road Corridor

Hi Sarah,

Kindly advise, whom on MDT's staff would we approach about an official extension of the December 1st deadline?

The public data we are collecting will be of great value to MDT's plans.

Thank you,

Carol Fifer
Bridger Canyon

On Tue, Nov 18, 2014 at 2:04 PM, Nicolai, Sarah <snicolai@dowlhkm.com> wrote:

Carol,

Thank you for your e-mail. We held a resource agency meeting on October 15, 2014, and requested comments from resources agencies by October 24, 2014.

We are requesting public comments on the draft environmental scan and the draft existing and projected conditions report by December 1, 2014. Although MDT will accept comments at any time during the study, comments received by December 1st will be considered as we develop the draft improvement options report for review by our advisory committee.

Please let me know if I can answer any additional questions.

Thank you,

Sarah

From: Carol Fifer [mailto:catfifer@gmail.com]
Sent: Tuesday, November 18, 2014 9:03 AM
To: Nicolai, Sarah
Subject: Bridger Canyon Road Corridor

Good morning Sarah,

I have a few questions about your time table for input by resource agencies and additional facts as provided by local residents.

There are a number of factors which are not included thus far in your study and we are working on compiling a survey for resident observations.

Kindly advise, what is the cutoff date for input by the public so the facts are included in the options analysis presented to your Advisory Board?

What is the cutoff date for input by resource agencies so their review and comments are included in the options analysis presented and considered by your Advisory Board?

Thank you very much,

Carol Fifer
Bridger Canyon
Bozeman, Mt

Nicolai, Sarah

From: Grant, Paul <pgrant@mt.gov>
Sent: Thursday, November 20, 2014 8:04 AM
To: Potts, Katie; Nicolai, Sarah; Zanto, Lynn (MDT); Strizich, Carol; Ebert, Jeff; Rouse, Dustin; Walsh, Joe
Subject: FW: Comment on a Project or Study Submitted

-----Original Message-----

From: www.mdt.mt.gov [<mailto:www@mdt.mt.gov>]
Sent: Wednesday, November 19, 2014 4:22 PM
To: MDT Comments - Project
Subject: Comment on a Project or Study Submitted

A question, comment or request has been submitted via the "Contact Us" web page.

Reason for Submission: Comment on a Project or Study
Submitted: 11/19/2014 16:22:18
Project/Study Commenting On: Bridger
Name: Crowell Herrick
Email Address: jackstraw92@gmail.com

Comment or Question:

I am a road cyclist who currently uses Bridger Canyon Road. I, however, access Bridger Canyon by way of Kelly Canyon due to the inherent hazards of the "lower" portion of the study area. That being Bridger Drive to the M Trailhead and the landslide detour due to the fact there is no shoulder whatsoever. I will ride down this section only because I have greater speed, and while I am not going the speed limit I don't impede vehicle traffic when I ride in the roadway. Additionally the relative speed in the event of an accident is lessened going down as opposed to up and I therefore have a greater chance of surviving.

It would always be nice to have a wide shoulder however regardless of the width I will ride close to the traffic lane because there is less gravel there. So this becomes a maintenance issue and unless there is going to be a dedicated bike path I will continue to ride where my path is smoothest.

Clearly there are a number of drainage crossings on Bridger Canyon where I have to share the road because there is no shoulder. Providing a shoulder will eliminate my risk of being involved in an accident if a shoulder is provided at these crossings.

I ride to Battleridge and beyond and found the traffic to be less of an issue. No doubt it would be very nice to have a shoulder on the stretch between Brackett Creek and the top. It is my understanding that Brackett Creek will in the near future be paved and the traffic to that point will increase substantially. I have noticed a fair amount of heavy truck traffic using the canyon to between construction sites and gravel pits, wherever they may be located. Consequently a shoulder and improved road quality from Bridger Bowl to Brackett Creek is necessary.

Thank you.

Reference Number = prjcomment_43865966796875

Nicolai, Sarah

From: Jo Giese <jogiese.jogiese@gmail.com>
Sent: Sunday, November 30, 2014 10:20 PM
To: Nicolai, Sarah
Subject: Bridger canyon

Public comment.

Two deer ran into the front of my 1998 Tahoe early one morning the summer of 2013. It was still dark, I was on my way to the airport, there was almost no traffic, and as I was traveling south on Bridger Canyon and rounded the curve, almost at the M, one deer and then another charged into my headlights. Luckily, my car was heavy and stable and I kept steady on the road. When I returned from my trip my headlights were replaced and the front of my car was repaired. That was way more than a close call with wildlife.

I can also say without qualifications that I have never driven from town out to Bridger Hills, where we live, or from where we live into town, that I have not been passed by someone speeding by. It happens every every time--even on the curves where visibility is limited.

Jo Giese
Jo@jogiese.com
jogiese.com

Nicolai, Sarah

From: Grant, Paul <pgrant@mt.gov>
Sent: Monday, December 01, 2014 10:34 AM
To: Potts, Katie; Nicolai, Sarah; Zanto, Lynn (MDT); Strizich, Carol
Subject: FW: Comment on a Project or Study Submitted

-----Original Message-----

From: www@mdt.mt.gov [<mailto:www@mdt.mt.gov>]
Sent: Sunday, November 30, 2014 8:42 PM
To: MDT Comments - Project
Subject: Comment on a Project or Study Submitted

A question, comment or request has been submitted via the "Contact Us" web page.

Reason for Submission: Comment on a Project or Study
Submitted: 11/30/2014 20:42:01
Project/Study Commenting On: Bridger
Name: Ruth Hall
Email Address: cowgirlruth@gmail.com

Comment or Question:

I have lived directly on Bridger Canyon Road for 15 years. Over that time I have had "near misses" with wildlife and careless (speeding) drivers countless times. Frankly, I think it is ludicrous that the posted speed limits are so high for this rural roadway and wildlife corridor. It's a winding road at high elevation. I think it would be wise to reduce the speed limits all along Bridger Canyon. Given that it is a popular route for cyclist furthers my safety concerns. Please lower the posted speed limits all along 86. Thank you.

Reference Number = prjcomment_974395751953125

Nicolai, Sarah

From: Gabor Benda <gabendamd@yahoo.com>
Sent: Monday, December 01, 2014 6:56 AM
To: Nicolai, Sarah
Subject: Comment on Bridger Canyon Corridor

Dear Ms. Nicolai,

I would like to comment on the Bridger Canyon Corridor as a resident of Bridger Canyon (mile marker 8), a cyclist who commutes to town on this road, and as a physician, who has worked in the ER in the past and has seen the consequences of motor vehicle accidents. I had written an objection to the plan to build a railing along the stretch of road approaching the M before it was built. I explained that without widening the road, that railing would have the effect of crowding 2 way traffic too much, and increasing the risk of head on collisions, especially on icy roads. Beyond that, it is very dangerous for cyclists when there are cars going both ways, and there is a cyclist they are passing by. Many people will wait to pass a cyclist in that situation, but not all. It will just be a matter of time before a biker gets clipped and pushed off into the ditch, or gets squeezed against the guardrail. I know there is a bike path planned, but the situation is dangerous even for cars alone.

Please do what you can to ensure a generous shoulder for as much of the corridor as possible since the entire corridor is heavily used by many bikers. Please do not let them make those rumble strips which negates the benefit of shoulders for the bikers. Thank you very much.

Sincerely,

Gabor

Gabor Benda, MD
The Bozeman Clinic
931 Highland Blvd Suite 3360
Bozeman, MT 59715
406.587.4242
gabendamd@yahoo.com

Nicolai, Sarah

From: Grant, Paul <pgrant@mt.gov>
Sent: Tuesday, December 02, 2014 8:37 AM
To: Ebert, Jeff; Walsh, Joe; Rouse, Dustin; Potts, Katie; Zanto, Lynn (MDT); Nicolai, Sarah; Strizich, Carol
Subject: FW: Comment on a Project or Study Submitted

-----Original Message-----

From: www.mdt.mt.gov [<mailto:www@mdt.mt.gov>]
Sent: Monday, December 01, 2014 3:44 PM
To: MDT Comments - Project
Subject: Comment on a Project or Study Submitted

A question, comment or request has been submitted via the "Contact Us" web page.

Reason for Submission: Comment on a Project or Study
Submitted: 12/01/2014 15:44:10
Project/Study Commenting On: Bridger
Name: Bill Costigan
Email Address: bill@poindexters.com
Other Details: Bridger Canyon Hwy, future expansion - suggest a noise / vibration study be conducted before expansion work begins.

Comment or Question:

I appreciate this opportunity to send a voice out for potential concerned consideration. It's with regard to the possibility of future expansion of Bridger Cyn Hwy. I truly appreciate the service MTC provides us MT folk each day and night, especially when the roads are snowy and icy as they are currently and much of the year. The snow plow drivers are heroes to us...

With limited knowledge of how Bridger Cyn Rd. may be modified in the future, my concern is that of noise. Sound and noise is often an area that slips under the radar screen of detection until it's too late or too expensive to properly or effectively deal with it. Living within a world of sound, music, acoustics and vibration, seeing how it impacts the quality of life of people especially within our community is of great interest to me, sound is my passion and business. In talking with my neighbors, it's something that concerns others as well. My feeling is a "noise and vibration study" must be completed prior to any drastic change to the Hwy that would invite heavy hauling truck traffic in to use this road. The goal of the study would be to determine the potential impact of increased traffic of this nature would have Bridger Cyn. residences.

Thanks for your time, keep up the excellent work. Bill Costigan

Reference Number = prjcomment_9320068359375

Nicolai, Sarah

From: Carol Fifer <catfifer@gmail.com>
Sent: Monday, December 01, 2014 12:59 PM
To: Nicolai, Sarah; Potts, Katie; Ebert, Jeff
Subject: Bridger Canyon Road, State Rd 86 Corridor Study

Sara, Katie and Jeff,

The recent corridor analysis of State Road 86 from Bozeman to Wilsall was well done, however there are several areas of concern which I would like to have included in your planning and implemented during construction.

Deer have often been seen crossing SR 86 from E. Griffin Road thru the "M." Those are areas near the creeks, which tend to attract wildlife.

For a number of years during the time span referenced in the study, as a matter of safety, the local volunteer fire department removed carcasses from Bridger Canyon Road. This resulted in a lower than actual carcass count provided to MDT. Very few, if any, of the motor vehicle/wildlife accidents were reported to authorities.

There are many places along SR 86 where large elk herds have been encountered standing on the road pavement, but those places were not indicated on the study maps. These areas are known to many locals and are a major safety concern for people and wildlife. Locations I have personally observed are from Kelly Canyon thru Jackson Creek. Many times it has been necessary to stop to avoid a collision.

In addition to the elk, quite a number of road kill deer have been near the Stallion Station and Bridger Canyon Tree Farm.

The Bridgers are known to have wolverine activity. They are a species of concern, along with the lynx and grizzly bear. Recent scientific research points to the importance of providing a continuing corridor for wildlife to navigate from the Yellowstone Ecosystem to the Yukon Ecosystem. One of the vital links in that corridor is thru the Gallatin Mountains, then thru Bozeman Pass, over Green Mountain, across Bridger Canyon Road into the Bridger Mountain range, and extending to points beyond. This connection is critical to maintain the survival and genetic diversity of any number of species, but especially important to the endangered and species of concern.

While considering the needed repairs to Bridger Canyon Road I would urge you to address the importance of providing safe passage for wildlife via tunnels, or bridges. A tunnel along the creek by the Boys and Girls Club could reduce the likelihood of a collision in that area. With the planned park at Story Mill there will be more traffic and also more wildlife.

An overpass or tunnel near the "M" and Drinking Horse Trailhead will benefit hikers, bikers, and wildlife. A land bridge connecting the mountain tops would serve to enhance safety and create an attractive feature. They have worked well in other states.

A large tunnel, such as the one under SR 86 and currently in private use for horses and cattle near the Bridger Canyon Fire Station, should be constructed in the vicinity of MM 9. There are any number of bridges in that area which must be repaired or replaced.

The cost for the work would be incremental. Along with the necessity of providing for wildlife, this work will further offer some measure of increased safety for people. The value of a human life can't possibly be calculated.

Bridger Canyon is a unique agricultural and historic area. I would draw your attention to items 8 and 9 in the Bridger Canyon Zoning documents which

.."insist on attention to vegetation, sanitation, wildlife habitat, erosion, and public safety.....as well as ...elements of community design

(roads, utilities, etc.) should be planned to include environmental factors in addition to usual safety and engineering considerations.

"

Local residents can give further specifics which will be of great help to you in this project. With the expected population increase, thus

traffic increase, it is critical that MDT includes the valuable resources of local observations in your decision making process.

You may contact me at any time should you have questions.

Sincerely,
Carolyn A. Fifer
4750 Meadow Lane
Bozeman, Mt 59715

406-451-3880

Nicolai, Sarah

From: Grant, Paul <pgrant@mt.gov>
Sent: Tuesday, December 02, 2014 10:51 AM
To: Ebert, Jeff; Rouse, Dustin; Walsh, Joe; Potts, Katie; Nicolai, Sarah; Zanto, Lynn (MDT); Strizich, Carol
Subject: FW: Comment on a Project or Study Submitted

-----Original Message-----

From: www@mdt.mt.gov [<mailto:www@mdt.mt.gov>]
Sent: Tuesday, December 02, 2014 9:56 AM
To: MDT Comments - Project
Subject: Comment on a Project or Study Submitted

A question, comment or request has been submitted via the "Contact Us" web page.

Reason for Submission: Comment on a Project or Study
Submitted: 12/02/2014 09:56:05
Project/Study Commenting On: Bridger
Name: jeff kack
Email Address: kack@montana.net

Comment or Question:

1. the biggest and main problem in the canyon has been the "curves" in the slide area. I have lived here since the slide and always thought the "detour" was going to be fixed. over the years this has proven to be the most accident prone area in the canyon. straightening and re grading need to be done in order to make this short section safe again.
 2. bring back the speed limits from last year. the new 45mph from the end of bridger drive to far past the detour curves is not necessary, especially if the detour problems are addressed.
 3. the guardrail that was installed on the way from Bozeman to the "M" is a disaster waiting to happen. major development needs to be done to widen the road opposite the new rail in order to accommodate bikes and people. the installation of the guardrail without addressing adequate shoulder area was reckless to say the least.
- thank you

Reference Number = prjcomment_40362548828125

Nicolai, Sarah

From: Grant, Paul <pgrant@mt.gov>
Sent: Monday, December 01, 2014 10:43 AM
To: Potts, Katie; Nicolai, Sarah; Zanto, Lynn (MDT); Strizich, Carol
Subject: FW: Ask MDT A Question Submitted

-----Original Message-----

From: www@mdt.mt.gov [<mailto:www@mdt.mt.gov>]
Sent: Monday, December 01, 2014 5:24 AM
To: MDT Comments - Ask MDT
Subject: Ask MDT A Question Submitted

A question, comment or request has been submitted via the "Contact Us" web page.

Reason for Submission: Ask MDT A Question
Submitted: 12/01/2014 05:24:29
Name: Ron Lerner
Email Address: lerner.ron@gmail.com

Comment or Question:

I am told today is the last day for comments regarding the highway study for Bridger Road thru the canyon. while there are many issues that cannot be resolved due the constraints of nature or common sense, there is one thing that is certain.

Reducing the speed limits to winter levels on a year round basis will provide for cyclists increased safety, time to enjoy the scenery and help save animal and drivers' lives. This suggestion is cost effective and lets MOT move on to the next problem area.

Reference Number = askmdt_995697021484375

Nicolai, Sarah

From: Grant, Paul <pgrant@mt.gov>
Sent: Monday, December 01, 2014 10:44 AM
To: Potts, Katie; Zanto, Lynn (MDT); Nicolai, Sarah; Strizich, Carol
Subject: FW: Comment on a Project or Study Submitted

-----Original Message-----

From: www@mdt.mt.gov [<mailto:www@mdt.mt.gov>]
Sent: Monday, December 01, 2014 6:28 AM
To: MDT Comments - Project
Subject: Comment on a Project or Study Submitted

A question, comment or request has been submitted via the "Contact Us" web page.

Reason for Submission: Comment on a Project or Study
Submitted: 12/01/2014 06:28:26
Project/Study Commenting On: Bridger
Name: John Rogers
Email Address: jrogers@daqsystems.com

Comment or Question:

It would be a major construction project but given the popularity of MT86 for cyclists, what is really needed is a separate bike path. The new guard rail just before the "M" is really, really bad. Someone is going to get killed. There is no room for two trucks and a cyclist to pass each other. Anchorage has miles of separate bike lanes, including along the Glenn highway.

Reference Number = prjcomment_12322998046875

Nicolai, Sarah

From: Grant, Paul <pgrant@mt.gov>
Sent: Monday, December 01, 2014 11:02 AM
To: Nicolai, Sarah; Zanto, Lynn (MDT); Potts, Katie; Strizich, Carol
Subject: FW: Comment on a Project or Study Submitted

-----Original Message-----

From: www@mdt.mt.gov [<mailto:www@mdt.mt.gov>]
Sent: Monday, December 01, 2014 9:58 AM
To: MDT Comments - Project
Subject: Comment on a Project or Study Submitted

A question, comment or request has been submitted via the "Contact Us" web page.

Reason for Submission: Comment on a Project or Study
Submitted: 12/01/2014 09:58:08
Project/Study Commenting On: Bridger
Name: linda svendsen
Email Address: linda@boojum.com

Comment or Question:

We love the lower speed limits on Bridger Canyon, no problem there. As to wildlife, most people know to drive slower in the fall/winter months and don't mind doing so, so as to make it a safe place for wildlife as well as humans. If there was ever extra money, a couple tunnels for wildlife crossings would be great. Same thing applies to ski season...most people know to drive slower and hopefully keep in mind the reason the canyon is so packed at 9am and 4-5pm. Great snow!

Cyclists who are going to town on Bridger are not a huge problem. The big concern is bicyclists who are cycling north(east), away from town. In some places, there's just no room. So the slower speed limits are great (safe) for just about everything.

Keep the canyon 2 lanes. We all love it. Thanks!
p.s. Please don't put my name/email on any mailing lists - thanks again.

Reference Number = prjcomment_397857666015625

Nicolai, Sarah

From: Grant, Paul <pgrant@mt.gov>
Sent: Tuesday, December 02, 2014 8:30 AM
To: Nicolai, Sarah; Potts, Katie; Zanto, Lynn (MDT); Strizich, Carol
Subject: FW: Comment on a Project or Study Submitted

-----Original Message-----

From: www@mdt.mt.gov [<mailto:www@mdt.mt.gov>]
Sent: Monday, December 01, 2014 9:49 PM
To: MDT Comments - Project
Subject: Comment on a Project or Study Submitted

A question, comment or request has been submitted via the "Contact Us" web page.

Reason for Submission: Comment on a Project or Study
Submitted: 12/01/2014 21:48:39
Project/Study Commenting On: Bridger
Name: Ellen Trygstad
Email Address: eltjupiter@gmail.com

Comment or Question:

Thank you for the excellent presentation in October on the Bridger Canyon road review by MDT. As you review comments and begin to prioritize projects, please arrange for additional public input. This may save MDT time and money as residents continue to provide input from their experience of the road.

I suggest prioritizing bridger repair and assisting animal crossings as these projects would immediately address potential accidents. Adding turn lanes is a waste of public money. Distracted driving is not something MDT can prevent now that cell towers have access in the Canyon. Eliminating beer at the ski area would help accidents, but again outside MDT's province. The reduced speeds near Kelly Canyon will likely help turning there. Perhaps a follow up speed study will facilitate this much cheaper solution for turning at Jackson Creek as well as Bridger Bowl.

Bridger Canyon has five buildings on the National Registry for Historic Preservation. Lewis and Clark travelled Kelly Canyon; John Bozeman plied his trade down BC Road. Fort Ellis was built from timber slid along a road from the Bohart Ranch area and around Green Mountain. This is a historic area. The two lane road and the curves in the road are part of its rural charm and history, therefore also part of its tourist draw. Any changes to the road should be limited and specific, such as bridges and over/underpasses for wildlife. Thank you for your time. Hopefully, a future speed study will provide MDT with the authorization to reduce the 70mph areas to 60 mph which is more compatible with this road overall and creates the optimal safety situation. Thank you very much.

Reference Number = prjcomment_8917236328125

Nicolai, Sarah

From: Renee Callahan <renee@largelandscapes.org>
Sent: Monday, December 01, 2014 4:55 PM
To: Nicolai, Sarah
Cc: kelly@gvlt.org; renee@largelandscapes.org; meredith@largelandscapes.org; jerry@future-west.org; bill@poindexters.com; catfifer@gmail.com; flyboy700@gmail.com; hamlins@littleappletech.com; eltjupiter@gmail.com; kirk.loftsgarden@dot.gov; lstoeffler@fs.fed.us; cpoissant@bozeman.net; MTrail@dot.gov; John.Pierce@dfw.wa.gov
Subject: Bridger Canyon Corridor Planning Study, Montana Highway 86
Attachments: MSWP Hwy 86 Corridor Study Comments 12-01-14 FINAL.pdf
Importance: High

Dear Ms. Nicolai,

On behalf of the Gallatin Valley Land Trust, Montanans for Safe Wildlife Passage, and the undersigned residents of Bridger Canyon, we appreciate the opportunity to provide input on the Bridger Canyon Corridor Planning Study regarding potential improvement options for Montana Highway 86, an approximately 35-mile corridor from Story Mill Road in the City of Bozeman, to the intersection with US Highway 89 in Wilsall, Montana. As detailed in the attached comments, we urge the Montana Department of Transportation to consider the effects of any proposed improvements on ecological connectivity, and to commit to affirmatively exploring opportunities to maintain this critical linkage between the Greater Yellowstone and Crown of the Continent ecosystems, as part of any future highway improvement projects.

If you have any questions regarding our comments or the information we have provided, please do not hesitate to contact me.

Respectfully submitted,
Renee Callahan

On behalf of:

Gallatin Valley Land Trust

Kelly Pohl, Associate Director, PO Box 7021, Bozeman, MT 59771, kelly@gvlt.org

Montanans for Safe Wildlife Passage

Renee Callahan & Meredith McClure: *Center for Large Landscape Conservation*,
renee@largelandscapes.org, meredith@largelandscapes.org

Jerry Grebenc, *Future West*, jerry@future-west.org

People's Way Partnership, <http://www.peopleswaywildlifecrossings.org/>

Residents of Bridger Canyon

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Candace Hamlin & Gerald Meyers, hamlins@littleappletech.com

Ellen Trygstad & Richard Burke, eltjupiter@gmail.com

Renee Callahan, MESM, JD
Senior Policy Officer
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December 1, 2014

Via email: snicolai@dowlhkm.com

Sarah Nicolai
Consultant Project Manager
DOWL HKM
1300 Cedar Street
Helena, MT 59601

Re: *Bridger Canyon Corridor Planning Study, Montana Highway 86*

Dear Ms. Nicolai,

Gallatin Valley Land Trust (GVLТ), Montanans for Safe Wildlife Passage (MSWP), and the undersigned residents of Bridger Canyon appreciate the opportunity to provide input on the Bridger Canyon Corridor Planning Study (Study) regarding potential improvement options for Montana Highway 86 (MT 86), an approximately 35-mile corridor from Story Mill Road in the City of Bozeman, to the intersection with US Highway 89 in Wilsall, Montana. As described below, we urge the Montana Department of Transportation (MDT) to consider the effects of any proposed improvements on ecological connectivity and to commit to affirmatively exploring opportunities to maintain this critical linkage between the Greater Yellowstone and Crown of the Continent ecosystems, as part of any future highway improvement projects.

Background on GVLТ, MSWP and Residents of Bridger Canyon

GVLТ connects people, communities, and open lands through conservation of working farms and ranches, healthy rivers, and wildlife habitat, and the creation of trails in the Montana headwaters of the Missouri and Upper Yellowstone Rivers. Since our founding in 1990, we have helped conserve more than 42,800 acres of land in partnership with 90 families, including 12 conservation easements in the Bridger Canyon and Bozeman Pass critical wildlife corridor, protecting nearly 4,200 acres from the I-90 corridor north to Battle Ridge.

MSWP formed in 2011 to bring individuals and conservation groups together to advocate for innovative solutions to provide safe passage for Montana's people, fish, and wildlife and improve or maintain habitat connectivity across Montana's roads. Our members include people who have been working on improving safe passage for wildlife and aquatic species for over 15 years, including research, mapping, monitoring, policy work, and on-the-ground projects.

Several individuals who reside in the Bridger Canyon study area, some of whom have lived in the area more than 15 years and are intimately familiar with the corridor, also support these comments. Their names and contact information appear in the signature block below.

I. The Western Governors’ Association’s Crucial Habitat Assessment Tool confirms that MT 86 bisects a predicted link critical to maintaining broad-scale connectivity.

a. Connectivity across the Bangtail and Bridger Mountains, over MT 86

The Western Governors’ Association (WGA) has produced a west-wide Crucial Habitat Assessment Tool (CHAT) as part of its Wildlife Corridors and Crucial Habitat Initiative. The CHAT is a cooperative effort of 16 Western states to provide the public and industry a high-level overview of “crucial habitat” across the West. “Crucial habitats” are places that are likely to provide the natural resources important to aquatic and terrestrial wildlife, including species of concern, as well as hunting and fishing species. The west-wide CHAT is intended to help users in the pre-planning of energy corridors and transmission routes, or in comparing fish and wildlife habitat, by establishing a common starting point across the West for the intersection of development and wildlife. As part of the WGA’s CHAT effort, connectivity among large intact blocks of habitat was modeled throughout the West. This model identifies connectivity flowlines, or corridor routes, that are predicted to be crucial for maintaining broad-scale connectivity of several major biomes (Figure 1). The model is not species-specific; instead, it serves as a coarse-filter approach to identifying areas expected to support the movement of a wide range of species as well as continuity of ecological processes. A centrality score is calculated for each flowline, which represents its relative importance to maintaining connectivity across the region as a whole, and all lines are buffered by 1 mile on each side to account for various sources of uncertainty in the model.

As illustrated in Figure 1, a corridor with the highest connectivity value assigned by the model (1.0 on a standardized scale of 0.0 to 1.0) crosses MT 86, roughly between miles 10-12. This area also coincides with the highest carcass count along the study corridor, outside of miles 1-2 immediately adjacent to Bozeman, based on MDT’s own Carcass Database.¹

b. The corridor crossing MT 86 is a crucial link between the Greater Yellowstone Ecosystem and the Crown of the Continent Ecosystem.

The U.S. Northern Rockies span three relatively intact ecosystems: (1) the Crown of the Continent (Crown) centered around Glacier-Waterton National Parks, (2) the Salmon-Selway wilderness areas of central Idaho, and (3) the Greater Yellowstone Ecosystem (GYE). These intact ecosystems still host a full complement of native wildlife that includes wolf, bison, lynx, wolverine, fisher, marten, goshawk, eagle, grizzly and black bear, and mountain lion. With increasing human development, and accompanying increases in daily traffic loads on surrounding roads, wildlife habitat between these protected areas is becoming fragmented.

¹ Although this analysis was conducted throughout the west, individual states adopted it at their own discretion. Because some states selected alternative methods for modeling connectivity (e.g., Montana), and many states chose not to make connectivity layers public via the CHAT, this layer is not available for download from the WGA CHAT website. Instead, please direct questions concerning access to and use of this dataset to John Pierce (360.902.2511, John.Pierce@dfw.wa.gov).

Carcass Counts and WGA Connectivity Analysis for MT 86

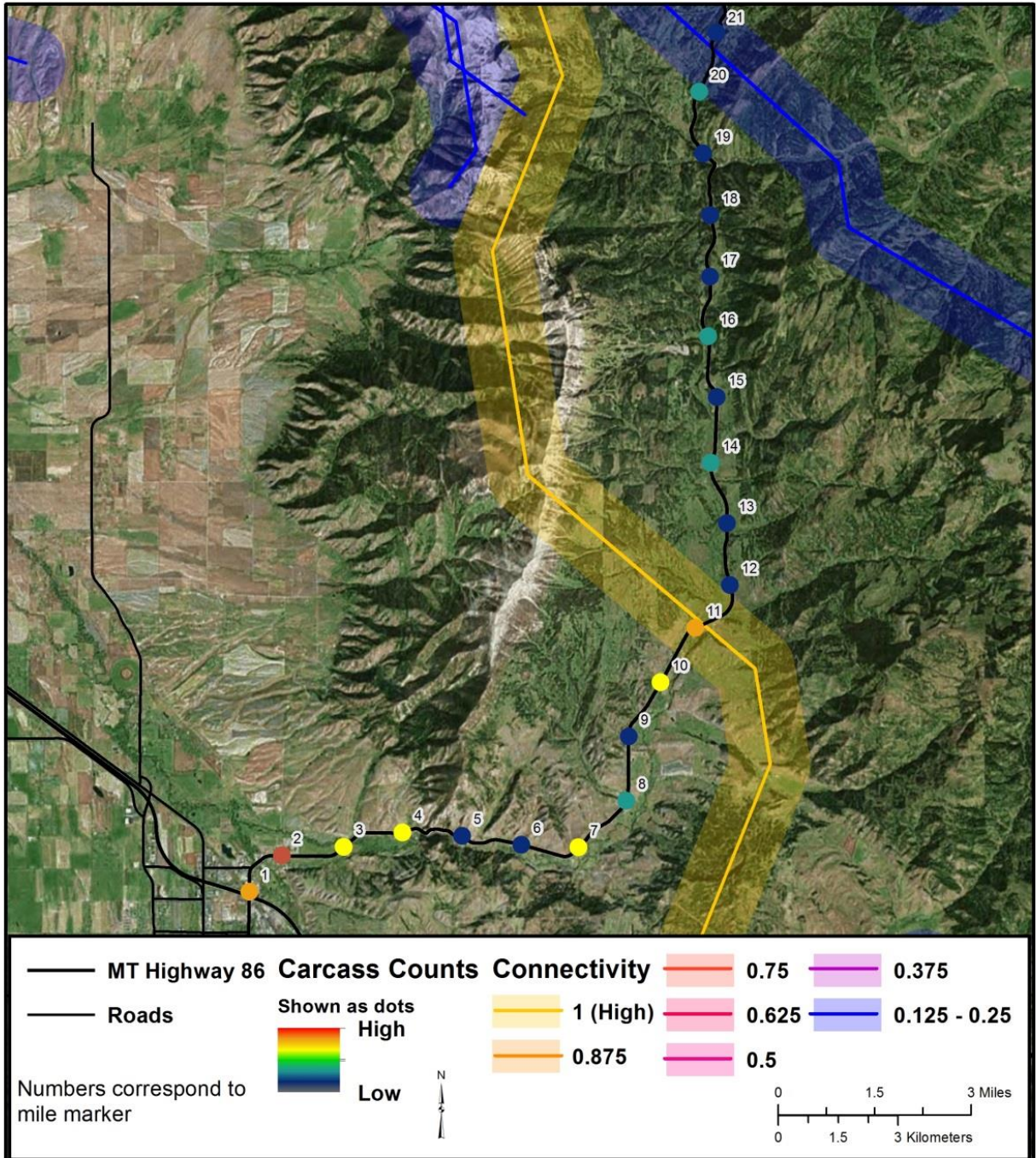


Figure 1. Carcass counts and WGA connectivity flowlines overlaid on MT 86 corridor study area. Sources: MDT Carcass Database, WGA Wildlife Corridors and Crucial Habitat connectivity analysis.

WGA Connectivity Analysis for U.S. Northern Rockies

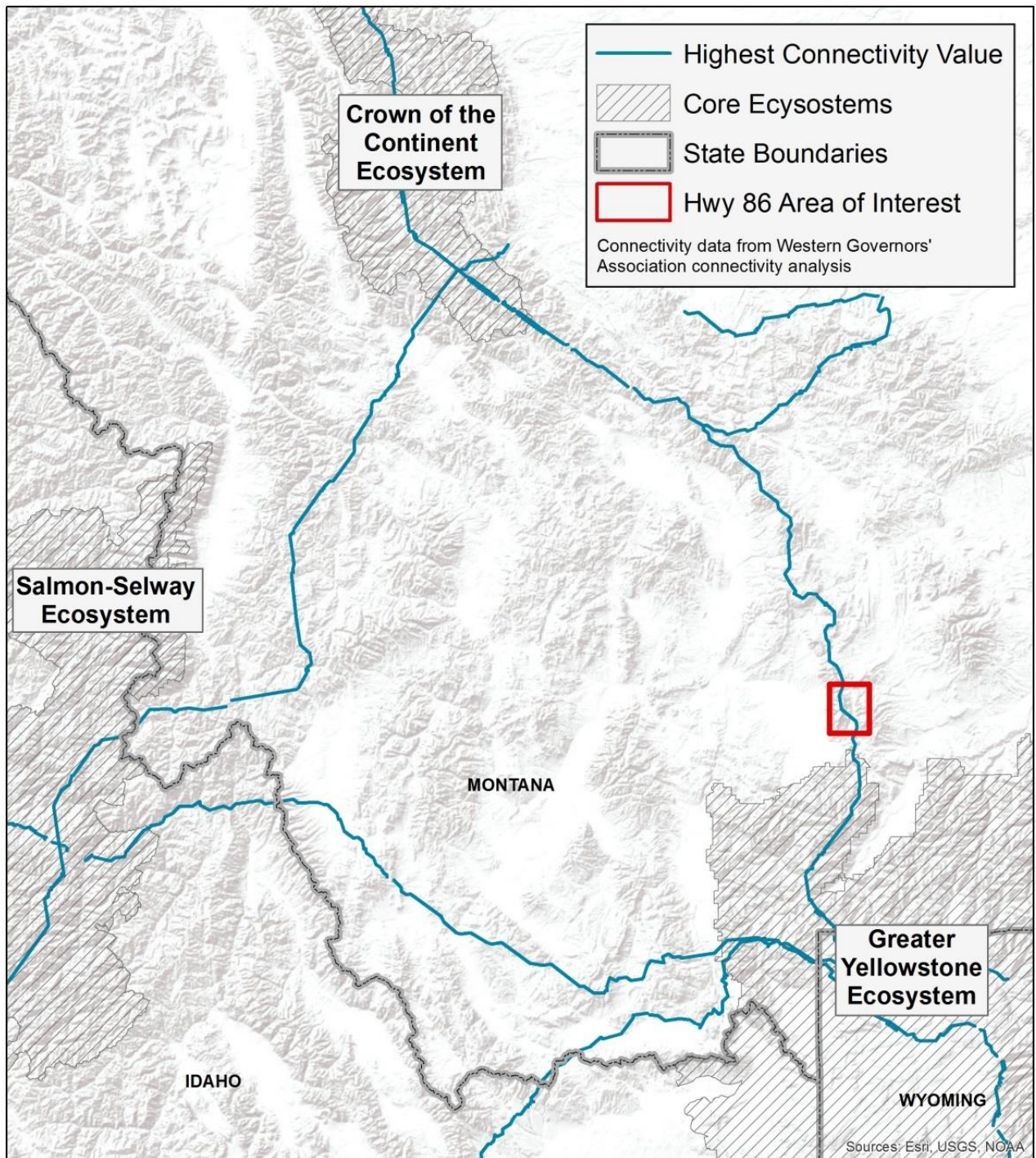


Figure 2. Highest connectivity value flowlines between major ecosystems of the U.S. Northern Rockies. Source: WGA Wildlife Corridors and Crucial Habitat connectivity analysis.

The WGA connectivity analysis identifies the best potential linkages among these three remaining relatively intact systems. As depicted in Figure 2, the high centrality linkage crossing MT 86 is expected to be the most crucial connection between the Greater Yellowstone and Crown ecosystems; it first runs north from the GYE, across I-90, along the Bangtail Mountains and **across MT 86 – the study area** – into the Bridger Mountains, and northwest to the Crown Ecosystem.

c. Any future improvements must preserve or improve ecological connectivity.

It is critical that any future improvements consider the importance of this region to broad-scale connectivity, and take steps to protect against further fragmentation. By considering wildlife early in the process, it is likely that relatively minor modifications, such as widening replacement culverts or bridges to allow for both terrestrial and aquatic passage, may be incorporated at minimal cost, while substantially maintaining or improving connectivity.

II. The Bozeman Pass Wildlife Corridor study provides a surrogate for those species likely to use the GYE to Crown Ecosystem linkage.

Although we are not aware of any connectivity studies focused on the Bridger Canyon corridor, the Craighead Institute, American Wildlands, and their partners studied another link, near Bozeman Pass, in the chain connecting the GYE to the Crown Ecosystem. Specifically, study partners applied a least-cost model to delineate routes across the landscape that provide the best opportunities for successful travel between habitat areas. They focused on three species (grizzly bear, elk, and cougar) and four variables (habitat suitability, habitat complexity, weighted road density, and building density). Field workers also compiled road-kill data, track surveys, and remote camera data to confirm wildlife use. They found that Bozeman Pass was used not only by the three focal species, but by many other species as well, including wolf, red fox, deer, marmot, mink, and weasel. As a result, the study delineated the Bozeman Pass Wildlife Corridor, located about 40 miles north of Yellowstone National Park between the towns of Livingston (to the east) and Bozeman (to the west). The corridor, which links the Bridger and Bangtail mountains (to the north) with the GYE (to the south) and encompasses approximately 908 km² or 223,917 acres, effectively serves as a surrogate for those species likely to use the remainder of the corridor and, therefore, to encounter MT 86.

As part of that effort, a variety of mitigation activities were undertaken, including:

- *Transportation corridor.* Highway I-90 and Montana Rail Link bisect the area. Taking advantage of a scheduled resurfacing and bridge replacement project, MDT agreed to rebuild a highway bridge across the railroad tracks and install fencing and moose guards to redirect wildlife under the interstate through existing bridges and culverts.
- *Wildlife-vehicle collisions.* MDT worked to deploy changeable message signs and highway radio advisories to inform motorists of wildlife movement in an effort to reduce wildlife collisions and maintain and improve wildlife movement.
- *Land development.* Homes and the potential of increased land development were additional sources of fragmentation. To protect the land within the corridor from further

development, over 2,000 acres are under conservation easements; county zoning restrictions limit further housing development on 20,000 acres; and coalbed methane development has been prohibited on 18,000 acres.

By taking wildlife into consideration during future improvements, MDT will be building upon existing efforts to reweave this landscape in a way that re-connects the GYE, currently an ecological island, with the Crown Ecosystem and other intact lands in the northern U.S. and southern Canada.

III. MDT should take steps to incorporate wildlife mitigation as part of any improvements that increase the operational speed of MT 86.

Certain improvements – in particular, straightening out horizontal or vertical curves – will likely increase the speed at which motorists will be able to drive on MT 86. (This is known as the “operating speed,” which should not be confused with the legally posted speed limit, the subject of recent changes along the corridor.)

Numerous studies indicate that the operating speed of a highway is one of the most significant predictors of wildlife-vehicle collisions (e.g., Newman et al. 2012), as the driver’s reaction time is reduced to a fraction of the time s/he would have to react at slower speeds. Found & Boyce’s (2011) models suggest that lowering legally posted speed limits on roads traveling through areas with a high deer-vehicle collision risk may also lead to a reduction in collisions. Lowering posted speed limits has also been shown to reduce vehicle collision rates with bighorn sheep and elk (Bertwhistle 1999). Two of these species are abundantly present in the study area, with deer (87%) and elk (6.5%) being involved in the overwhelming majority of reported wildlife-vehicle crashes (Draft E-Scan, Table 5, at 11).

Although the posted (legal) speed may be higher or lower than the operating speed, at least one study of traffic speeds in Yellowstone National Park concluded that “[a]ctual speeds averaged 16 mph higher than the [55 mph] posted speed limits on road segments where design and condition did not act to slow vehicle speeds” (Gunther *et al.* 1998). Other studies similarly conclude that road improvements, including straightening out curves, increasing lane and shoulder widths and paving gravel surfaces, are associated with an increase in wildlife-vehicle collisions (Vokurka & Young 2008; Leblond *et al.* 2007; Jones 2000; Gunther *et al.* 1998).

To the extent MDT proposes any improvements that will increase the operational speed of MT 86, it should recommend specific, tangible actions to reduce the effect of such modifications on the ability of wildlife to safely cross MT 86.

IV. MDT should coordinate with the Bozeman to Bridger Mountain Trail Project to identify win-win-win opportunities to improve safe passage for bicyclists, pedestrians and wildlife.

The City of Bozeman, Federal Highway Administration-Western Federal Lands (FHWA), Gallatin National Forest, and MDT have jointly undertaken a project to design and construct a 2-mile bicycle-pedestrian path along an overlapping portion of the MT 86 study area, from Story Mill Road in Bozeman to the “M” trailhead parking lot. Based on MDT’s Carcass Database, this 2-mile stretch coincides with relatively high carcass counts along the corridor.

As depicted in Figure 3, among other improvements, the project is actively considering a possible bicycle-pedestrian crossing under MT 86 to connect the “M” parking lot with the Drinking Horse Mountain trailhead. GVLTL, MSWP, and the undersigned residents of Bridger Canyon urge MDT to work with project stakeholders to determine whether it is feasible to develop a multi-use overpass or underpass that would accommodate bicycle, pedestrian and wildlife passage (both large and small wildlife, and possibly aquatic, as well, depending upon location).

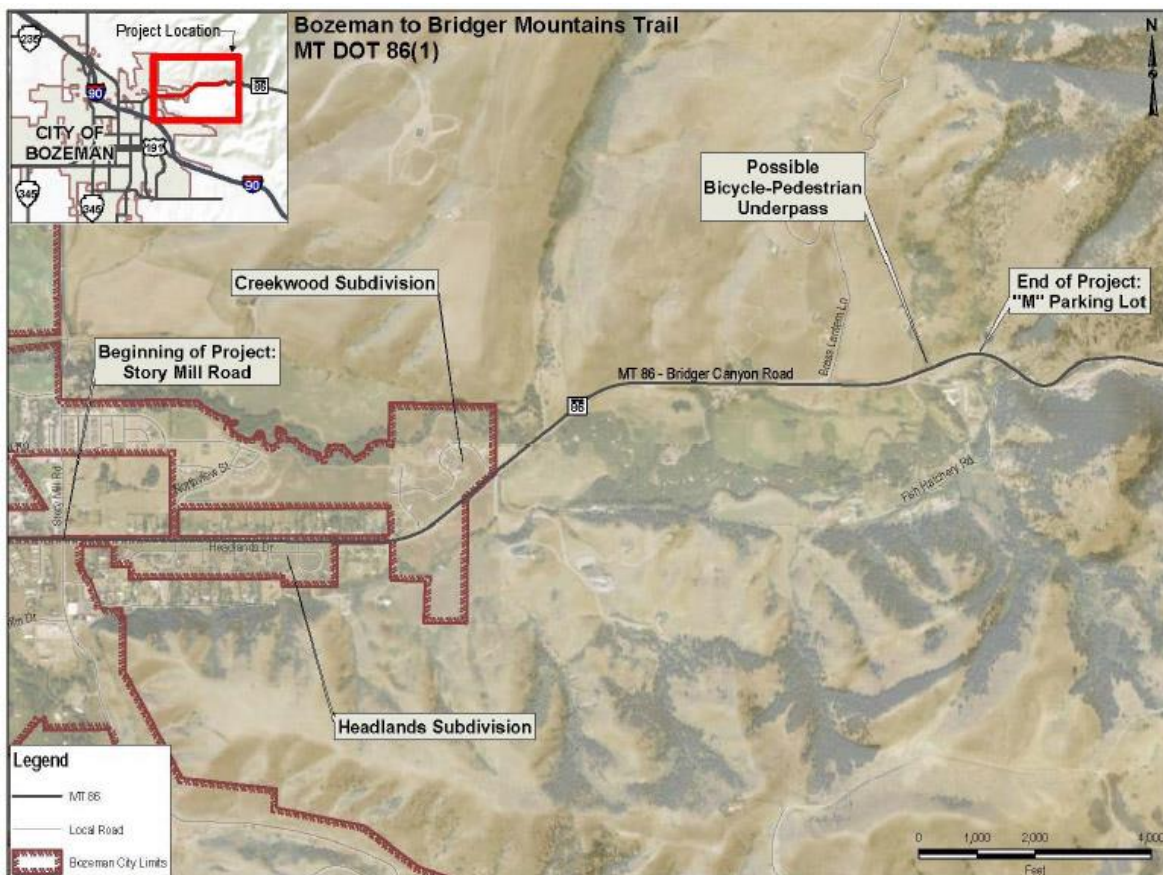


Figure 3. Proposed Bozeman to Bridger Mountains Trail project, comprising a 2.1-mile bike path adjacent to MT 86. The project starts at the Story Mill Road intersection and ends at the “M” parking lot, and includes a possible bicycle-pedestrian underpass. Available on the internet: <http://www.wfl.fhwa.dot.gov/projects/mt/mtrail/>.

Conclusion

Thank you for the opportunity to comment on the Study. We respectfully request that you consider these comments as you develop options for short- and long-term improvements along the MT 86 corridor. If you have any questions regarding our comments or the information we have provided, please do not hesitate to contact us.

Respectfully submitted,

Gallatin Valley Land Trust

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Montanans for Safe Wildlife Passage

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Literature Cited

- Bertwhistle, J. 1999. The effects of reduced speed zones on reducing bighorn sheep and elk collisions with vehicles on the Yellowhead Highway in Jasper National Park. *In: Proceedings of the International Conference on Wildlife Ecology and Transportation*, Missoula, MT, p. 727-735.
- Found, R. & M.S. Boyce. 2011. Predicting deer-vehicle collisions in an urban area. *Journal of Environmental Management* 92: 2486-2493. Doi:10.1016/j.jenvman.2011.05.010
- Gunther, K.A., M.J. Biel, H.L. Robison. 1998. Factors Influencing the Frequency of Road-killed Wildlife in Yellowstone National Park. *In: Proceedings of the 1998 International Conference on Wildlife Ecology & Transportation*, Fort Myers, Florida.
<http://www.icoet.net/downloads/98paper05.pdf>
- Jones, M.E. 2000. Road upgrade, road mortality and remedial measure: impacts on a population of eastern quolls and Tasmanian devils. *Wildlife Research* 27: 289-296. Doi: 10.1071/WR98069
- Leblond, M., C. Dussault, J. Ouellet, M. Poulin, R. Courtois, & al., e. 2007. Electric fencing as a measure to reduce moose-vehicle collisions. *Journal of Wildlife Management* 71(5): 1695-1703.
- Neumann, W., G. Ericsson, H. Dettki, N. Bunnefeld, N.S. Keuler, D.P. Helmers, V.C. Radeloff. 2012. Difference in spatiotemporal patterns of wildlife road-crossings and wildlife-vehicle collisions, *Biological Conservation* 145: 70–78. Doi:10.1016/j.biocon.2011.10.011.
- Vokurka, C.S. & R.K. Young. 2008. Relating Vehicle-Wildlife Crashes to Road Reconstruction. *In: Transportation Research Board, 86th Annual Meeting*, Washington, DC.
- Western Governors' Association. 2008. Wildlife corridors initiative: June 2008 report. Western Governors' Association. Denver, CO. Available on the internet:
<http://www.westgov.org/wildlife>