

Appendix A

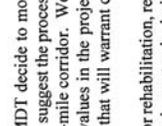
CONSULTATION, COORDINATION AND
COMMUNITY INVOLVEMENT



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| <p>10/31/2012 Stan Wilmoth, Ph.D.</p> | <p>Big Sky, Big Land, Big History. Montana Historical Society</p> <p>October 31, 2012</p> <p>JEFF KEY, PE ROBERT PECCIA & ASSOCIATES POB 5653 HELENA MT 59604</p> <p>RE: Tongue River Road Corridor Planning Study</p> <p>Dear Mr. Key:</p> <p>Thank you for providing us a copy of the planning study for the Tongue River Road. Could you please tell me what response was given to the request in Appendix A, under public comments, from apparently a member of the public to be added to the mailing list for archaeological and cultural sites in the study area?</p> <p>Sincerely,</p> <p> Stan Wilmoth, Ph.D. State Archaeologist/Deputy, SHPO</p> <p>RECEIVED NOV 01 2012 Robert Peccia & Associates</p> <p><i>Historic Preservation Museum Outreach & Interpretation Publications Research Center</i></p> | <p>Thank you for your comments. Information requested was forwarded to the individual submitting the comment.</p> |

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| <p>11/05/2012</p> <p><i>Doris Fischer</i></p> | <p>Hi Jeff,</p> <p>Was just reading through the CPS draft report for Secondary 332. I have two questions that you may be able to answer:</p> <ol style="list-style-type: none"> 1. What is the posted speed currently, on both the paved and unpaved portions? 2. Once an improvement option advances, when would the follow-up consultations with FWP field biologists occur (e.g., before or after STIP nomination and listing, before or after ROW negotiations begin, etc.)? <p>Thanks! Appreciate the repeat emphasis given in your report to the need for follow-up consultations with FWP re: fish and wildlife issues.</p> <p>Doris</p> | <p>Thank you for your comments.</p> <p>Information requested was forwarded to the individual submitting the comment.</p> |
| <p>11/08/2012</p> <p><i>Teresa Erickson</i></p> | <p>Dear Mr. Key,</p> <p>Northern Plains intends to file comments on the corridor study but I see that November 13 is the published deadline on your website which seems extremely short especially given that the Tongue River Railroad EIS scoping hearings and comment deadlines are also on an extremely fast deadline with hearings next week and deadlines for comments on December 6th. We request an extension of time until at least mid-December to give meaningful and substantive comments on the corridor study. It seems unnecessary for this study to be on an artificially fast timeline other than to coincide with Governor's Schweitzer's departure from office.</p> <p>As you may know, this valley has many resources not the least of which is ranching and outstanding hunting. The impact of paving what is now a relatively narrow dirt road at tax payer expense in order to accommodate Arch Coal needs close and careful evaluation and scrutiny. The public cannot possibly give meaningful comment in such a short time frame especially given the other need for public comment on the Surface Transportation Board scoping.</p> <p>I would very much appreciate a response from you and an extension of time. Please do not hesitate to contact me by phone or email if you should have any questions.</p> <p>Sincerely,</p> <p>Teresa</p> | <p>Thank you for your comments.</p> <p>Information requested was forwarded to the individual submitting the comment. The deadline for receipt of comments was extended to November 20, 2012.</p> |

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| <p>11/16/2012 Mark Fix</p> | <p>I wanted to send you some more comments regarding the Tongue River Road Project. I think you need to look at the application from the Tongue River Railroad (TRR) and the latest scoping meeting notice to get more information in regard to your study http://www.stb.dot.gov/stb/index.html. You should look under FD 30186 0 and look at the decisions related to the TRR. The scoping hearings are going to look at 4 different routes. One route will follow the Tongue River Road. That route would continue on the West side of the Tongue River all the way to Ashland. Another route will be where it has been proposed in the past on the West side of the river and goes back to the East side near the end of highway 332. A third route would cut across near the Moon Creek drainage near the existing BN line and the fourth would go to Colstrip from Otter Creek. The original route would propose to move the Tongue river road in a few places South of the Brandenberg Bridge. It also shows a bridge near the end of the 332 road. I don't know if that is a bridge for the road across the railroad or a bridge for the train across the road. This could alter the estimates you have provided in the study.</p> <p>I appreciate all the work you have done on the study and I would like to see the road paved. It would cause some severe changes to some of the ranching operations. The Ball Ranch just above the Brandenberg Bridge would probably lose their circle pivot if the road is moved through their fields. The state land that is crossed further upriver also proposes to move the Tongue River Road closer to the river and the road was previously moved away from the river to avoid erosion of the road into the river. The railroad proposes a culvert in the same spot that the current road has a bridge. There could be other areas where the proposed TRR and the Tongue river road will have problems.</p> <p>I think that more people would take the Tongue River road if it was paved. We usually try to take a pickup or a vehicle with 10 ply tires to avoid getting flat tires when we travel the Tongue River Road. My wife drives the road twice a week. She works in Lame Deer and by taking the Tongue River road it saves her 30 minutes of driving time versus driving from our ranch to Miles City and then going to Lame Deer via the Colstrip exit from I-94.</p> | <p>Thank you for your comments.</p> <p>Additional language was added to the <i>Corridor Study Report</i> that discusses the TRR's revised application to the Surface Transportation Board for a new rail line, and also clarifies that an EIS is in process and at the scoping stage.</p> |

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| <p>11/20/2012</p> <p>David Risley (MT FWP)</p> | <div style="text-align: center;">  </div> <p>PO Box 200701 Helena MT 59620-0701 (406) 444-9817 FAX: (406) 444-4952 Ref:DO302-12 November 20, 2012</p> <p>Tom Kahle, MDT Project Manager MDT Statewide and Urban Planning P.O. Box 2001001 Helena, MT 59620-1001</p> <p>Dear Mr. Kahle:</p> <p>Thank you for the opportunity to offer input during the Corridor Planning Study for the Tongue River Road. In response to the draft CPS report dated October 23, 2012, we offer the following comments:</p> <ul style="list-style-type: none"> • We appreciate the report's incorporation of our input provided to date and look forward to offering more specific information if and when a proposed project advances. • Stated objectives for this highway corridor are outlined on page ix of the report. Objective 2.1 refers to animal-vehicle conflicts. We suggest this objective be expanded as follows: Evaluate and incorporate "best practice" mitigation strategies as appropriate to reduce animal-vehicle conflicts and maintain wildlife connectivity. • Should MDT decide to move forward with proposed major improvements to the Tongue River Road, we suggest the process include an Environmental Assessment at the very least, if not an EIS, of the 50-mile corridor. We believe a Categorical Exclusion would not be appropriate. Fish and wildlife values in the project area are high, and both fish passage and wildlife connectivity are concerns that will warrant careful site analysis and design solutions. • Any major rehabilitation, reconstruction, and/or extended paving of the Tongue River Road would likely involve not only design/build activities, but also right-of-way negotiations and speed limit review. All such elements of a highway improvement project have the potential to cause adverse impacts on wildlife, and we urge you to take this into full account as more detailed plans and preparations take shape. <p>Sincerely,  David Risley Fish and Wildlife Administrator</p> <p>c: Jeff Key, Robert Peccia & Associates Brad Schmitz, Regional Supervisor, FWP Region 7 Doris Fischer, Land Use Planning Specialist, FWP</p> | <p>Thank you for your comments. MDT recommends considering improvements with respect to wildlife and aquatic connectivity impacts in the report (pg. 25). No changes were made to corridor study "Needs and Objectives".</p> |

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| <p>11/20/2012</p> <p>Monique DiGiorgio (MT's for Safe Wildlife Passage)</p> |  <p>November 20, 2012</p> <p><i>Via MDT Online Comment Form and E-mail</i></p> <p>Tom Kahle, MDT Project Manager Montana Department of Transportation Online Comment Form Rail, Transit and Planning Division</p> <p>Re: Comments on Draft Tongue River Road (S-332) Corridor Planning Study</p> <p>Dear Mr. Kahle:</p> <p>Montanans for Safe Wildlife Passage (MSWP) submits the following comments on the Draft Tongue River Road (S-332) Corridor Planning Study (Study) that was developed in accordance with the 2011 Legislature's directive that the Montana Department of Transportation (MDT) "... survey and provide design and preliminary engineering work to improve State Secondary 332." (Study at vii.) We appreciate receiving the one week extension of the comment deadline from November 15th to November 20th.</p> <p>MSWP formed in 2011 to bring individuals and conservation groups together to advocate for innovative solutions to improve and/or maintain habitat connectivity across Montana roads and provide safe passage for Montana's people, fish, and wildlife. Our members include individuals who have been working on improving wildlife passage for wildlife and aquatic species for over 15 years, including research, mapping, monitoring, policy work, and on-the-ground projects.</p> <p>First, we would like to commend MDT for your Corridor Planning Process that allows for earlier planning-level coordination with the community, resource agencies, and other entities. This process is an excellent way to ensure adequate community involvement early on in the transportation planning process and can provide a more meaningful and thorough NEPA/MEPA process.</p> <p>Through these comments, we hope to bring to your attention the importance of wildlife considerations in the Tongue River corridor, a riparian area of critical importance to wildlife in Eastern Montana. We also highlight specific instances in which MDT should more fully consider the effect of any proposed improvement options on wildlife, including recommended actions MDT can take to mitigate the effects of any proposed improvements on the motoring public as well as Montana's wildlife. Finally, we question whether the overall purpose and need of the Study, as currently written, is adequate to justify the proposed improvement "Concepts" and hope the final draft addresses more fully the issues we raise.</p> <p>I. Background Information: Safe Wildlife Passage In Montana</p> <p>A. Good planning for wildlife means safer highways for Montanans.</p> <p>Wildlife-vehicle collisions cause human fatalities, injuries, property damage, and pose safety and maintenance challenges for departments of transportation. A 2007 study, requested by Congress pursuant</p> | <p>Thank you for your comments.</p> |

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| | <p>to the SAFETEA-LU Act, estimated that one to two million collisions between cars and large animals occur every year in the United States. (Huijser <i>et al.</i> 2007.) Even though the overall number of collisions has leveled off at around 6 million per year (1990-2004), the relative percentage of collisions due to animals has increased. Specifically, wildlife-vehicle collisions have increased by 50% in the past fifteen years, from fewer than 200,000 per year in 1990 to approximately 300,000 in 2004 – about 5% of all reported motor vehicle collisions. (Huijser <i>et al.</i> 2007.) State Farm Insurance similarly reported in 2009 that deer-vehicle collisions had jumped 18% in the prior five years, even though the number of vehicles had increased by only 7%.¹</p> <p>An estimated 200 people die and 26,000 people are injured each year in the U.S. due to wildlife-vehicle collisions, and the total annual cost of wildlife-vehicle collisions is estimated to exceed \$8 billion. (Huijser <i>et al.</i> 2007.) The average costs to a motorist from colliding with a deer include: \$1,840 in vehicle repair costs, \$2,702 in medical costs, \$125 in towing and law enforcement services, \$2,000 for the monetary value of the animal, and \$50 for carcass removal and disposal, which totals \$6,717. Note that these figures are from 2007 and are likely much higher today.</p> <p>The cost averages for larger animals, such as elk and moose, are even higher (\$3,000 and \$4,000, respectively). (Huijser <i>et al.</i> 2007.) In addition to endangering Montanans, wildlife-vehicle collisions also constitute a major threat to survival for some of the nineteen federally listed threatened or endangered animal species in Montana and the U.S., including lynx. (<i>id.</i>)²</p> <p>Studies indicate providing wildlife passage across highways save lives, animals, and money. Wildlife crossings (with fencing) are estimated to reduce vehicle collisions with large wild ungulates by 80 to 90%. (Woods 1990, Clevenger <i>et al.</i> 2001, Dodd <i>et al.</i> 2007.) A series of six underpasses (with fencing) on State Route 260 near Payson, Arizona, for example, has realized a benefit of greater than \$6,000,000, based on the Western Transportation Institute's most recent estimate of cost of elk-vehicle collisions.³ A study conducted by Utah State University further demonstrated that mitigation efforts to reduce deer-vehicle collisions could produce a net positive economic gain and increase driver safety. The study estimated that the overall cost for 13,020 collisions from 1996 to 2001 in Utah was approximately \$45,175,454, resulting in an estimated average per year cost of about \$7,529,242 and a mean collision cost of \$3,470. (Bissonette <i>et al.</i> 2008.)</p> <p>Here in Montana, when discussing the numerous wildlife crossings installed in the Ravalli area on Hwy 93 N., Confederated Salish and Kootenai Tribes Wildlife Program Manager Dale Becker stated, "For the most part I think we're intercepting a lot of the deer strikes and a lot of the bear collisions." Becker noted, "The research is ongoing, to give you an idea in the Ravalli area, from May of 2008 to December of 2009,</p> | <p>¹ State Farm Insurance, September 28, 2009. Deer-Vehicle Collision Frequency Jumps 18 Percent in Five Years. Bloomington, Illinois.</p> <p>² Threatened, Endangered, and Candidate Species in Montana (November 2011). Found on-line at: http://www.fws.gov/montana/fieldoffice/Endangered_Species/Listed_Species/TECList.pdf</p> <p>³ CDOT Briefs. March 6, 2009. I-70 temporarily closed today to move elk from median. Post Independent, Glenwood Springs, CO.</p> <p style="text-align: right;">November 20, 2012 COMMENTS TONGUE RIVER CORRIDOR STUDY PAGE 2</p> |

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| | <p>through camera work and tracking surveys, there were documented a bit over 6,500 wildlife crossings or uses of the crossing structures.⁴</p> <p>Wildlife-vehicle collisions also have financial implications for governmental agencies. Law enforcement incurs costs to investigate collisions, while transportation or other related state agencies incur costs to remove and dispose of carcasses and repair damaged infrastructure. (Huijser <i>et al.</i> 2007.) In addition to saving human and animal lives, inclusion of strategies to mitigate wildlife-vehicle collisions on Montana's highways thus will save MDT money by decreasing the costs for carcass removal and disposal, law enforcement, and emergency services. Agencies should take advantage of such win-win opportunities to save money while improving road safety for Montanans and wildlife.</p> <p>B. Federal and regional efforts support the integration of wildlife considerations early in the planning process.</p> <p>Over the last five years, numerous state and federal initiatives and instruction memoranda support the integration of wildlife consideration early in the planning process to protect wildlife habitat and movement corridors. The most notable effort is the Western Governors' Association (WGA) Wildlife Corridors Initiative (Western Governors' Association 2008) that is working to:</p> <ul style="list-style-type: none"> • Make the preservation of wildlife corridors and crucial habitat priorities for transportation planning, design, and construction; • Integrate conservation and transportation coordination, planning, and implementation across jurisdictions. <p>As part of the WGA effort, Montana Fish, Wildlife and Parks has been hailed as a leader because of its work in developing the Crucial Areas Planning System (CAPS)⁵ when planning for aquatic and wildlife passage. Among other things, CAPS can be used to generate GIS maps that show habitat for fish and wildlife, including crucial areas for aquatic and wildlife corridors. Where the WGA, CAPS and/or other tools show that a proposed project will harm aquatic and wildlife connectivity, federal and state agencies have properly committed to implement mitigation measures aimed at offsetting the identified harm.</p> <p>At the federal level, Montana Department of Transportation should be aware of a Federal Highway Administration (FHWA) June 1, 2010 memorandum regarding the Wildlife Vehicle Collision (WVC) Reduction Study Training Course (attached). That memorandum, which was sent from FHWA Administrators to the Director of Field Services, Federal Lands Highway Division Engineers, and Division Administrators, recognized the usefulness of the training during evaluation of wildlife-collision mitigation strategies. Significantly, the memorandum further urged <i>all FHWA divisions to adopt the practice of "incorporat[ing] this consideration of wildlife and safety needs into their Categorical Exclusion and other documentation checklists" because "early consideration can result in project design features that decrease wildlife mortality and increase safety for vehicle drivers and passengers"</i> (emphasis added, Attachment at 2). Montana Department of Transportation should similarly incorporate</p> | |

⁴ KXLH 9, June 29, 2011. Animal crossing structures saving lives in Montana. Found online: http://www.kxll.com/news/animal-crossing-structures-saving-lives-in-montana/?fb_comment_id=fb-10150288607176077_17520218_10150289352616077

⁵ Found online at <http://fwp.mt.gov/fishAndWildlife/conservation/inAction/crucialAreas.html>
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| | <p>wildlife-vehicle mitigation strategies into their highway project checklists and other documentation to ensure that these strategies are not only considered early, but that appropriate funding levels are also included within the first initial project budgets.</p> <p>II. Comments: The Draft Tongue River Road Corridor Planning Study</p> <p>At this time, MSWP has reviewed the Draft Tongue River Road Corridor Planning Study (Study) and offers the following comments on the overall purpose and need and recommended concept plans for S-332 and the likely effect of the proposed improvements on wildlife in Montana and how the Study can be improved by including more information and cost estimates to mitigate the harmful effects of the proposed Concepts.</p> <p>A. Purpose and Need</p> <p>The stated purpose of the Study is to determine financially feasible improvement options to address safety and geometrical concerns within the transportation corridor based on needs presented by the community, the study partners, and resource agencies. However, given the flat or negative county population growth, negative traffic growth rates, as well as the lower crash rates and crash severity levels compared to the statewide average, it does not appear that safety issues or AADTs are the driving force for this study. Rather, it seems that anticipated truck traffic from Otter Creek Coal is the driving force for the interest in transportation improvements along S-332. Thus, the purpose and need does not appear to be an accurate reflection of the current situation.</p> <p>Moreover, there is a pending proposal to extend the Tongue River Railroad segment from Ashland to Miles City, expressly for the purpose of transporting "coal from the proposed mine sites in Rosebud and Powder River Counties, Montana, including the proposed mines in the Otter Creek area" (Notice of an Intent to Prepare an Environmental Impact Statement, in <i>Tongue River RR Co., Inc.</i>, STB Docket No. FD 30186, 77 Fed. Reg. 64592, 64593 (Oct. 22, 2012)). According to the Notice, "the [Surface Transportation] Board must approve a construction application unless it finds that the construction is 'inconsistent with the public convenience and necessity.'" (<i>Id.</i>) The Tongue River Railroad predicts that the anticipated train traffic on the proposed segment "would consist of 26 round trips per week, or 2.7 loaded unit coal trains daily on average, with 7.4 trains per day total (empty and loaded)." (<i>Id.</i>) Yet, as discussed below, the current Study projects a potential 17-fold increase in the traffic along S-332, solely as a result of increased truck traffic to transport Otter Creek's coal. Each proposal cannot reasonably be examined in a vacuum. Rather, the current Study and the pending railroad extension are two sides of the same coin. If the railroad extension is approved, then there is no justification whatsoever for spending tens of millions of dollars on S-332 (Concepts 3-5), given its very low AADTs and low crash rate.</p> <p>Accordingly, any future studies of the S-332 corridor must assess the entirety of the impacts of significantly increased truck and/or railroad traffic on the area. Rather than assessing only the proposed upgrades to S-332, it is critical that MDT assess the cumulative and related effects of the planned and prospective activities along the corridor, including increased truck and/or railroad traffic, increased</p> <p style="text-align: right;">NOVEMBER 20, 2012 COMMENTS TONGUE RIVER CORRIDOR STUDY PAGE 4</p> | |

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| | <p>polluted runoff into 303d listed streams, increased air pollution, increased likelihood of wildlife-vehicle collisions, increased release of greenhouse gasses, and associated climate change impacts.</p> <p>We, however, welcome the opportunity for MDT to enhance this secondary route for landowners and the community that is utilizing the road to address maintenance, safety and environmental concerns along the corridor. Given the comments to date on the importance of the rural and agricultural character of the study area, the best option to meet MDT's stated need in Chapter 4: Preserve the Environmental, Cultural, Recreational, and Agricultural Nature of the Corridor, would be to do minimum upgrades to S-332, maintain the gravel sections of the road, and limit the amount of truck traffic in this rural area.</p> <p>B. Stakeholder Engagement</p> <p>MSWP would like to thank you for engaging stakeholder early in the transportation planning process through this Corridor Study. We recommend adding non-governmental organizations, landowner alliances, and conservation organizations to your outreach list. The list of stakeholders identified in the Study (at 3) is limited in scope. We recommend the following groups be added to your outreach list to ensure that stakeholders interested in conservation, agricultural lands, private landowner interest, and wildlife concerns have an opportunity to provide meaningful input:</p> <ul style="list-style-type: none"> • Northern Plain Resources Council, Billings, MT, Contact: Teresa Erickson • Montanans for Safe Wildlife Passage and all of its members, Contact: Monique DiGiorgio, Monique@commonsgroundconservation.com; 406-548-1592 <ul style="list-style-type: none"> ○ Center for Large Landscape Conservation ○ Defenders of Wildlife ○ Future West ○ Western Environmental Law Center ○ Craighead Institute ○ Yellowstone to Yukon Conservation Initiative ○ Wildlands CPR • Alternative Energy Resources Organization, Helena, MT Contact Kevin Moore 443-7272; http://www.aeromt.org/food-ag <p>C. Environmental Setting & Biological Resources</p> <p>I. Riparian Areas</p> <p>Estimates for the total area of Montana's land base that are riparian range from 2-4% percent.⁶ "Wetlands and riparian areas are among Montana's greatest treasures. They are essential to maintaining water quality and the supply of clean water, and contribute in many ways to Montana's quality of life. While less than five percent of the total landscape in the western United States is wetland/riparian, over 75</p> <p><small>⁶ A Planning Guide for Protecting Montana's Wetlands and Riparian Areas, by Janet Ellis and Jim Richard, a Montana Watercourse, MDEQ, and MT Audubon publication produced by MSU in 2008. Page 2-1</small></p> <p style="text-align: right;"><small>NOVEMBER 20, 2012 COMMENTS TONGUE RIVER CORRIDOR STUDY PAGE 3</small></p> | |

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| | <p><i>percent of animals in the west are highly associated with these areas.</i>⁷ These two critical facts, along with the fact that the S-332 runs along the Tongue River through-out the entire Study Area, should be stated in the Wetlands Section 3.4.1.4, which should be revised to be titled "Wetlands & Tongue River Riparian Corridor." Although the Study (at 23) states that "Wetlands impacts should be avoided to the greatest extent practicable" and (at 25) states the same thing with regard to "riparian river, stream or creek habitats," the reader of the current draft is left wondering how the different Concepts, especially Nos. 3-5, will impact these critical resources, as there is no description of where the current road is located in relation to the Tongue River or where any potential road expansion will place the road or fill into riparian/wetland areas.</p> <p>Based upon maps of the area, it appears the large majority of S-332 is located away from the riparian vegetation of the Tongue River, but there are approximately two dozen tributary stream crossings as shown in Appendix D of the Environmental Scan. Thus, the current location of the road impacts riparian vegetation at these crossings and possibly several points along the Tongue River such as Garland and Big John Creek. Thus, our concern is that Concepts 3-5 could and likely would impact wetland and riparian areas to a much greater extent than the current road, but the possibility of that occurring (or not) is not addressed in the Study. It is not enough to just state that "Formal wetland delineations will need to be conducted" (at 23). A reader of this Corridor Study should at least have a better understanding of the magnitude and likelihood of impacting a resource that represents only 2-4% of Montana's land base (and in this particular area of MT, it would be closer to 2%). Additionally, if complete avoidance of wetland and riparian resources is not possible for Concepts 3-5, then a general estimate of the additional costs of environmental mitigation measures should be reflected in the estimated costs for those concepts.</p> <p>2. Tongue River Flood Plain</p> <p>The Study (at 23) sets forth the applicable laws that regulate improvements in the floodplain, but again, there is no information about the possibility of Concepts 3-5 encroaching upon the floodplain. This Corridor Study should inform the reader whether or not the current location of the road is entirely outside of the Tongue River floodplain and how likely encroachment is under Concepts 3-5 and approximately how great a length of the floodplain corridor could be impacted. If the study can document where 35 spot improvements are needed and where 46 vertical curves are at issue, then surely it can also provide this type of information in regards to potential wetlands, riparian, and floodplains encroachment. This information should be important in MDT's and other decision-makers' determination of which Concept to choose.</p> <p>3. Water Quality</p> <p>The Study (at 22) states that the Tongue River is listed as a 303(d) water body and that probable causes for the water quality impairment include increased lead, nickel, salinity, solids, and sulfates from stream bank modifications/destabilization (among other causes). There is zero information in the Study or the</p> | <p>⁷ Montana Fish Wildlife & Parks: Montana Wetlands and Riparian Areas: A 2002 Study, FWP RMU Research Summary No. 8 fwp-ant.gov/fwpDoc.html?id=11059</p> <p>November 20, 2012 Comments TONGUE RIVER CORRIDOR STUDY PAGE 6</p> |

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| | <p>Environmental Scan about any projections on how the various Concepts could decrease the river's water quality. If a portion of the impairment is due to stream bank destabilization from the current road, then it is seems probable that further impairment could occur from widening the roads and laying back and straightening out curves. Whether or not such improvements will likely exacerbate the Tongue River's status as a 303(d) river should be addressed at least at a basic level.</p> <p>4. Geology</p> <p>The Study states (at 21) that S-332 traverses the alluvial terraces of the Tongue River and the Environmental Scan in Appendix C provides descriptions of the various silty, sandy, clay soil types, all of which are prone to landslides as was evidenced in many slumps and slides early this year. The report states (at 16) that "evidence of continued subsurface failure was noted at some of the [slide] locations," but there is no discussion of what challenges the geology presents for the road improvements listed in the Concepts. The challenging geology within the Study Area merits further discussion in terms of additional costs for the various Concepts and long-term maintenance issues.</p> <p>5. Prime Farmland</p> <p>The Study states that activities associated with the construction of the Tongue River Road Corridor will likely create impacts to the soil map units with prime and important farmland status. The farmland soils map provided in Appendix B of the Environmental Scan indicates that farmland soils of Statewide Importance and Prime Farmland soils make up the large majority of the entire Study Area. Agricultural lands and working landscapes are important for wildlife habitat and movement as well as an increased quality of life. We are concerned that a greater level of activities along the Tongue River Road Corridor will result in loss of important agricultural activities and farmland.</p> <p>6. Fish & Wildlife</p> <p>We are pleased to see that animal-vehicle collisions and habitat connectivity are identified as a concern to be addressed on S-332, and that "there is a desire for underpass overpass structures to protect wildlife and due to the sensitivity of the area." (Study at 5.) We concur with this statement and encourage MDT to consider all options to provide safe passage for wildlife including culverts, underpasses, overpasses, span bridges, animal detection systems, and wildlife friendly fencing on lower volume sections of the roadway. We are also supportive of the Environmental Scan (Appendix B) recommendation to maintain the riparian vegetation on both sides of the riparian corridor to ensure terrestrial connectivity. (<i>Id.</i>, App. B, at 15.)</p> <p>We are also pleased to see that MDT utilized MT Fish, Wildlife and Parks CAPS database in this corridor study, including a full assessment in Appendix E. Acknowledgement of the need for fish passage and connectivity, especially given the fact that all Yellowstone fish species have the ability to migrate upstream into the Tongue River because of the construction of the Muggli Bypass and removal of the SH dam.</p> <p>MDT should also consider that paving S-332 will likely act as a barrier to ecological connectivity and increase habitat fragmentation. Indeed, the severely limited scope of MDT's analysis – specifically</p> <p style="text-align: right;"> <small>November 20, 2012 Comments Tongue River Corridor Study PAGE 7</small> </p> | |

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| | <p>defined as ½ mile “buffer” on each side of S-332 (Study at 1), by its very nature, is likely to understate the effect of MDT’s proposed improvement options (Forman, 2000). Road width and traffic density are the two most significant contributors to the “barrier effect” (Forman & Alexander 1998), with certain animals, including elk, moose, grizzly bear, and mountain lions, being particularly vulnerable to the barrier effect of roads. (E.g., Ward, 1976; Frederick, 1991; Dickson <i>et al.</i>, 2005; Dussault <i>et al.</i>, 2007.)</p> <p>Impacts to fish and wildlife will be reduced to the greatest extent possible with a corresponding reduction in the scope and extent of upgrades, including paving, to S-332. If construction occurs, MSWP recommends:</p> <ul style="list-style-type: none"> • Fish and wildlife passage opportunities at regular intervals along the entire stretch of S-332; • Additional information gathering, including MT CAPS as well as a more thorough mitigation analysis that is expanded to detail specific activities and estimated costs; • The use of wildlife friendly fencing whenever possible. <p>The Study (at 26) states that animal-vehicle collisions are unreported within the study area. In order to understand the depth and breadth of the issue, MSWP recommends more information be provided in the Wildlife Section of the Study about the number and distribution of ungulates in the Study Area that are moving back and forth across the road. The Environmental Scan (at 18) states that the area provides the “highest value winter range for both mule deer and white-tail deer” and thus this could be discussed further in terms of how increased traffic will likely negatively impact these species. Elk are also in the Study Area but not even mentioned in the report. We recommend a pre- and post-construction study to inform the placement of wildlife crossing structures.</p> <p>III. Transportation Conditions</p> <p>1. Traffic Volume</p> <p>As noted, it appears that the primary justification for proposed action is to accommodate the anticipated increase in traffic volume as a result of coal extraction at the Otter Creek coal tracts. Indeed, based on the most recent 20 years of traffic data, the projected average annual growth rate is less than a quarter of a percent (0.24%). (Study at 18.) Moreover, from RP 11.0 to RP 49.5, the average annual historical and projected growth rates were <i>negative</i> in three of the four time frames examined (1992-2011; 1992-1999; 2000-2011; 2005-2011). (<i>Id.</i>) Based on the average annual growth rate over the past 20 years, the number of projected vehicles per day (VPD) for the unpaved portions of S-332 varies from a high of 105 at RP 11.0 to a low of 53 vehicles per day at RP 39.5 and 49.5. Although there is not a “rule of thumb” for when a road should be paved, MDT notes that “traffic volumes of approximately 200 VPD may be a potential threshold for paving a roadway.” (<i>Id.</i> at 33.) Clearly, the projected volumes based on the past 20 years do not come close to justifying paving (Concept 5). It is only when projected increases due to development of the Otter Creek coal tracts are included that the “potential threshold” of 200 VPD is exceeded. (<i>Id.</i> at 20, Table 12, compare Baseline Scenario with Scenarios 1-3.)</p> <p>Based on the <i>Otter Creek Property Summary Report</i>, it would take 30 loaded trucks per hour, based on an assumed work schedule of 350 working days per year and 24 hours per day, to transport 10 million tons of coal per year. (<i>Id.</i> at 19.) The Report further states that:</p> <p style="text-align: right;">NOVEMBER 20, 2012 COMMENTS TONGUE RIVER CORRIDOR STUDY PAGE 8</p> | |

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| | <p>[T]his is the equivalent to one loaded truck every two minutes. In addition, an empty truck would pass by in the opposite direction every two minutes. In all, a total of 1,440 truck trips per day would be needed to haul the estimated coal production. (<i>id.</i>)</p> <p>Similarly, paving cannot be justified by the available crash data or the sufficiency of the existing bridges. In particular, the Study indicates that there have been 18 crashes along S-332 between January 1, 2001 and December 31, 2011. This translates into a rate of 0.86 crashes per million vehicle miles.⁸ In contrast, the statewide crash rate for a rural secondary highway is 1.40. Stated differently, the crash rate on S-332 is 38% lower than the statewide rate for similar roads. Surely, scarce transportation funds should be allocated to those roadways that would give Montanans the biggest improvement in rural safety per dollar spent.</p> <p>Nor can the proposed improvements be justified based on the condition of bridge crossings. As the Study indicates, bridge structures with a rating of 0-49.9 are eligible for replacement, while structures with a rating of 50-80 are eligible for rehabilitation. In this case, “[a]ll four bridges within the study areas were determined to be not structurally deficient and not functionally obsolete for the current conditions. (<i>id.</i> at 17, emphasis in original.) Indeed, three of the four bridges have ratings of over 90 (RP 19.87, sufficiency rating of 90.1; RP 39.61, rating of 91.3; RP 47.80, rating of 97.7). The fourth has a rating of 68.0 (RP 1.02), although eligible for rehabilitation, it is otherwise considered structurally sufficient. Again, rather than spend limited transportation dollars replacing three structurally sufficient bridges, as is proposed in Concepts 3-5, Montanans would be better served by those funds being expended on replacing, repairing or rehabilitating the estimated 391 structurally deficient bridges in Montana, the top 10 of which have average annual daily traffic that ranges from a low of 12,670 to a high of 37,280 vehicles per day.⁹</p> <p>2. Increased Speed</p> <p>Currently, the paved portion of S-332 (RP 00 to RP 17.7) has a speed limit of 70 mph, while the unpaved portion (RP 17.7 to RP 50.4) has a speed limit of 45 mph. If MDI were to pave S-332 in its entirety, as is proposed in Concept 5, it is likely that the design speed for all or a significant portion of the newly paved road would increase, depending on terrain and other improvements (e.g., straightening out curves) (<i>id.</i> at 11), and the posted speed would increase to 70 mph. Numerous studies indicate that traffic speed is one of the most significant predictors of wildlife-vehicle collisions (e.g., Newman <i>et al.</i> 2012), as the driver’s reaction time is reduced to a fraction of the time at slower speeds. Indeed, Found & Boyce’s (2011) models suggest that simply reducing speed limits on roads traveling through high deer-vehicle collision-risk areas could lead to a reduction in such collisions. Reductions in speed limits also have been shown to reduce vehicle collision rates with bighorn sheep and elk. (Bertwhistle 1999.)</p> | <p>⁸ Of those 18 crashes, one-third (six) involved collisions with either wild or domestic animals. All 18 crashes only involved a single vehicle with the majority involving “driver error, either driving too fast for the conditions or careless driving.” Study at 10.</p> <p>⁹ <i>The Fix We’re in For: The State of Montana’s Bridges</i>. Transportation for America Report at 4 & Table 2. http://t4america.org/docs/bridgereport/tables/bridgereport-mt.pdf</p> <p>NOVEMBER 20, 2012 COMMENTS TONGUE RIVER CORRIDOR STUDY PAGE 9</p> |

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| | <p>Although the posted (legal) speed may be higher or lower than the design speed (Study at 11), 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 <i>et al.</i> 1998.) If visitors to Yellowstone National Park – many of whom travel hundreds if not thousands of miles to experience its scenic beauty and to view wildlife – do not adhere to posted speeds where the road design allows higher speeds, it is difficult to imagine that the average person traveling on a newly paved and/or improved S-332 would not similarly adhere to the design, rather than the legal, posted speed limit.</p> <p>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 <i>et al.</i> 2007; Jones 2000; Gunther <i>et al.</i> 1998.) Improvements are also associated with increased residential development.¹⁰</p> <p>Thus, the increased speed that comes with paving and road straightening is our greatest concern in regards to impacts to wildlife as these upgrades will result in a tremendous increase in AVCs over the 50 mile Study Area as well as habitat fragmentation. Even if numerous wildlife crossings are installed along with fencing, those measures reduce but do not eliminate AVCs and reduce but cannot fully mitigate for the habitat fragmentation.</p> <p>IV. Proposed Concept Plans</p> <p>I. Estimated Costs</p> <p>The estimated cost of the five proposed Concepts vary widely (Study at 43, Table 17):</p> <table border="1" data-bbox="941 1092 1104 1596"> <thead> <tr> <th>Concept</th> <th>Estimated Cost</th> <th>Cost/Mile of Improvement</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>\$6,120,000</td> <td>\$121,428.57</td> </tr> <tr> <td>2</td> <td>\$4,924,000</td> <td>\$150,581.04</td> </tr> <tr> <td>3</td> <td>\$27,219,000</td> <td>\$832,385.32</td> </tr> <tr> <td>4</td> <td>\$37,909,000</td> <td>\$752,162.70</td> </tr> <tr> <td>5</td> <td>\$57,404,000 (24') to \$93,813,000 (40')</td> <td>\$1,138,968.25 to \$1,861,369.05</td> </tr> </tbody> </table> <p>Concept 5 (reconstruct with pavement) carries a particularly high price tag – between \$1.1 and \$1.9 million per mile of improvement. If the additional traffic due to the Otter Creek coal development is included, then the projected average annual daily traffic on S-332 increases 17-fold, from an average of 116 vehicles per day to 2,056 vehicles per day. At that projected traffic level, MDT design standards recommend a roadway width (travel lanes and shoulders) of 36'. (Study at 40.) In that event, it is likely</p> | Concept | Estimated Cost | Cost/Mile of Improvement | 1 | \$6,120,000 | \$121,428.57 | 2 | \$4,924,000 | \$150,581.04 | 3 | \$27,219,000 | \$832,385.32 | 4 | \$37,909,000 | \$752,162.70 | 5 | \$57,404,000 (24') to \$93,813,000 (40') | \$1,138,968.25 to \$1,861,369.05 | <p>All planning level cost estimates have been adjusted since the release of the Draft Corridor Study Report by adding a fifteen percent contingency factor to construction costs to account for unknown environmental mitigation measures.</p> |
| Concept | Estimated Cost | Cost/Mile of Improvement | | | | | | | | | | | | | | | | | | |
| 1 | \$6,120,000 | \$121,428.57 | | | | | | | | | | | | | | | | | | |
| 2 | \$4,924,000 | \$150,581.04 | | | | | | | | | | | | | | | | | | |
| 3 | \$27,219,000 | \$832,385.32 | | | | | | | | | | | | | | | | | | |
| 4 | \$37,909,000 | \$752,162.70 | | | | | | | | | | | | | | | | | | |
| 5 | \$57,404,000 (24') to \$93,813,000 (40') | \$1,138,968.25 to \$1,861,369.05 | | | | | | | | | | | | | | | | | | |

¹⁰ Land Use Effects of Paving Rural Roads, <http://www.headwatersineconomics.org/regional.php/#paving>, November 20, 2012. Coauthors: TONGUE RIVER CORRIDOR STUDY PAGE 10

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| | <p>that additional rights-of-way will need to be purchased from adjacent landowners. (<i>Id.</i> at 43.) These costs have not been included in the above estimates.</p> <p>The estimated costs also do not include costs likely to be incurred for wildlife mitigation measures, despite the fact that MDT repeatedly acknowledges the potential effect of the proposed improvements on wildlife-vehicle collisions and connectivity in the Study (at ix, x, 5, 25, 26, 32, 35). In particular, MDT states that “[d]ue to potentially extensive mitigation measures, project costs may be higher than typically expected and should be budgeted for in the planning process.” (<i>Id.</i> at 25.) Despite this recognition, none of the Concepts includes any estimates for the cost of anticipated wildlife mitigation measures, even though those costs are projected to be “higher than typically expected.” (<i>Id.</i>) Even though an exact dollar amount is not known, an estimate could be used based on similar measures taken on other highways, such as Highway 93 North & South.</p> <p>2. Recommendation on Preferred Concept Plan</p> <p>Based on our review of the proposed options and the feedback you have received from the community, MSWP strongly recommends that MDT move forward, if any investments are to be made, with Concept 2A: Gravel Placement, to improve the road surface and maintainability, Concept 1B: Slide Areas, to stabilize the slide areas, and Concept 1C: Guardrail, to improve safety. As noted in the study, concerns over paving have already been expressed by the community because it would:</p> <ul style="list-style-type: none"> • Decrease the quality of life in the area due to increased traffic and increased vehicle speeds; • Create safety hazards for livestock movement; and • Increase truck-traffic, especially as it relates to coal development. <p>In addition, stakeholders felt that the existing paved section of S-332 is in disrepair. Investments along this corridor should be made on existing infrastructure first, before new infrastructure and improvements, including paving new sections of roadway, are made.</p> <p>IV. Conclusion</p> <p>In conclusion, MSWP respectfully requests that MDT:</p> <ul style="list-style-type: none"> • Move forward, if any investments are to be made, with Concepts 1B & C and 2A. • Expand the draft study to incorporate wildlife-related mitigation measures and include their cost in the budget analysis of the proposed improvements. • If MDT moves forward with Concepts 1- 3, that the environmental documentation to meet NEPA/NEPA requirements be at a minimum an Environmental Assessment and if either Concept 4 or 5 is chosen, then an Environmental Impact Statement. <p>We would be happy to conduct site visits with you as you move forward with next steps. Wildlife mitigation can often be achieved by considering relatively minor adjustments, such as lengthening bridges and/or increasing the number and size of culverts to provide safe passage.</p> <p>We also ask that you add us to your contact list for all notifications of public meetings and newsletter publications regarding the Draft Tongue River Road Corridor Planning Study (Monique@commongroundconservation.com). If you have any questions/comments about this letter or</p> <p style="text-align: right;"> <small>NOVEMBER 20, 2012 COMMENTS TONGUE RIVER CORRIDOR STUDY PAGE 11</small> </p> | |

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| | <p>would like to meet with us, please don't hesitate to contact Monique DiGiorgio at the contact information below.</p> <p>Respectfully submitted,</p> <p>Montanans for Safe Wildlife Passage Monique DiGiorgio, Common Ground Conservation monique@commongroundconservation.com, 406-548-1592, PO Box 6190, Bozeman, MT 59771</p> <p>Renee Callahan, Center for Large Landscape Conservation renee@climateconservation.org</p> <p>Jacquelyn Corday, Citizen Advocate maureenecorday@yahoo.com</p> <p>Kylie Paul, Defenders of Wildlife & People's Way Partnership kyliepaul@hotmail.com, kpnauts@defenders.org</p> <p>Greg Costello, Western Environmental Law Center costello@westernlaw.org</p> <p>Bethanie Walder, Wildlands CPR wildlandscpr@wildlandscpr.org</p> <p>cc: Doris Fischer (MT Fish, Wildlife and Parks) Tom Martin, MDT Bureau Chief, Environmental Services Bureau Larry Sickerson, MDT Glendive District Biologist Shane Mintz, MDT, Administrator, MDT Glendive District John Hamilton, Representative Landowner Wayne Buck, Rosebud County Jeff Key, P.E., RPA Project Manager</p> <p><i>Via e-mail: dofischer@mt.gov; tommartin@mt.gov; sickerson@mt.gov; smintz@mt.gov; fkahle@mt.gov; cedarhillsranch@rangeweb.net; dbuck@rosbudcountymt.com; jeffkey@rpa-hln.com</i></p> | <p>NOVEMBER 20, 2012 COMMENTS TONGUE RIVER CORRIDOR PUBLIC INPUT PAGE 12</p> |

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| | <p>References:</p> <p>Bertwhistle, J. 1999. The effects of reduced speed zones on reducing bighorn sheep and elk collisions with vehicles on the Yellowstone Highway in Jasper National Park. <i>In: Proceedings of the International Conference on Wildlife Ecology and Transportation</i>, Missoula, MT, p. 727-735.</p> <p>Bissonette, J.A., C. Kassar, L. Cook. 2008. Assessment of costs associated with deer-vehicle collisions: human death and injury, vehicle damage, and deer loss. <i>Human-Wildlife Conflicts</i> 2(1):17-27.</p> <p>Clevenger, A. P., B. Chruszcz, and K. Gunson. 2001. Highway mitigation fencing reduces wildlife-vehicle collisions. <i>Wildlife Society Bulletin</i>. 29:646-653.</p> <p>Dickson, B.G., J.S. Jenness & P. Beir. 2005. Influence of vegetation, topography, and roads on cougar movement in Southern California. <i>Journal of Wildlife Management</i> 69(1): 264-276.</p> <p>Dodd, N. L., J. W. Gagnon, S. Boe, A. Manzo, & R. E. Schweinsburg. 2007. <i>Evaluation of measures to minimize wildlife-vehicle collisions and maintain permeability across highways: Arizona Route 260</i>. Final Report 540. FHWA-AZ-07-540. Arizona Department of Transportation, Phoenix, Arizona, USA.</p> <p>Dussault, C., J. Ouellet, C. Laurian, R. Courtois, & L. Breton. 2007. Moose movement rates along highways and crossing probability models. <i>Journal of Wildlife Management</i> 71(7): 2338-2345.</p> <p>Forman, R.T., & L.E. Alexander. 1998. Roads and their major ecological effects. <i>Annual Review of Ecology and Systematics</i> 29: 207-231+C2.</p> <p>Found, R. & M.S. Boyce. 2011. Predicting deer-vehicle collisions in an urban area. <i>Journal of Environmental Management</i> 92: 2486-2493. Doi:10.1016/j.jenvman.2011.05.010</p> <p>Frederick, G.P. 1991. Effects of forest roads on grizzly bears, elk, and gray wolves: A literature review. USDA Forest Service, Kootenai National Forest, Montana. 49 pp.</p> <p>Gunther, K.A., M.J. Biel, H.L. Robison. 1998. Factors Influencing the Frequency of Road-killed Wildlife in Yellowstone National Park. <i>In: Proceedings of the 1998 International Conference on Wildlife Ecology & Transportation</i>, Fort Myers, Florida. http://www.icot.net/downloads/98paper05.pdf</p> <p>Huijser, M.P., P. McGowen, J. Fuller, A. Hardy, A. Kociolek, A.P. Clevenger, D. Smith & R. Ament. 2007. Wildlife-vehicle collision reduction study. Report to congress. U.S. Department of Transportation, Federal Highway Administration, Washington D.C., USA. <i>available at:</i> http://ftp.odot.state.or.us/techserv/ORWildlifeMoveStrategy/WildlifeConnectionsConference/Wildlife_Vehicle_Collision_Reduction_report_to_Congress.pdf.</p> <p>Jones, M.E. 2000. Road upgrade, road mortality and remedial measure: impacts on a population of eastern quolls and Tasmanian devils. <i>Wildlife Research</i> 27: 289-296. Doi: 10.1071/WR98069</p> <p>Leblond, M., C. Dussault, J. Ouellet, M. Poulin, R. Courtois, & al., e. 2007. Electric fencing as a measure to reduce moose-vehicle collisions. <i>Journal of Wildlife Management</i> 71(5): 1695-1703.</p> | |

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| | <p>Neumann, W., G. Ericsson, H. Dettki, N. Bunnefeld, N.S. Keuler, D.P. Helmers, V.C. Radloff. 2012. Difference in spatiotemporal patterns of wildlife road-crossings and wildlife-vehicle collisions. <i>Biological Conservation</i> 145: 70-78. Doi:10.1016/j.biocon.2011.10.011.</p> <p>C.S. Yonkka & R.K. Young. 2008. Relating Vehicle-Wildlife Crashes to Road Reconstruction. <i>In: Transportation Research Board, 86th Annual Meeting</i>, Washington, DC.</p> <p>Ward, A.L. 1976. Elk behavior in relation to timber harvest operations and traffic on the Medicine Bow Range in south-central Wyoming. <i>Proceedings of the Elk-Logging-Roads Symposium</i>, 16-17 December 1975 (pp. 32-43), Moscow, Idaho, USA: Forest, Wildlife and Range Experiment Station, University of Idaho.</p> <p>Woods, J.G. 1990. <i>Effectiveness of fences and underpasses on the Trans-Canada highway and their impact on ungulate populations</i>. Report to Banff National Park Warden Service, Banff, Alberta, Canada.</p> <p style="text-align: right;">NOVEMBER 20, 2012 COMMENTS TONGUE RIVER CORRIDOR STUDY PAGE 14</p> | |

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| | <p>Attachment: FHWA June 1, 2010 Memorandum</p>  <p>Memorandum</p> <p>Subject: INFORMATION: FHWA Wildlife Vehicle Collision (WVC) Reduction Study Training Course</p> <p>Date: June 1, 2010</p> <p>From: Eric Toole, Associate Administrator for Office of Safety</p> <p>In Reply Refer To: HEPE</p> <p>To: Directors of Field Services Federal Lands Highway Division Engineers Division Administrators</p> <p>Gloria M. Shepherd Associate Administrator for Planning, Environment, and Realty</p> <p>The Office of Safety and the Office of Planning, Environment, and Realty wish to announce the availability of the FHWA Wildlife Vehicle Collision (WVC) Reduction Study Training Course. This course was developed by the Office of Planning, Environment, and Realty, the Office of Project Development and Environmental Review, and the Office of Federal Lands Management. This web-based course is now available at: http://www.environment.fhwa.dot.gov/WVCtraining/index.asp.</p> <p>This training is based on the findings of the Wildlife Vehicle Collision Reduction Study: Report to Congress which is available at: http://www.fhwa.gov/safety/hubs/08034/index.htm and the Best Practices Manual developed from that study. The Manual, which is the textbook for the course, may be accessed at: http://www.fhwa.dot.gov/environment/hcmec/wvc/index.htm. The Report to Congress, Best Practices Manual, and the Web-based course were developed in collaboration with representatives from State DOT(s), other federal agencies, and experts in the field of Wildlife Vehicle Collisions. This collaborative effort resulted in a thorough and in-depth process to identify WVC problem areas and habitat connectivity opportunities, and to evaluate effective mitigation strategies that can be implemented to reduce WVCs. The course covers a wide variety of these strategies such as wildlife fencing, animal detection systems and vegetation management in great detail.</p> <p>This web based course and the information it contains is particularly important at this time. The Congressional WVC study estimated that one to two million collisions between cars and large animals occur every year in the U.S. This presents a real danger to human safety as well as wildlife survival.</p>  | <p>NOVEMBER 20, 2012 COMMENTS TONGUE RIVER CORRIDOR STUDY PAGE 15</p> |

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| | <p>2</p> <p>Though human injuries and fatalities as a result of WVCs are relatively rare, they do occur and are a serious consequence of WVCs. More common impacts for drivers and their passengers are vehicle damage, secondary motor vehicle crashes, emotional trauma, and less direct impacts such as travel delays. WVCs can also require the assistance of law enforcement personnel, emergency services, and road maintenance crews for potential repairs and carcass removal. For animals, WVCs present an immediate danger to their individual survival, and further reduce the population survival probability of certain threatened and endangered species.</p> <p>The information presented in the Study, Manual and course is a useful tool in evaluating the need to accommodate wildlife collision mitigation strategies and connectivity needs during the environmental review process, regardless of the class of action of the environmental document. In addition to Environmental Assessments and Environmental Impact Statements, many Divisions and State DOTs have incorporated this consideration of wildlife and safety needs into their Categorical Exclusion and other documentation checklists. We encourage all divisions to adopt this practice since early consideration can result in project design features that decrease wildlife mortality and increase safety for drivers and passengers. In addition to the information resources outlined above, many states have collaborated with groups such as the National Wildlife Federation and local information regarding wildlife corridors and connectivity priorities. We have attached a summary prepared by the Western Environmental Law Center of some of these studies and tools.</p> <p>We are planning an informational webinar in the near future to highlight the features of the course. Logistical information for the webinar will be sent by separate email in the coming weeks. If you have any questions related to this effort please contact Mary Gray at mary.gray@dot.gov, or by phone at by 360-753-9487 or Dennis Durbin at 202-366-2066, dennis.durbin@dot.gov, in the Office of Project Development and Environmental Review or Carol Tan at 202-493-3315, carol.tan@fhwa.dot.gov, in the Office of Safety Research and Development.</p> | <p>NOVEMBER 20, 2012 COMMENTS TONGUE RIVER CORRIDOR PAGE 16</p> |

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| <p>11/20/2012</p> <p>Mark Wilson (USFWS)</p> | <div style="text-align: center;">  <p>United States Department of the Interior Fish and Wildlife Service</p> <p>Ecological Services Montana Field Office 585 Shepard Way Helena, Montana 59601-6287</p> <p>Phone: (406) 449-5225 Fax: (406) 449-5339</p> </div> <p>M.44 MDT (I) November 20, 2012</p> <p>Tom Kahle Montana Department of Transportation PO Box 201001 Helena, MT 59620-1001</p> <p>Dear Mr. Kahle:</p> <p>We received a CD containing the Draft Corridor Study Report for the Tongue River Road (S-332), from Jeff Key at Robert Peccia & Associates on October 29, 2012. Mr. Key's letter indicated that comments would be accepted on the draft report, until November 16, 2012. We appreciate the extension to send our comments in by November 23, 2012. This corridor study examines the current and future transportation needs and potential issues along Secondary Route 332, between Miles City and Ashland, Montana, in Custer and Rosebud counties. Our comments below are authorized under the authority of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 et. seq.), the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.), and the Migratory Bird Treaty Act of 1918 (MBTA), as amended (16 U.S.C. 703 et. Seq.), and the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d, 54 Stat. 250; BGEPA).</p> <p>Upon reviewing the draft corridor study report, the U.S. Fish and Wildlife Service (Service) wants to ensure that the following four items receive adequate attention in any projects that result from this report.</p> <ol style="list-style-type: none"> 1. With habitat and conveyance improvements that have occurred along the Tongue River due to the removal of the SH Dam and construction of the Muggli Bypass, all Yellowstone River fish species have the potential to utilize the entire Tongue River and tributaries within the corridor study area. As a result, it is important that all bridges or culverts be adequately sized and provide for fish passage. 2. With the mixture of native grasslands/sagebrush habitats, wetlands, riparian areas, and cultivated crop land, the potential exists for wildlife/vehicle collisions. In the event of increased average annual daily traffic (AADT) volumes due to current or future mining operations, accommodating for wildlife movement will be increasingly important for human safety and maintaining wildlife connectivity. | <p>Thank you for your comments.</p> <p>We have added additional language referencing the <i>2010 Montana Bald Eagle Management Plan</i>, per your suggestion, to Section 3.4.3.1.4 – Wildlife and Traffic Concerns of the Corridor Study Report.</p> <p>We have added additional language discussing MDT's protocol for minimizing the influence of noxious weeds during construction activities to Section 3.4.3.2.3 – Noxious Weeds of the Corridor Study Report.</p> |

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| | <p>3. The bald eagle (<i>Haliaeetus leucocephalus</i>) is no longer a state species of concern, or protected under the ESA. However, bald eagles are still protected under the BGEPA, and nest along the length of this corridor. During any construction activities that may result from this report, the Service recommends that the Montana Department of Transportation (Department) comply with the recommended temporary seasonal and distance construction buffers stipulated in the <i>2010 Montana Bald Eagle Management Guidelines: An Addendum to Montana Bald Eagle Management Plan (1994)</i>. Additionally, accommodating for safe wildlife passage along the corridor, as described in item 2 above, may reduce the risk of incidental take of eagles that might scavenge on roadside carrion.</p> <p>4. While the draft corridor study does noxious weeds, it should also discuss their impacts to native grasslands and sagebrush habitats. Because there is an abundance of these habitats along the corridor, and noxious weeds could have negative effects to federal candidate species greater sage-grouse (<i>Centrocercus urophasianus</i>) and Sprague's pipit (<i>Anthus spragueii</i>), there should be further discussion as to the effects of noxious weeds and how the Department manages them along state secondary routes.</p> <p>The Service appreciates your efforts to incorporate fish and wildlife resource concerns, including threatened and endangered species, into your project planning. If you have questions or comments related to this issue, please contact Mike McGrath of my staff at (406) 449-5225, extension 201.</p> <p>Sincerely, <i>Anne Vandenberg</i> For R. Mark Wilson Field Supervisor</p> | |

| Date | Comment |
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| | <p>Project Commenting On: Tongue River Road Corridor Planning Study Nearest Town/City to Project: Miles City Name: Kristi Jeffers Address Line 1: 2140 Tongue River Road City: Miles City State/Province: Montana Postal Code: 59301 Email Address: jeffers@rangeweb.net Phone Number: 406-421-5664</p> <p>Comment or Question:</p> <p>I have a lot of concern for the Tongue River Road. I have two children that will be of school age in the next three years. I also work in town. Whether I choose to take my children to the SH school or to town is a hard decision to make. It is much farther to town, but the road is so rough that it makes it hard to want to ruin a vehicle going to the SH. The Tongue River Road has a lot of traffic in general. The truck traffic is incredible. There are so many trucks, and with the road conditions, it sometimes makes it very hazardous for the other vehicles. I am also concerned for some of the paved road. There are a few places that need to be fixed instead of just covered up. I do wonder when the road will sink out from under a vehicle. Thank you for listening to my concerns and hopefully something will be done soon.</p> <p>Submitter's IP address: 67.218.79.15</p> <p>Reference Number = picomment_220184326171875</p> |
| <p>06/01/2012</p> <p><i>Jaimi Balsam</i></p> | <p>Good morning Jeff,</p> <p>I had the pleasure of meeting you last night just prior to the meeting at MCC. I'm the Small Business Development Center Director for SouthEastern Montana Development Corp in Colstrip.</p> <p>I just wanted to take the opportunity to tell you how well you facilitated the meeting last night. It was a difficult evening and a controversial situation, and you handled it with class and grace. Very well done.</p> <p>I hope to run into you again, and wish you the very best of luck!</p> <p>Sincerely,</p> <p>Jaimi Balsam</p> <p>Jaimi L. Balsam, Director SouthEastern Montana Small Business Development Center 6200 Main Street P.O. Box 1935 Colstrip, MT 59323 (406) 748-2990 Phone (406) 748-2990 Fax www.semhc.org</p> |
| <p>06/04/2012</p> <p><i>Catherine Byron</i></p> | <p>Hi, Jeff –</p> <p>Couldn't get your email to work so am using this one.</p> <p>Per our conversation after last night's meeting, attached you will find the Tongue River cultural/historical study recommending it for protection.</p> <p>You can find it on the web at:</p> <p>http://ncptt.nps.gov/wp-content/uploads/2007-12.pdf</p> |

| Date | Comment |
|---|--|
| | <p>This is an appendices insert for the draft Rosebud County Growth Plan.</p> <p>cb</p> |
| <p>06/07/2012</p> <p><i>Mark Fix</i></p> | <p>Hi Jeff,</p> <p>I missed the meeting as I was going to a funeral for an aunt in Colorado. Will try to get some comments in. Should I just send the comments to this e-mail?</p> <p>Mark</p> |
| <p>06/11/2012</p> <p><i>Mark Fix</i></p> | <p>Dear Mr. Kahle,</p> <p>I am writing to comment on the Tongue River Road study. I am located about 6 miles up the Tongue River Road and am on a paved section. It is great to have the highway paved and it has made access much nicer. A few years ago the highway was resurfaced and that helped the highway substantially. It is starting to develop cracks and should probably be resurfaced in the near future.</p> <p>I think that paving the Tongue River road would be beneficial to our area. I believe it would stimulate more people to bring their livestock and grain to Miles City for sale. More car traffic would occur if the road is paved. Many of the cars use alternate routes now to avoid gravel damage and flat tires to their cars. The major farm-to-market road should be paved.</p> <p>But I do have a number of concerns. How will this improvement be paid for? Will additional mill levies be assessed to pay for this project?</p> <p>I also believe that there are several things that need to be addressed when paving the road. I believe that a full environmental analysis that is documented in an environmental impact statement (EIS) must be done. For example, some of the areas along the road are open range, and cattle freely cross the road to get to water. The road and fences that would be installed would keep livestock from easily migrating to water. When the EIS is done, it should include an analysis of whether or not ranchers in these areas will need to drill wells for water when their cattle are fenced in as well as if there is adequate water available for this purpose.</p> <p>In addition the fences will separate pastures and cattle will not be able to utilize the pastures as well. Additional grade crossings may be required to move the cattle across the highway. Culverts will not be sufficient for cattle passes. The culverts get water in the bottom and ice will form in the winter. Many of the culverts may not be usable for a good part of the year. It may take some of the cattle a long time to learn to use the culverts and some may never use the culvert.</p> <p>Some of the route may need to be altered to pave the road. The EIS should look at the existing irrigation systems and verify whether or not the road can be moved without hampering the existing irrigation systems and water rights. If not, then how will this added cost be paid for?</p> <p>Our ranch would be crossed by the proposed Tongue River Railroad. It would go through about 3 miles of our ranch. The railroad is on the other side of the river, and I have a private bridge to cross the Tongue River. The majority of my ranch is located on the west side of the Tongue River. If this study is going to look at the development of the Otter Creek coal mining tracts, then it must also look at the Tongue River Railroad (TRR). The TRR is basically proposed on the opposite side of the river from the Tongue River Road. In order to fight fires and control weeds a road would need to be built on both sides of the river. This study and analysis should start at Miles City and go to Ashland. The TRR is proposed to cross back to the east side of the Tongue River near the end of this study area. The road would need to be built above Brandenburg on the east side of the river so that there would be access for fire and weed control. The EIS prepared for the Tongue River Road should be coordinated with the new EIS that must be done for the TRR based on the recent 9th Circuit Court of Appeals decision. By the way, the new EIS for TRR may analyze a route that does not go down the Tongue River as the coal is now destined for sale in China. This would mean that a new road may not need to be built if the TRR route is changed.</p> |



Informational Meeting

Discuss Tongue River Road Corridor Planning Study

**Thursday, May 31, 2012 6:00 p.m.
Miles Community College, Rm. 106
2715 Dickinson St., Miles City, MT**

The Montana Department of Transportation (MDT) will discuss the corridor study that begins 10 miles south of Miles City (RP 0.0) and ends two miles north of the Northern Cheyenne Indian Reservation along Tongue River Road (RP 50.4). The study will identify potential improvements and will assist in facilitating a smooth and efficient transition from transportation planning to future project development / environmental review, if any, based on need and funding availability. The Tongue River Road Corridor Planning Study is a planning-level study and is not a design or construction project. The purpose of the meeting is to inform interested parties about the scope and purpose of the planning study, present the initial findings of the existing conditions analysis, and to solicit input on the existing conditions and issues within the study area that may be relevant to the planning effort.

The meeting is open to the public and the public is encouraged to attend. MDT attempts to provide accommodations for any known disability that may interfere with a person's participation in any department service, program or activity. For reasonable accommodations to participate in this meeting, please contact Jeff Key at (406) 447-5000 at least two days before the meeting. For the hearing impaired, the TTY number is (406) 444-7696 or (800) 335-7592, or Montana Relay at 711. Alternative accessible formats of this information will be provided upon request.

Comments may be submitted in writing at the meeting, by mail to Tom Kahle, Project Manager, MDT Statewide and Urban Planning, PO Box 201001, Helena, MT. 59620-1001, or online at www.mdt.mt.gov/mdt/comment_form.shtml. Please indicate comments are for Tongue River Road Corridor Planning Study.



May 31, 2012

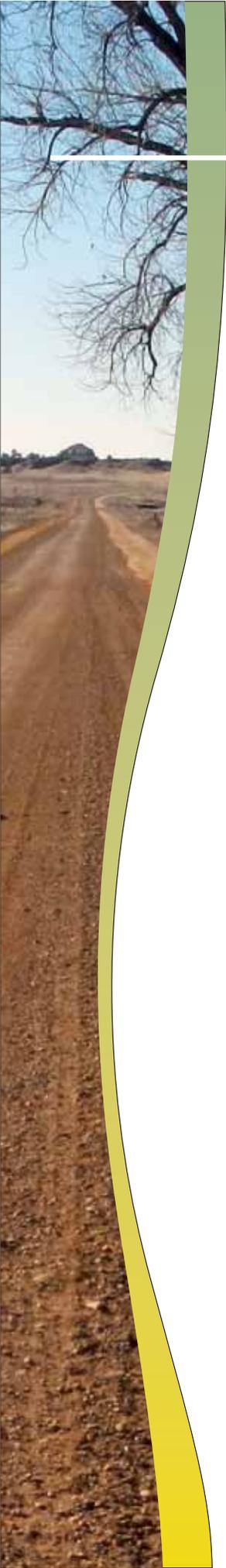
INFORMATIONAL MEETING #1

TONGUE RIVER ROAD (S-332) – Corridor Planning Study

WELCOME



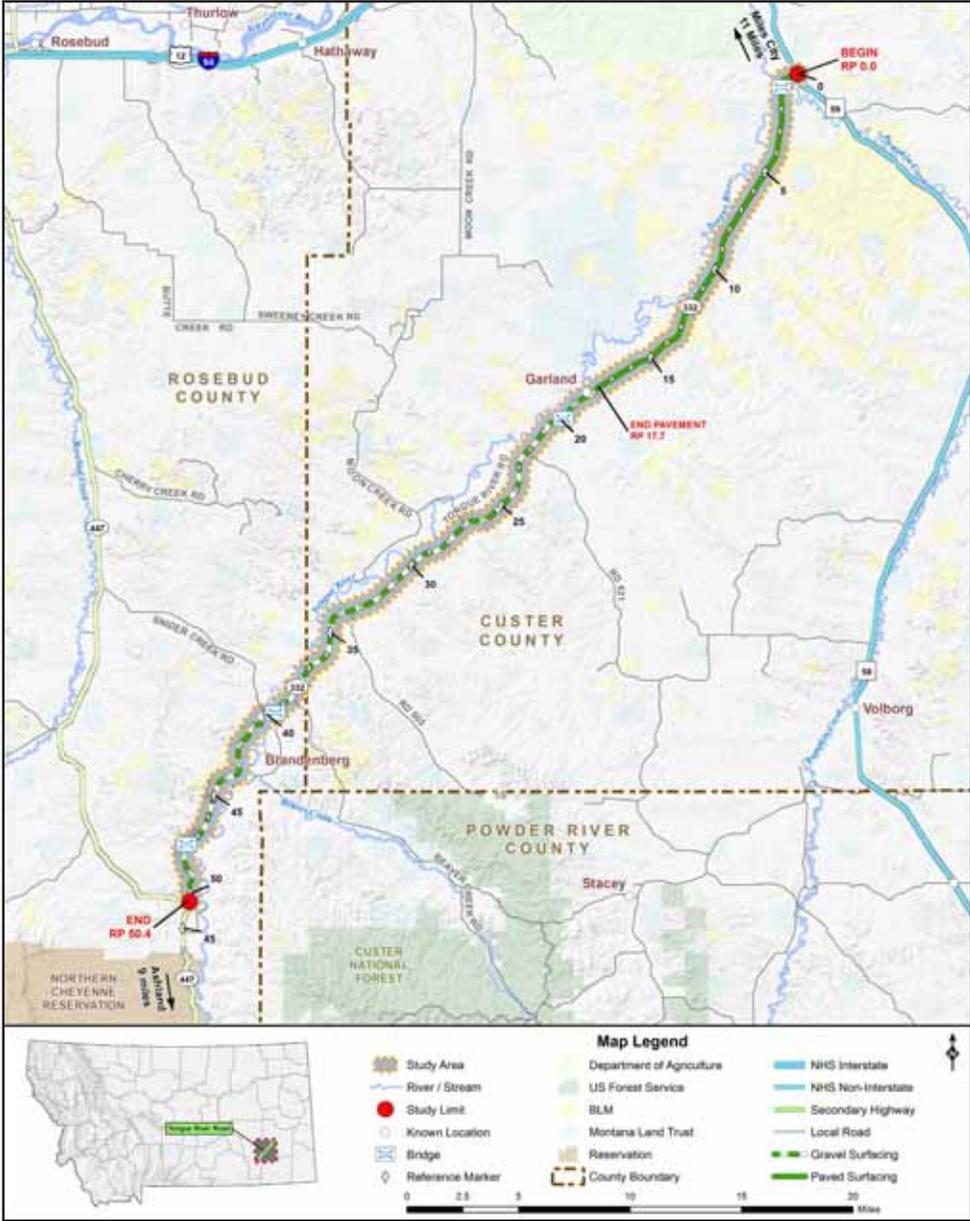
Montana Department of Transportation
Helena, Montana



INFORMATIONAL MEETING

TONGUE RIVER ROAD (S-332) – Corridor Planning Study

Study Area Boundary

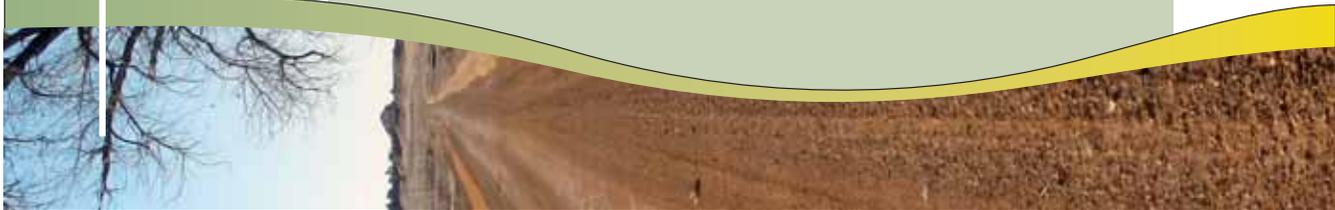


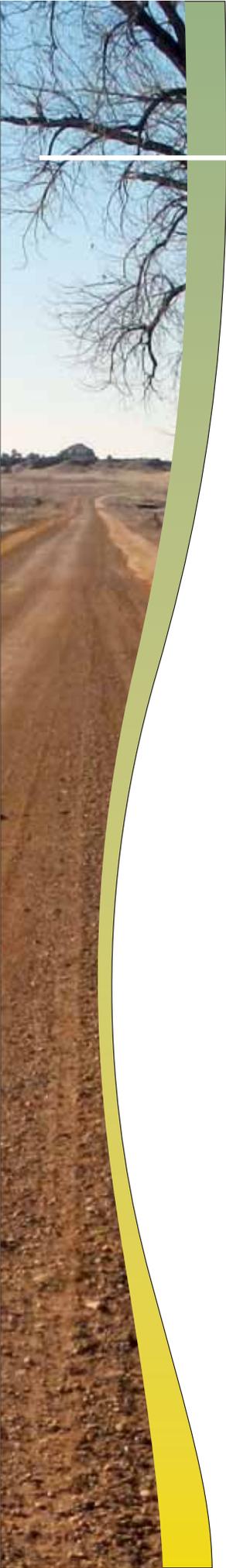
Montana Department of Transportation
Helena, Montana

INFORMATIONAL MEETING

TONGUE RIVER ROAD (S-332) – Corridor Planning Study

Study Schedule





INFORMATIONAL MEETING

TONGUE RIVER ROAD (S-332) – Corridor Planning Study

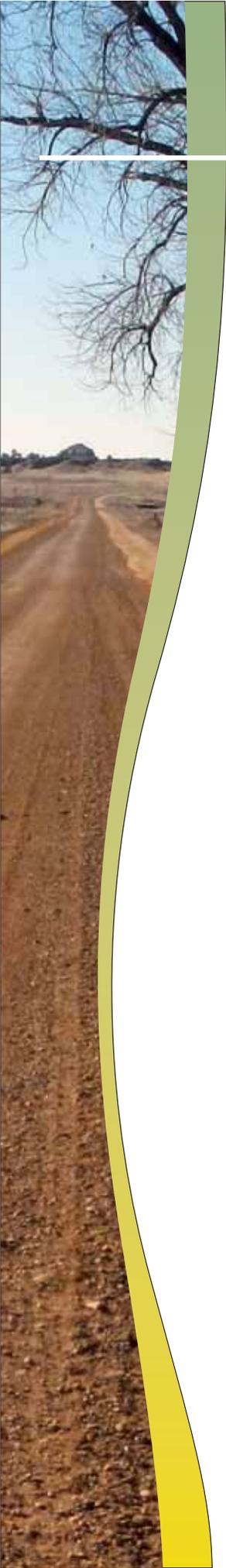
Pre-NEPA/MEPA Planning Studies

- Are not a NEPA/MEPA Study or Environmental Review
- Are not a Preliminary Engineering or Final Design Report
- Are not a Construction or Maintenance Project
- Are not a Right of Way Acquisition Project

NEPA - National Environmental Policy Act
MEPA - Montana Environmental Policy Act



Montana Department of Transportation
Helena, Montana



INFORMATIONAL MEETING

TONGUE RIVER ROAD (S-332) – Corridor Planning Study

Pre-NEPA/MEPA Planning Studies

- Are based on existing social, economic, environmental and roadway data and available reports
- Are a “high level scan” of the study area
- Define transportation issues/areas of concern
- Consider social, economic and environmental constraints at an early stage
- Identify and prioritize cost-effective and feasible strategies
- Provide opportunities for early and continuous community involvement

NEPA - National Environmental Policy Act
MEPA - Montana Environmental Policy Act



Montana Department of Transportation
Helena, Montana

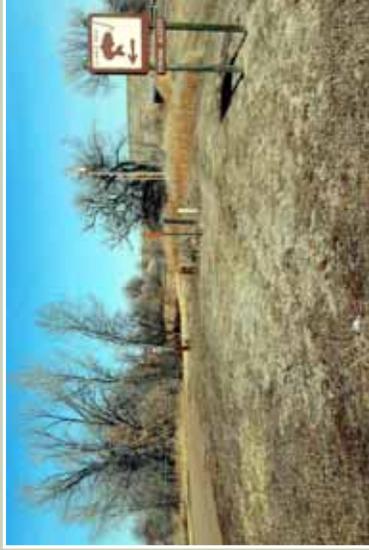
INFORMATIONAL MEETING

TONGUE RIVER ROAD (S-332) – Corridor Planning Study

PHOTOS



LOOKING NORTHEAST AT INTERSECTION
OF MT-59 AND S-332 (RP 0.10)



12 MILE DAM FISHING ACCESS SITE
ACCESS (RP 1.07)



PUMPKIN CREEK RANCH ACCESS
TO S-332 (RP 4.08)



LOOKING NORTHEAST IN GRAVEL SECTION
(RP 26.04)



ON ALIGNMENT LOOKING SOUTH
(RP 13.0)



TRUCK ACTIVITY ON PAVED SECTION
LOOKING NORTHEAST (RP 8.00)

INFORMATIONAL MEETING

TONGUE RIVER ROAD (S-332) – Corridor Planning Study

PHOTOS



LOOKING SOUTH ON ALIGNMENT AT BRIDGE OVER PUMPKIN CREEK (RP 0.96)



REPAIRED SLIDE AREA LOOKING NORTH (RP 3.70)



END OF PAVEMENT / GRAVEL SECTIONS LOOKING NORTHEAST (RP 17.70)



REPAIRED SLIDE AREA IN GRAVEL SECTION (RP 26.22)



LOOKING NORTHEAST ON ALIGNMENT IN GRAVEL SECTION (RP 32.08)



LOOKING EAST IN GRAVEL SECTION NEAR STATION (RP 32.7)

INFORMATIONAL MEETING

TONGUE RIVER ROAD (S-332) – Corridor Planning Study

PHOTOS



LOOKING NORTHEAST NEAR COUNTY LINE (RP 37.25)



LOOKING EAST AT TONGUE RIVER BRIDGE (RP 39.65)



BEGINNING OF "S-CURVES" WEST OF TONGUE RIVER BRIDGE (RP 40.40)



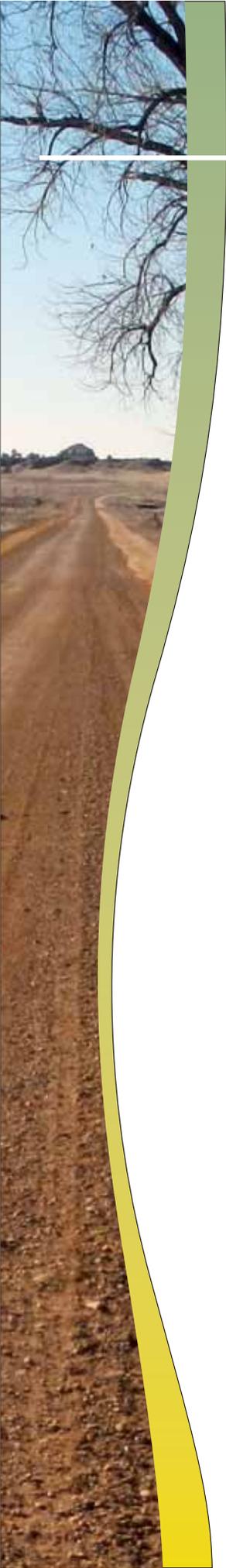
ON ALIGNMENT LOOKING NORTH (RP 42.90)



BRIDGE ACROSS UNNAMED DRAINAGE LOOKING NORTHEAST (RP 47.70)



LOOKING NORTH AT INTERSECTION OF S-447 / S-332



INFORMATIONAL MEETING

TONGUE RIVER ROAD (S-332) – Corridor Planning Study

Existing Conditions - Key Findings

Transportation System

Surfacing

- Longitudinal and transverse cracking in the asphalt surfacing (RP 0.0 to RP 17.7).
- Evidence of asphalt failure due to recent slides at intermittent locations.
- Gravel surfacing from RP 17.7 to RP 50.4. in fair condition.

Drainage

- Nine locations with evidence of recent slides indicating potential drainage issues.
- Four existing bridges with no drainage issues noted.

Horizontal Alignment

- Seven horizontal curves do not meet current standards.

Vertical Alignment

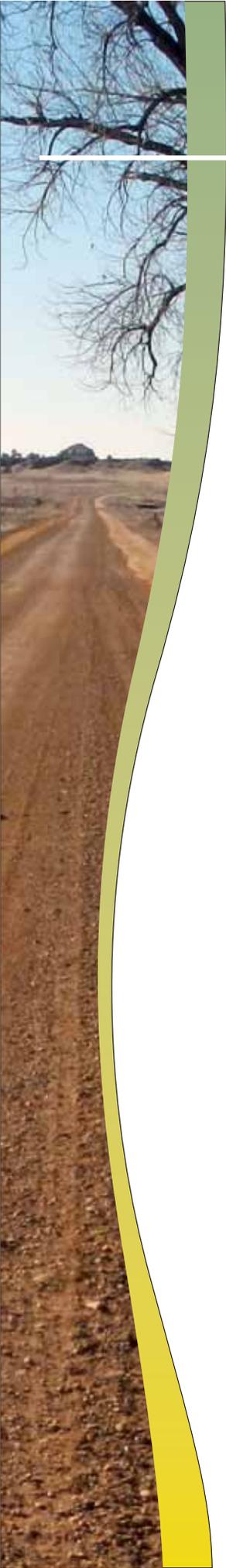
- 46 vertical curves were estimated to not meet current standards.
- Nine locations have grades that were estimated to not meet current standards.

Roadside Clear Zones (i.e. horizontal clearance)

- 22 locations were estimated to have clear zones that do not meet current standards based on field review.

Access Points

- Three public approaches do not meet current standards based on intersection angles.
- Nine private approaches do not meet current standards based on intersection angles.



INFORMATIONAL MEETING

TONGUE RIVER ROAD (S-332) – Corridor Planning Study

Existing Conditions - Key Findings

Environmental Considerations

Prime Farmland

- Approximately 28% of the study area is designated as farmland of statewide importance.
- Approximately 15% of the study area is designated as prime farmland if irrigated.

Water Resources

- Tongue River is located within the study area.
- Numerous tributaries to the Tongue River exist within the study area.

Wetlands

- Wetlands associated with the Tongue River and associated drainages are located intermittently within the study area.

Hazardous Substances

- There are five abandoned mine sites within the study area.

Fish and Wildlife

- Seven endangered, threatened, proposed, or candidate species are listed for Custer and Rosebud Counties.
- 39 species of concern for Custer County and 47 species of concern for Rosebud County were listed.

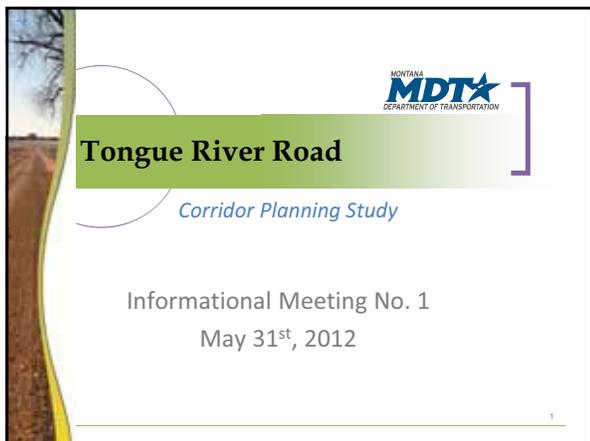
Vegetation

- No endangered, threatened, proposed, or candidate plant species are expected to occur within the study area.
- Nine plant species of concern for Custer County and eleven for Rosebud County were listed.

Cultural and Archaeological Resources

- Numerous cultural resources are known to exist within the study area.
- Three 4(f) and one 6(f) resources are located within the study area.





MONTANA
MDT
DEPARTMENT OF TRANSPORTATION

Tongue River Road

Corridor Planning Study

Informational Meeting No. 1
May 31st, 2012

1

Introduction

- Introduction of local officials
- Partners
 - Custer County
 - Rosebud County
 - MDT
 - FHWA
- Planning team members in attendance
- Consultant team



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INFORMATIONAL MEETING NO. 1 MAY 31st, 2012

Outline of this Evening's Meeting

- What is a corridor planning study?
- Study area boundary
- Study schedule
- Identified interested parties
- Existing conditions in the corridor
- Next steps & conclusion

3

INFORMATIONAL MEETING NO. 1 MAY 31st, 2012

What is a Corridor Planning Study?

- Corridor planning studies:
 - Are a "high level scan"
 - Define transportation issues/areas of concern
 - Consider social, economic and environmental effects at an early stage
 - Identify and prioritize cost-effective and feasible strategies
 - Provide a level of analysis that can support informed and sustainable decisions
 - Provide opportunities for early and continuous involvement

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INFORMATIONAL MEETING NO. 1 MAY 31st, 2012

What is a Corridor Planning Study?

- Corridor planning studies are:
 - Not a NEPA/MEPA Study or Environmental Study
 - Not a Preliminary or Final Design Project
 - Not a Construction or Maintenance Project
 - Not a Right of Way Acquisition Project

5

INFORMATIONAL MEETING NO. 1 MAY 31st, 2012

Goals and Purpose

- Engage constituents early!
- Identify constraints
- Identify needs and objectives
- Identify short-range and long-range improvements
- Develop planning level cost estimates
- Develop information and data to be forwarded into the environmental process if a project moves forward from the study

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INFORMATIONAL MEETING NO. 1 MAY 31st, 2012

Study Area Boundary

- State Secondary Route 332 (S-332)
- Between MT-59 and S-447
- 50.4 miles in length

INFORMATIONAL MEETING NO. 1 MAY 31st, 2012

Tongue River Railroad (TRR)

- This study is not related to the TRR
- Sole focus on S-332

INFORMATIONAL MEETING NO. 1 MAY 31st, 2012

Study Schedule

INFORMATIONAL MEETING NO. 1 MAY 31st, 2012

Public Involvement Activities

- Two informational meetings
- Presentations and outreach to interested parties, stakeholders, resource agencies and land owners as warranted
- Study newsletters
- Website/toll free line
- Informal meetings

INFORMATIONAL MEETING NO. 1 MAY 31st, 2012

Identified Interested Parties

- Bill McChesney (House District 40)
- Eric Moore (Senate District 20)
- Montana State Highway Patrol
- Landowners in the Corridor
- Williston Basin Interstate Pipeline Company
- Northern Cheyenne Tribe
- Arch Coal

INFORMATIONAL MEETING NO. 1 MAY 31st, 2012

S-332 Corridor Context

- Functionally classified as a Rural Collector
- Posted speeds vary between 45 mph and 70 mph
- Serves multiple uses
 - Local traffic
 - Recreational traffic
 - Farm-to-market agricultural traffic
 - Horses / horse-and-buggies
 - Mining related traffic

INFORMATIONAL MEETING NO. 1 MAY 31st, 2012

S-332 Corridor Physical Characteristics

- Two-lane roadway
- Asphalt surfacing – first 17.7 miles
- Gravel surfacing – remaining 32.7 miles
- 147 access points, of which 10 are “public” approaches
- Constructed or improved at various times (as early as 1930 and as recently as 1998)
 - Emergency slide repairs in 2011



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INFORMATIONAL MEETING NO. 1
MAY 31st, 2012

S-332 Corridor Traffic Data

- Ranges from 280 vehicles per day (vpd) near Miles City to 50 vpd near Ashland (2010 counts)

| Site | Loc. | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|--------|---------|------|------|------|------|------|------|------|------|------|------|
| 9-2-9 | RP 1.0 | 190 | 170 | 180 | 260 | 180 | 140 | 270 | 250 | 180 | 190 |
| 9-4-3 | RP 11.0 | 140 | 150 | 90 | 80 | 80 | 160 | 180 | 90 | 110 | 130 |
| 9-4-4 | RP 26.5 | 70 | 90 | (a) | (a) | 80 | 210 | 100 | 110 | 90 | 110 |
| 44-7-5 | RP 39.5 | 100 | 100 | 70 | 90 | (a) | 90 | 40 | 10 | (a) | (a) |
| 44-8-4 | RP 49.5 | 60 | 100 | 60 | 60 | (a) | 60 | 90 | 40 | (a) | 40 |

| Site | Loc. | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|--------|---------|------|------|------|------|------|------|------|------|------|------|
| 9-2-9 | RP 1.0 | 190 | 290 | 220 | (a) | 220 | 230 | 220 | 220 | 280 | (a) |
| 9-4-3 | RP 11.0 | 160 | 210 | 150 | 150 | 120 | 100 | 100 | 100 | 100 | 100 |
| 9-4-4 | RP 26.5 | 100 | 140 | 100 | 130 | 90 | 70 | 70 | 70 | 70 | 80 |
| 44-7-5 | RP 39.5 | 20 | 20 | 30 | (a) | 80 | 70 | 70 | 70 | 50 | (a) |
| 44-8-4 | RP 49.5 | 70 | 30 | 90 | (a) | 60 | 60 | 60 | 60 | 50 | (a) |

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INFORMATIONAL MEETING NO. 1
MAY 31st, 2012

S-332 Corridor Roadway Geometrics - Horizontal

- Corridor consists of both level and rolling terrain
- Seven horizontal curves do not meet current standards

| RP | Element | Value (ft) |
|-------|---------|------------|
| 39.52 | Radius | 955 |
| 40.23 | Radius | 350 |
| 40.66 | Radius | 300 |
| 40.88 | Radius | 350 |
| 42.21 | Radius | 500 |
| 42.97 | Radius | 500 |
| 44.37 | Radius | 1,000 |

Reverse curves just west of Tongue River Bridge



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INFORMATIONAL MEETING NO. 1
MAY 31st, 2012

S-332 Corridor Roadway Geometrics - Vertical

- Grades
 - Nine areas have vertical grades greater than 5.0% (exceeds current standards)
 - Of the nine, two have grades greater than 7.0%
- Curves
 - Thirty-four curves do not meet current standards
 - Of the 34, 13 curves do not meet current standards for stopping sight distance (SSD)
 - An additional 12 locations are estimated to not meet SSD

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INFORMATIONAL MEETING NO. 1
MAY 31st, 2012

S-332 Corridor Roadway Geometrics - Clear Zone

- Seven slide areas
- Fourteen steep fill slopes

Slide Area (note pavement edge)



Steep fill slope



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INFORMATIONAL MEETING NO. 1
MAY 31st, 2012

S-332 Corridor Roadway Geometrics - Widths

- Determined from MDT’s 2011 Montana Road Log
 - Surface width, lane width, shoulder width, surfacing thickness, and base thickness

| Begin RP | End RP | Lanes | Width | | | Surfacing |
|----------|--------|-------|---------|------|----------|-----------|
| | | | Surface | Lane | Shoulder | |
| 0.0 | 5.7 | 2 | 26 | 12 | 1 | Asphalt |
| 5.7 | 12.2 | 2 | 32 | 12 | 4 | Asphalt |
| 12.2 | 17.7 | 2 | 24 | 12 | 0 | Asphalt |
| 17.7 | 20.0 | 2 | 28 | 10 | 4 | Gravel |
| 39.6 | 41.0 | 2 | 32 | 12 | 4 | Gravel |
| 41.0 | 44.7 | 2 | 26 | 9 | 4 | Gravel |
| 44.7 | 50.4 | 2 | 28 | 10 | 4 | Gravel |

Widths Are Of Interest

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INFORMATIONAL MEETING NO. 1
MAY 31st, 2012

S-332 Corridor Access Points

| Begin RP | End RP | Length (mi) | Access Points | Density (Access / mi) | < 60° Angle | Public Approach | |
|----------|--------|-------------|---------------|-----------------------|-------------|-----------------|-------------|
| | | | | | | Access Points | < 60° Angle |
| 0.0 | 6.0 | 6.0 | 27 | 4.5 | 1 | 3 | 0 |
| 6.0 | 12.0 | 6.0 | 26 | 4.3 | 1 | 0 | 0 |
| 12.0 | 17.7 | 5.7 | 15 | 2.6 | 0 | 0 | 0 |
| 17.7 | 24.0 | 6.3 | 20 | 3.2 | 3 | 1 | 1 |
| 24.0 | 31.0 | 7.0 | 7 | 1.0 | 0 | 1 | 0 |
| 31.0 | 37.2 | 6.2 | 20 | 3.2 | 2 | 1 | 0 |
| 37.2 | 44.0 | 6.8 | 21 | 3.1 | 5 | 3 | 2 |
| 44.0 | 50.4 | 6.4 | 11 | 1.7 | 0 | 1 | 0 |
| Total | | 50.4 | 147 | 2.9 | 12 | 10 | 3 |

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INFORMATIONAL MEETING NO. 1
MAY 31st, 2012

S-332 Corridor Bridge Crossings

- Four bridge crossings
 - RP 1.02 (Pumpkin Creek)
 - RP 19.87 (Foster Creek)
 - RP 39.61 (Tongue River)
 - RP 47.80 (Unnamed Drainage)

None of the bridges are structurally deficient or functionally obsolete



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INFORMATIONAL MEETING NO. 1
MAY 31st, 2012

S-332 Corridor Safety (Reported Crashes)

- For period between January 1, 2001 and December 31, 2010
- 18 total reported crashes
 - All single-vehicle; 6 involved wild or domestic animal; one fatal crash

| Crash Data | Crash Rate (per MVM) | Crash Severity Index | Crash Severity Rate (per MVM) |
|-----------------------------|----------------------|----------------------|-------------------------------|
| S-332 | 0.86 | 1.94 | 1.67 |
| Statewide Secondary – Rural | 1.40 | 2.25 | 3.17 |
| Percent Difference | -38.6% | -13.8% | -47.3% |

MVM = million-vehicle-miles

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INFORMATIONAL MEETING NO. 1
MAY 31st, 2012

S-332 Corridor Future Traffic Volumes

- Average Annual Growth Rate (AAGR)
- 20 years ahead – look 20 years back....

| Site | Location | 2010 AADT | Average Annual Growth Rate | | | |
|---------|----------|-----------|----------------------------|-------------|-------------|-------------|
| | | | 1992 - 2011 | 1992 - 1999 | 2000 - 2011 | 2005 - 2011 |
| 9-2-9 | RP 1.0 | 280 | 1.57% | 3.77% | 2.55% | 4.48% |
| 9-4-3 | RP 11.0 | 100 | -0.41% | -0.54% | -4.06% | -5.49% |
| 9-4-4 | RP 26.5 | 70 | -1.49% | 7.47% | -4.36% | -6.76% |
| 44-7-5 | RP 39.5 | 50 | -2.07% | -21.67% | 17.64% | -8.97% |
| 44-8-4 | RP 49.5 | 50 | -1.15% | -3.87% | 2.00% | -3.58% |
| Average | | 110 | 0.24% | 0.45% | 1.79% | -0.72% |

Ambient background growth = 0.24%

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INFORMATIONAL MEETING NO. 1
MAY 31st, 2012

S-332 Corridor Future Traffic Volumes

- In addition to "Ambient Background Growth", additional traffic due to potential mining activities

| Site | Location | Existing (2010) | Baseline (2032) | Scenario 1 (2032) | Scenario 2 (2032) | Scenario 3 (2032) |
|---------|----------|-----------------|-----------------|-------------------|-------------------|-------------------|
| 9-2-9 | RP 1.0 | 280 | 295 | 795 | 2,235 | 1,155 |
| 9-4-3 | RP 11.0 | 100 | 105 | 605 | 2,045 | 965 |
| 9-4-4 | RP 26.5 | 70 | 74 | 574 | 2,014 | 934 |
| 44-7-5 | RP 39.5 | 50 | 53 | 553 | 1,993 | 913 |
| 44-8-4 | RP 49.5 | 50 | 53 | 553 | 1,993 | 913 |
| Average | | 110 | 116 | 616 | 2,056 | 976 |

Uses ambient background growth = 0.24%

Depending on mining development, S-332 could realize a range of traffic volumes between 116 to 2,056 vpd

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INFORMATIONAL MEETING NO. 1
MAY 31st, 2012

Environmental Resources

- Land Ownership
- Soil Resources and Prime Farmland
- Geologic Resources
- Water Resources
- Wetlands
- Floodplains and Floodways
- Hazardous Substances
- Air Quality
- Noise
- Visual Resources
- Biological Resources
- Vegetation
- Cultural and Archaeological Resources
- Social

Resources in blue are discussed in PPT

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INFORMATIONAL MEETING NO. 1
MAY 31st, 2012

Soil Resources and Prime Farmland

- Farmland of statewide importance (~28% of study area)
- Prime farmland if irrigated (~15% of study area)



INFORMATIONAL MEETING NO. 1 MAY 31st, 2012 25

Water Resources

- Numerous crossings
- Four bridges
- Wetlands – delineated if and when a project is identified and advances



INFORMATIONAL MEETING NO. 1 MAY 31st, 2012 26

Visual Resources

- Landscape Character
- Visual Sensitivity
- Scenic Integrity
- Landscape Visibility



INFORMATIONAL MEETING NO. 1 MAY 31st, 2012 27

Biological Resources

- Fish and Wildlife
- Vegetation



INFORMATIONAL MEETING NO. 1 MAY 31st, 2012 28

Fish and Wildlife T & E Species

- Black-footed Ferret (Listed Endangered)
- Pallid Sturgeon (Listed Endangered)
- Piping Plover (Listed Threatened, Critical Habitat)
- Interior Least Tern (Listed Endangered)
- Whooping Crane (Listed Endangered)
- Greater Sage Grouse (Candidate)
- Sprague's Pipit (Candidate)

INFORMATIONAL MEETING NO. 1 MAY 31st, 2012 29

Fish and Wildlife Montana Species of Concern

- Birds
 - Twelve species identified
- Fish
 - Eleven species identified
- Invertebrates
 - Sixteen species identified
- Mammals
 - Six species identified
- Reptiles
 - Six species identified

INFORMATIONAL MEETING NO. 1 MAY 31st, 2012 30

Cultural and Archaeological Resources

- Twelve Mile Dam Fishing Access – 4(f) and 6(f)
- Pumpkin Creek Ranch Recreational Area – 4(f)
- Tongue / Yellowstone River Irrigation District Canal – 4(f)



31

INFORMATIONAL MEETING NO. 1

MAY 31st, 2012

Next Steps

- Continue study coordination and outreach
- Finalize environmental scan
- Finalize existing and projected conditions report
- Continue analysis of transportation needs
- Identify potential improvement options
- Draft corridor study report



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INFORMATIONAL MEETING NO. 1

MAY 31st, 2012

Conclusion

- Questions, answers and/or comments?

Study website: <http://www.mdt.gov/pubinvolve/tongueriver/>

Study newsletters:

Study contact:

Tom Kahle
MT Department of Transportation
2701 Prospect Avenue
P.O. Box 201001
Helena, Montana 59620-1001
Email: tkahle@mt.gov
Tel: (406) 444-9211



33

INFORMATIONAL MEETING NO. 1

MAY 31st, 2012

MEETING MINUTES

INFORMATIONAL MEETING - NUMBER 1

DETAILS:

Location: Miles Community College, Room 106
2715 Dickinson Street
Miles City, Montana

Date: May 31, 2012

Time: 6:00 PM – 8:30 PM

MEETING NOTIFICATION:

- A press release for the meeting was prepared on May 21st.
- Display ads were posted in the Miles City Star (May 16th and 25th).
- Information about the meeting was also posted on the study website:
<http://mdt.mt.gov/pubinvolve/tongueriver/>
- Study newsletters were sent to a total of 61 landowners within the study area boundary.
- Study newsletters were also sent to the following identified interested parties, including:
 - Bill McChesney (House District 40)
 - Eric Moore (Senate District 20)
 - Montana State Highway Patrol
 - Williston Basin Interstate Pipeline Company
 - Janice Spear (Northern Cheyenne Tribe)
 - George Luther (Arch Coal Consultant)
- Email notification was sent to those individuals on the study email list.

Meeting minutes are intended to capture the general content of meeting discussions and to document comments made by the attendees. Meeting minutes may include opinions provided by attendees; no guarantees are made as to the accuracy of these statements and no fact checking of specific statements is provided or implied from the publishing of final meeting minutes.

PLANNING TEAM MEMBER ATTENDANCE:

- Shane Mintz (MDT)
- Tom Roberts (MDT)
- Tom Kahle (MDT)
- Wayne Noem (MDT)
- Jerry Backlund (Custer County)
- John Hamilton (Custer County)
- Jeff Key (RPA)
- Scott Randall (RPA)

AGENDA:

The first Informational Meeting for the Tongue River Road Corridor Planning Study was held on Thursday, May 31st, 2012 at Miles Community College in Miles City. The purpose of the meeting was to inform interested parties about the scope and purpose of the corridor planning study, present the findings of the existing conditions analysis, and to solicit input on the existing conditions and concerns within the study area that may be relevant to the corridor planning effort. A study presentation was made from 6:00 to 6:45, followed by a question and answer period. The meeting ended at 8:30 PM.

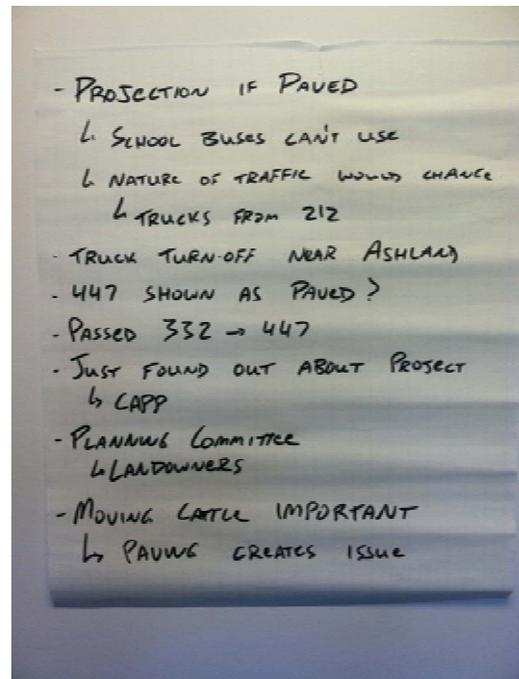
A total of 23 members of the community signed in at the meeting. Five others were present who did not sign in, bringing the estimated total attendance to over 28 individuals. This number does not include those on the Planning Team, or affiliated with MDT and RPA.

COMMENTS

A number of verbal comments were made during the open house and after the presentation. In addition, comment sheets were available for all members of the audience. A summary of the comments received during the meeting is presented below:

Comment Sheet No. 1

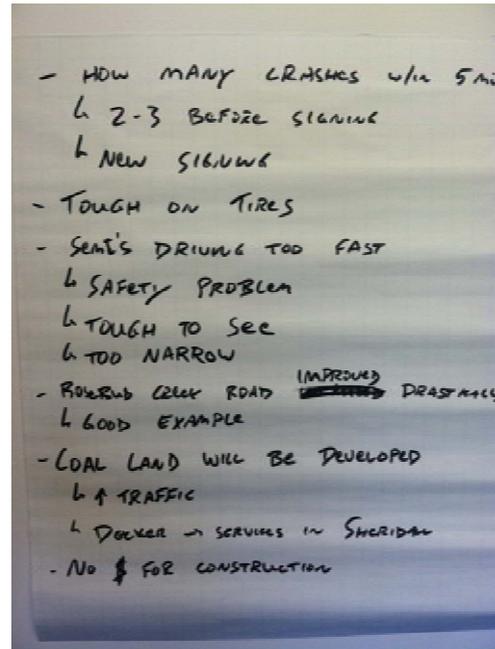
- A traffic projection will be needed if the road is paved to account for induced traffic.
- School buses currently can't use the road.
- The nature of traffic would change if road is paved – trucks may divert from Highway 212.
- Why is there a large truck turn-off area on S-447 just outside of Ashland?
- Your maps are wrong – you show S-447 as paved and it is not.
- Why would the study stop at the intersection of S-332 /S-447 when there is a gravel section just south to the Northern Cheyenne Indian Reservation?
- I just found out about this study. You're a third into it and this is the first time the landowners have even heard of it.
- You need more landowners on your Planning Team.



- Moving cattle is important – both along the road and across the road. Paving creates safety issues for us.

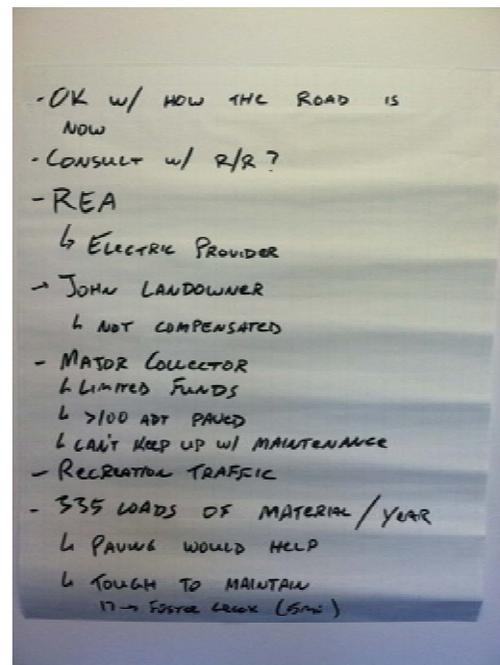
Comment Sheet No. 2

- How many crashes are within the first 5 miles?
 - *There were 2 to 3 crashes before the signing project, but the number of crashes after the new signing is unknown at this time.*
- The road is tough on our tires.
- Semi-trucks drive too fast, presenting a safety problem.
- The road can be too narrow in locations, and tough to see over hills.
- The Rosebud Creek Road was drastically improved and is a good example of the type of road needed here that stops short of paving.
- Coal land will be developed for sure. With that comes an increase in traffic. Miles City could become the center for related services much like Sheridan, Wyoming is for the Decker mining activities.
- There is no funding for actual construction improvements.



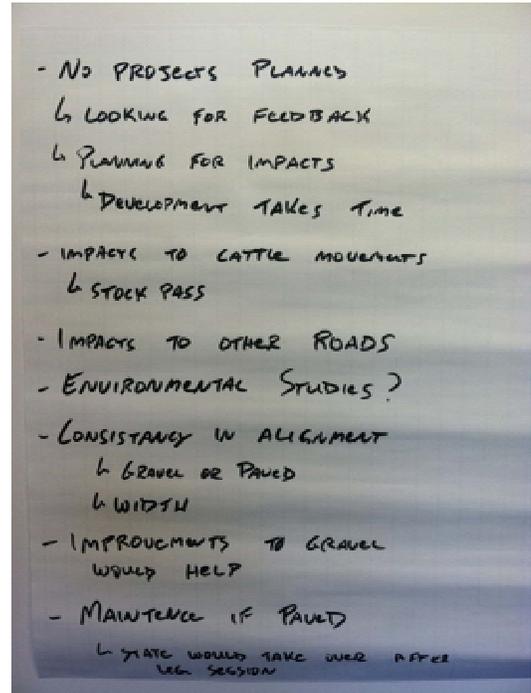
Comment Sheet No. 3

- We are okay with how the road is now.
- Have you consulted with the Tongue River Railroad group?
- You should consult with the Rosebud Electric Cooperative (REA) that provides utilities in the area.
- You need more landowner participation on your Planning Team. Maybe they should be compensated for their participation.
- The road is defined as a major collector according to the County(s). For that classification, County standards suggest that greater than 100 ADT would be paved. Because of limited funds at the local level, there is difficulty in keeping up with all the needed maintenance.
- There is recreational traffic along the roadway.
- Adjacent landowner generates 335 semi-truck loads of material per year. Paving would help him haul his product and reduce “wear and tear” on vehicles. The corridor area in most need of improvement seems to be near Foster Creek, for about 5 miles past the end of pavement.



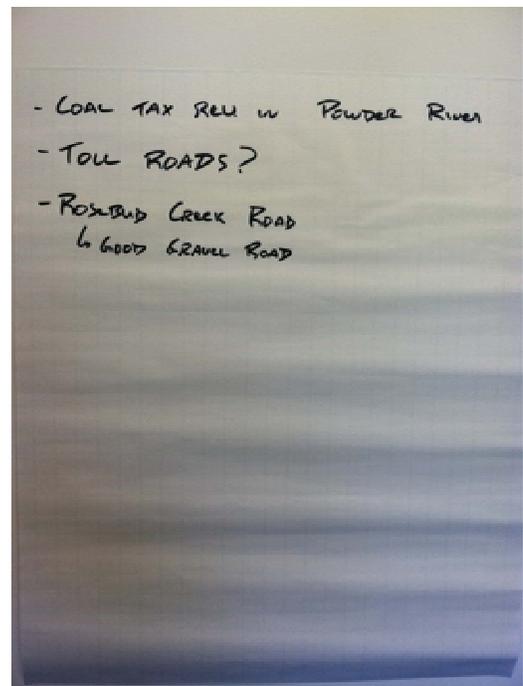
Comment Sheet No. 4

- There are no projects planned at the present time – looking for feedback.
- the desire is to plan for impacts before they occur. Areas around Sidney and Culbertson were cited as examples of how quickly impacts can occur.
- Concern was expressed over impacts to cattle operations and movement of cattle across the road if paved. Are stockpasses an option in the future?
- What about impacts to other roads (i.e. induced traffic if the road is paved)?
- When will detailed environmental studies be available?
- Highway consistency in alignment, especially width, would be desirable. Consistency in surfacing type, whether all gravel or all asphalt pavement, is important.
- Improvements to gravel surfacing, at a minimum, would help.
- Who would maintain the road if it was all paved?
- State would take over maintenance after legislative session.



Comment Sheet No. 5

- Major coal tax revenue was generated for the State and Local governments with developments in the Powder River Basin. Coal money could be available for road improvements in this area as a result of Otter Creek coal development.
- Are toll roads a potential funding mechanism in the state of Montana?
 - *This comment was not correlated to the Tongue River Road, but rather a general funding question.*
- Rosebud Creek Road is a good example of a gravel road.



The meeting concluded at 8:30 PM. Sign-in sheets from the informational meeting are attached.



Informational Meeting

Discuss Tongue River Road Corridor Planning Study

Wednesday, July 18, 2012 6:00 p.m.

St. Labre Indian School, Auditorium

1000 Tongue River Rd. Ashland, MT

This meeting is identical in format & content to the meeting previously held on May 31, 2012, in Miles City, MT.

The Montana Department of Transportation (MDT) will discuss the corridor study that begins 10 miles south of Miles City (RP 0.0) and ends two miles north of the Northern Cheyenne Indian Reservation along Tongue River Road (RP 50.4). The study will identify potential improvements and will assist in facilitating a smooth and efficient transition from transportation planning to future project development / environmental review, if any, based on need and funding availability. The Tongue River Road Corridor Planning Study is a planning-level study and is not a design or construction project. The purpose of the meeting is to inform interested parties about the scope and purpose of the planning study, present the initial findings of the existing conditions analysis, and to solicit input on the existing conditions and issues within the study area that may be relevant to the planning effort.

The meeting is open to the public and the public is encouraged to attend. MDT attempts to provide accommodations for any known disability that may interfere with a person's participation in any department service, program or activity. For reasonable accommodations to participate in this meeting, please contact Jeff Key at (406) 447-5000 at least two days before the meeting. For the hearing impaired, the TTY number is (406) 444-7696 or (800) 335-7592, or Montana Relay at 711. Alternative accessible formats of this information will be provided upon request.

Comments may be submitted in writing at the meeting, by mail to Tom Kahle, Project Manager, MDT Statewide and Urban Planning, PO Box 201001, Helena, MT. 59620-1001, or online at www.mdt.mt.gov/mdt/comment_form.shtml Please indicate comments are for Tongue River Road Corridor Planning Study



Informational Meeting*

TONGUE RIVER ROAD (S-332)

Corridor Planning Study

Wednesday, July 18, 2012 (6:00 PM)

**St. Labre Indian School Auditorium
1000 Tongue River Road
Ashland, MT**

The Montana Department of Transportation (MDT) will discuss the corridor study that begins 10 miles south of Miles City (RP 0.0) and ends two miles north of the Northern Cheyenne Indian Reservation along Tongue River Road (RP 50.4).

The Tongue River Road Corridor Planning Study is a planning-level study and is not a design or construction project.

The purpose of the meeting is to inform interested parties about the scope and purpose of the planning study, present the initial findings of the existing conditions analysis, and to solicit input on the existing conditions and issues within the study area that may be relevant to the planning effort.

Check out the Study Website for more information:

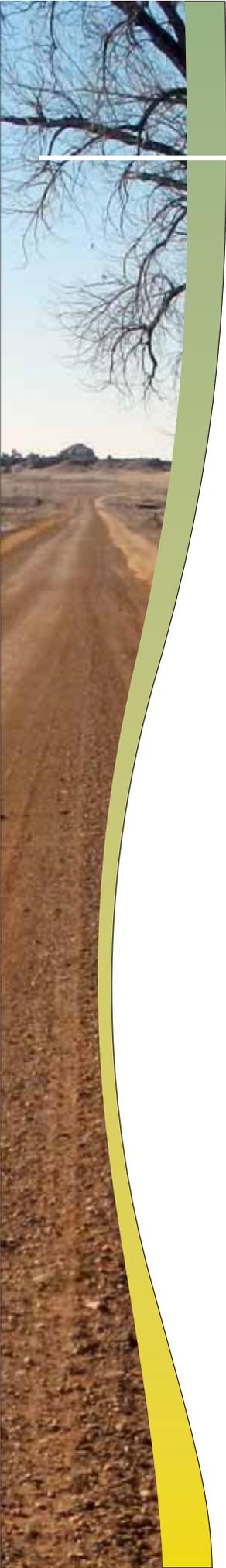
www.mdt.mt.gov/pubinvolve/tongueriver



**** This meeting is identical in format & content to the meeting previously held on May 31, 2012, in Miles City, MT.***

FOR QUESTIONS CONTACT:
Jeff Key, PE
RPA Project Manager
(406) 447-5000
Jeff.key@rpa-hln.com

The MDT and RPA attempt to provide accommodations for any known disability that may interfere with a person participating in any service, program, or activity associated with this project. Alternative accessible formats of this information will be provided upon request. For further information call (406) 447-5000 or TTY (800) 355-7592, or call Montana Relay at 711. Accommodation requests must be made at least 48 hours prior to any scheduled meetings and/or other activities.



INFORMATIONAL MEETING

TONGUE RIVER ROAD (S-332) – Corridor Planning Study

Existing Conditions - Key Findings

Environmental Considerations

Prime Farmland

- Approximately 28% of the study area is designated as farmland of statewide importance.
- Approximately 15% of the study area is designated as prime farmland if irrigated.

Water Resources

- Tongue River is located within the study area.
- Numerous tributaries to the Tongue River exist within the study area.

Wetlands

- Wetlands associated with the Tongue River and associated drainages are located intermittently within the study area.

Hazardous Substances

- There are five abandoned mine sites within the study area.

Fish and Wildlife

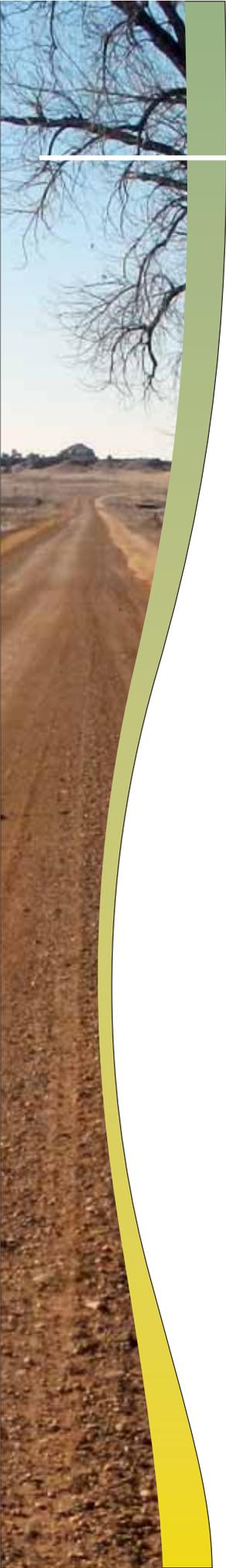
- Seven endangered, threatened, proposed, or candidate species are listed for Custer and Rosebud Counties.
- 39 species of concern for Custer County and 47 species of concern for Rosebud County were listed.

Vegetation

- No endangered, threatened, proposed, or candidate plant species are expected to occur within the study area.
- Nine plant species of concern for Custer County and eleven for Rosebud County were listed.

Cultural and Archaeological Resources

- Numerous cultural resources are known to exist within the study area.
- Three 4(f) and one 6(f) resources are located within the study area.



INFORMATIONAL MEETING

TONGUE RIVER ROAD (S-332) – Corridor Planning Study

Existing Conditions - Key Findings

Transportation System

Surfacing

- Longitudinal and transverse cracking in the asphalt surfacing (RP 0.0 to RP 17.7).
- Evidence of asphalt failure due to recent slides at intermittent locations.
- Gravel surfacing from RP 17.7 to RP 50.4. in fair condition.

Drainage

- Nine locations with evidence of recent slides indicating potential drainage issues.
- Four existing bridges with no drainage issues noted.

Horizontal Alignment

- Seven horizontal curves do not meet current standards.

Vertical Alignment

- 46 vertical curves were estimated to not meet current standards.
- Nine locations have grades that were estimated to not meet current standards.

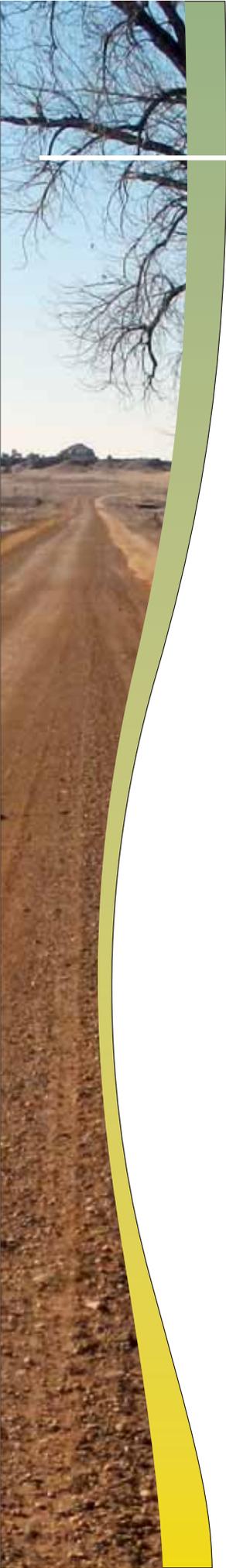
Roadside Clear Zones (i.e. horizontal clearance)

- 22 locations were estimated to have clear zones that do not meet current standards based on field review.

Access Points

- Three public approaches do not meet current standards based on intersection angles.
- Nine private approaches do not meet current standards based on intersection angles.





INFORMATIONAL MEETING

TONGUE RIVER ROAD (S-332) – Corridor Planning Study

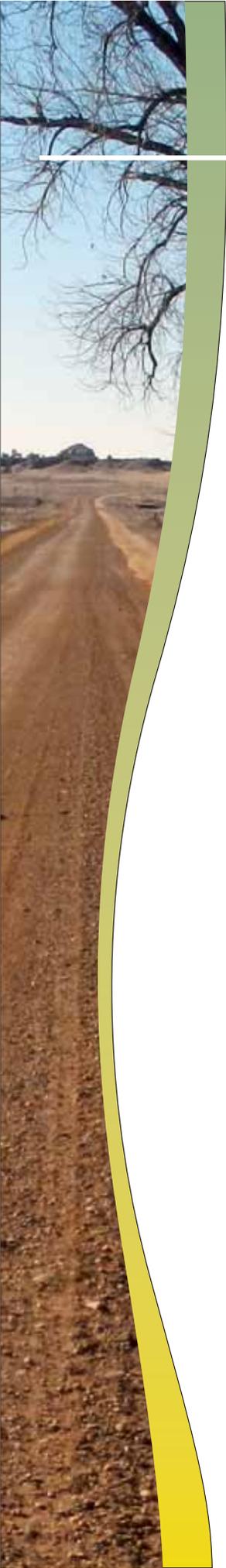
Pre-NEPA/MEPA Planning Studies

- Are not a NEPA/MEPA Study or Environmental Review
- Are not a Preliminary Engineering or Final Design Report
- Are not a Construction or Maintenance Project
- Are not a Right of Way Acquisition Project

NEPA - National Environmental Policy Act
MEPA - Montana Environmental Policy Act



Montana Department of Transportation
Helena, Montana



INFORMATIONAL MEETING

TONGUE RIVER ROAD (S-332) – Corridor Planning Study

Pre-NEPA/MEPA Planning Studies

- Are based on existing social, economic, environmental and roadway data and available reports
- Are a “high level scan” of the study area
- Define transportation issues/areas of concern
- Consider social, economic and environmental constraints at an early stage
- Identify and prioritize cost-effective and feasible strategies
- Provide opportunities for early and continuous community involvement

NEPA - National Environmental Policy Act
MEPA - Montana Environmental Policy Act



Montana Department of Transportation
Helena, Montana

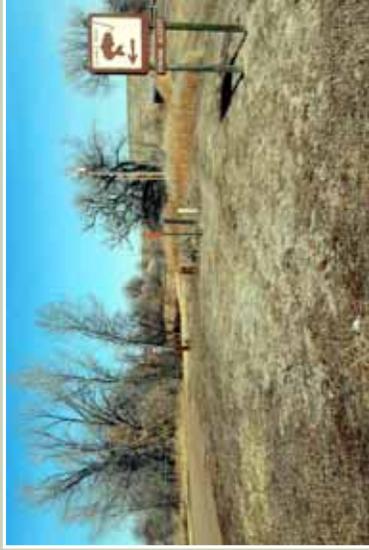
INFORMATIONAL MEETING

TONGUE RIVER ROAD (S-332) – Corridor Planning Study

PHOTOS



LOOKING NORTHEAST AT INTERSECTION
OF MT-59 AND S-332 (RP 0.10)



12 MILE DAM FISHING ACCESS SITE
ACCESS (RP 1.07)



PUMPKIN CREEK RANCH ACCESS
TO S-332 (RP 4.08)



LOOKING NORTHEAST IN GRAVEL SECTION
(RP 26.04)



ON ALIGNMENT LOOKING SOUTH
(RP 13.0)



TRUCK ACTIVITY ON PAVED SECTION
LOOKING NORTHEAST (RP 8.00)

INFORMATIONAL MEETING

TONGUE RIVER ROAD (S-332) – Corridor Planning Study

PHOTOS



LOOKING SOUTH ON ALIGNMENT AT BRIDGE
OVER PUMPKIN CREEK (RP 0.96)



REPAIRED SLIDE AREA LOOKING NORTH
(RP 3.70)



END OF PAVEMENT / GRAVEL SECTIONS
LOOKING NORTHEAST (RP 17.70)



REPAIRED SLIDE AREA IN GRAVEL
SECTION (RP 26.22)



LOOKING NORTHEAST ON ALIGNMENT IN
GRAVEL SECTION (RP 32.08)



LOOKING EAST IN GRAVEL SECTION NEAR
STATION (RP 32.7)

INFORMATIONAL MEETING

TONGUE RIVER ROAD (S-332) – Corridor Planning Study

PHOTOS



LOOKING NORTHEAST NEAR COUNTY LINE (RP 37.25)



LOOKING EAST AT TONGUE RIVER BRIDGE (RP 39.65)



BEGINNING OF "S-CURVES" WEST OF TONGUE RIVER BRIDGE (RP 40.40)



ON ALIGNMENT LOOKING NORTH (RP 42.90)



BRIDGE ACROSS UNNAMED DRAINAGE LOOKING NORTHEAST (RP 47.70)



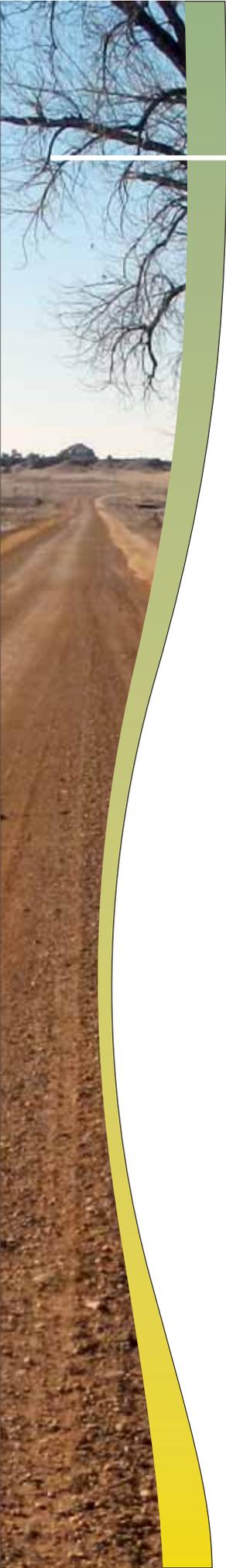
LOOKING NORTH AT INTERSECTION OF S-447 / S-332

INFORMATIONAL MEETING

TONGUE RIVER ROAD (S-332) – Corridor Planning Study

Study Schedule

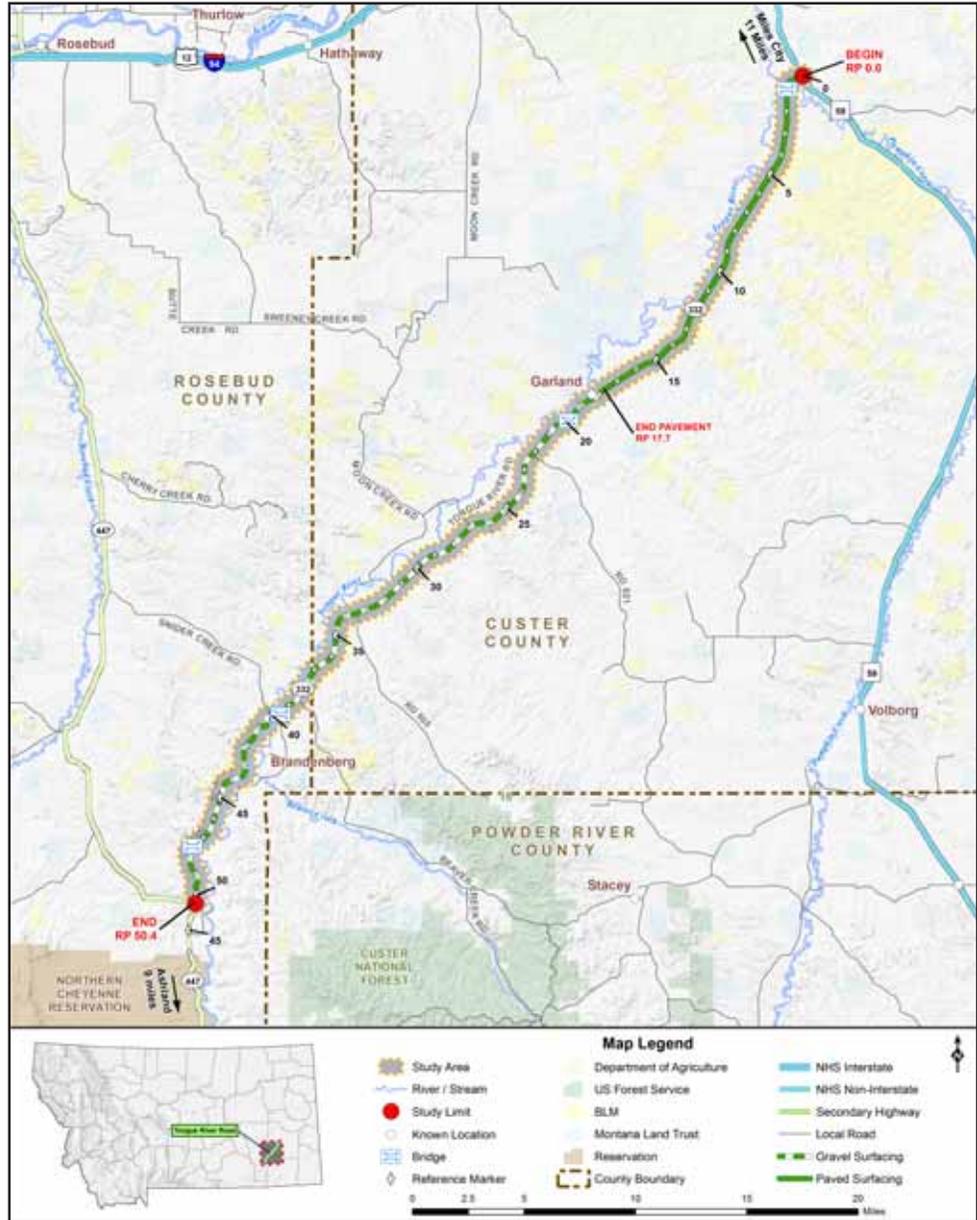




INFORMATIONAL MEETING

TONGUE RIVER ROAD (S-332) – Corridor Planning Study

Study Area Boundary



Montana Department of Transportation
Helena, Montana



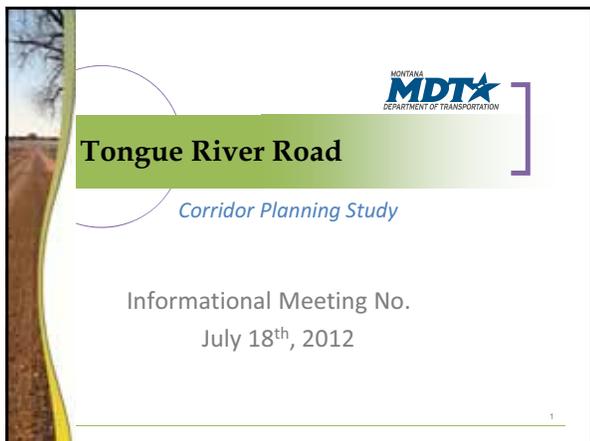
INFORMATIONAL MEETING #1

TONGUE RIVER ROAD (S-332) – Corridor Planning Study

WELCOME



Montana Department of Transportation
Helena, Montana



MONTANA
MDTA
DEPARTMENT OF TRANSPORTATION

Tongue River Road

Corridor Planning Study

Informational Meeting No.
July 18th, 2012

1

Introduction

- Introduction of local officials
- Partners
 - Custer County
 - Rosebud County
 - MDT
 - FHWA
- Planning team members in attendance
- Consultant team



2

INFORMATIONAL MEETING NO. 2 JULY 18th, 2012

Outline of this Evening's Meeting

- What is a corridor planning study?
- Study area boundary
- Study schedule
- Identified interested parties
- Existing conditions in the corridor
- Next steps & conclusion

3

INFORMATIONAL MEETING NO. 2 JULY 18th, 2012

What is a Corridor Planning Study?

- Corridor planning studies:
 - Are a "high level scan"
 - Define transportation issues/areas of concern
 - Consider social, economic and environmental effects at an early stage
 - Identify and prioritize cost-effective and feasible strategies
 - Provide a level of analysis that can support informed and sustainable decisions
 - Provide opportunities for early and continuous involvement

4

INFORMATIONAL MEETING NO. 2 JULY 18th, 2012

What is a Corridor Planning Study?

- Corridor planning studies are:
 - Not a NEPA/MEPA Study or Environmental Study
 - Not a Preliminary or Final Design Project
 - Not a Construction or Maintenance Project
 - Not a Right of Way Acquisition Project

5

INFORMATIONAL MEETING NO. 2 JULY 18th, 2012

Goals and Purpose

- Engage constituents early!
- Identify constraints
- Identify needs and objectives
- Identify short-range and long-range improvements
- Develop planning level cost estimates
- Develop information and data to be forwarded into the environmental process if a project moves forward from the study

6

INFORMATIONAL MEETING NO. 2 JULY 18th, 2012

Study Area Boundary

- State Secondary Route 332 (S-332)
- Between MT-59 and S-447
- 50.4 miles in length

INFORMATIONAL MEETING NO. 2 JULY 18th, 2012

Tongue River Railroad (TRR)

- This study is not related to the TRR
- Sole focus on S-332

INFORMATIONAL MEETING NO. 2 JULY 18th, 2012

Study Schedule

INFORMATIONAL MEETING NO. 2 JULY 18th, 2012

Public Involvement Activities

- Three informational meetings
- Presentations and outreach to interested parties, stakeholders, resource agencies and land owners as warranted
- Study newsletters
- Website/toll free line
- Informal meetings

INFORMATIONAL MEETING NO. 2 JULY 18th, 2012

Identified Interested Parties

- Bill McChesney (House District 40)
- Eric Moore (Senate District 20)
- Montana State Highway Patrol
- Landowners in the Corridor
- Williston Basin Interstate Pipeline Company
- Northern Cheyenne Tribe
- Arch Coal

INFORMATIONAL MEETING NO. 2 JULY 18th, 2012

S-332 Corridor Context

- Functionally classified as a Rural Collector
- Posted speeds vary between 45 mph and 70 mph
- Serves multiple uses
 - Local traffic
 - Recreational traffic
 - Farm-to-market agricultural traffic
 - Horses / horse-and-buggies
 - Mining related traffic

INFORMATIONAL MEETING NO. 2 JULY 18th, 2012

S-332 Corridor Physical Characteristics

- Two-lane roadway
- Asphalt surfacing – first 17.7 miles
- Gravel surfacing – remaining 32.7 miles
- 147 access points, of which 10 are “public” approaches
- Constructed or improved at various times (as early as 1930 and as recently as 1998)
 - Emergency slide repairs in 2011



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INFORMATIONAL MEETING NO. 2 JULY 18th, 2012

S-332 Corridor Traffic Data

- Ranges from 280 vehicles per day (vpd) near Miles City to 50 vpd near Ashland (2010 counts)

| Site | Loc. | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|--------|---------|------|------|------|------|------|------|------|------|------|------|
| 9-2-9 | RP 1.0 | 190 | 170 | 180 | 260 | 180 | 140 | 270 | 250 | 180 | 190 |
| 9-4-3 | RP 11.0 | 140 | 150 | 90 | 80 | 80 | 160 | 180 | 90 | 110 | 130 |
| 9-4-4 | RP 26.5 | 70 | 90 | (a) | (a) | 80 | 210 | 100 | 110 | 90 | 110 |
| 44-7-5 | RP 39.5 | 100 | 100 | 70 | 90 | (a) | 90 | 40 | 10 | (a) | (a) |
| 44-8-4 | RP 49.5 | 60 | 100 | 60 | 60 | (a) | 60 | 90 | 40 | (a) | 40 |

| Site | Loc. | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|--------|---------|------|------|------|------|------|------|------|------|------|------|
| 9-2-9 | RP 1.0 | 190 | 290 | 220 | (a) | 220 | 230 | 220 | 220 | 280 | (a) |
| 9-4-3 | RP 11.0 | 160 | 210 | 150 | 150 | 120 | 100 | 100 | 100 | 100 | 100 |
| 9-4-4 | RP 26.5 | 100 | 140 | 100 | 130 | 90 | 70 | 70 | 70 | 70 | 80 |
| 44-7-5 | RP 39.5 | 20 | 20 | 30 | (a) | 80 | 70 | 70 | 70 | 50 | (a) |
| 44-8-4 | RP 49.5 | 70 | 30 | 90 | (a) | 60 | 60 | 60 | 60 | 50 | (a) |

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INFORMATIONAL MEETING NO. 2 JULY 18th, 2012

S-332 Corridor Roadway Geometrics - Horizontal

- Corridor consists of both level and rolling terrain
- Seven horizontal curves do not meet current standards

| RP | Element | Value (ft) |
|-------|---------|------------|
| 39.52 | Radius | 955 |
| 40.23 | Radius | 350 |
| 40.66 | Radius | 300 |
| 40.88 | Radius | 350 |
| 42.21 | Radius | 500 |
| 42.97 | Radius | 500 |
| 44.37 | Radius | 1,000 |

Reverse curves just west of Tongue River Bridge



15
INFORMATIONAL MEETING NO. 2 JULY 18th, 2012

S-332 Corridor Roadway Geometrics - Vertical

- Grades
 - Nine areas have vertical grades greater than 5.0% (exceeds current standards)
 - Of the nine, two have grades greater than 7.0%
- Curves
 - Thirty-four curves do not meet current standards
 - Of the 34, 13 curves do not meet current standards for stopping sight distance (SSD)
 - An additional 12 locations are estimated to not meet SSD

16
INFORMATIONAL MEETING NO. 2 JULY 18th, 2012

S-332 Corridor Roadway Geometrics - Clear Zone

- Seven slide areas
- Fourteen steep fill slopes

Slide Area (note pavement edge)



Steep fill slope



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INFORMATIONAL MEETING NO. 2 JULY 18th, 2012

S-332 Corridor Roadway Geometrics - Widths

- Determined from MDT’s 2011 Montana Road Log
 - Surface width, lane width, shoulder width, surfacing thickness, and base thickness

| Begin RP | End RP | Lanes | Width | | | Surfacing |
|----------|--------|-------|---------|------|----------|-----------|
| | | | Surface | Lane | Shoulder | |
| 0.0 | 5.7 | 2 | 26 | 12 | 1 | Asphalt |
| 5.7 | 12.2 | 2 | 32 | 12 | 4 | Asphalt |
| 12.2 | 17.7 | 2 | 24 | 12 | 0 | Asphalt |
| 17.7 | 20.0 | 2 | 28 | 10 | 4 | Gravel |
| 39.6 | 41.0 | 2 | 32 | 12 | 4 | Gravel |
| 41.0 | 44.7 | 2 | 26 | 9 | 4 | Gravel |
| 44.7 | 50.4 | 2 | 28 | 10 | 4 | Gravel |

Widths Are Of Interest

18
INFORMATIONAL MEETING NO. 2 JULY 18th, 2012

S-332 Corridor Access Points

| Begin RP | End RP | Length (mi) | Access Points | Density (Access / mi) | < 60° Angle | Public Approach | |
|----------|--------|-------------|---------------|-----------------------|-------------|-----------------|-------------|
| | | | | | | Access Points | < 60° Angle |
| 0.0 | 6.0 | 6.0 | 27 | 4.5 | 1 | 3 | 0 |
| 6.0 | 12.0 | 6.0 | 26 | 4.3 | 1 | 0 | 0 |
| 12.0 | 17.7 | 5.7 | 15 | 2.6 | 0 | 0 | 0 |
| 17.7 | 24.0 | 6.3 | 20 | 3.2 | 3 | 1 | 1 |
| 24.0 | 31.0 | 7.0 | 7 | 1.0 | 0 | 1 | 0 |
| 31.0 | 37.2 | 6.2 | 20 | 3.2 | 2 | 1 | 0 |
| 37.2 | 44.0 | 6.8 | 21 | 3.1 | 5 | 3 | 2 |
| 44.0 | 50.4 | 6.4 | 11 | 1.7 | 0 | 1 | 0 |
| Total | | 50.4 | 147 | 2.9 | 12 | 10 | 3 |

19
INFORMATIONAL MEETING NO. 2
JULY 18TH, 2012

S-332 Corridor Bridge Crossings

- Four bridge crossings
 - RP 1.02 (Pumpkin Creek)
 - RP 19.87 (Foster Creek)
 - RP 39.61 (Tongue River)
 - RP 47.80 (Roe and Cooper Creek)

None of the bridges are structurally deficient or functionally obsolete



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INFORMATIONAL MEETING NO. 2
JULY 18TH, 2012

S-332 Corridor Safety (Reported Crashes)

- For period between January 1, 2001 and December 31, 2010
- 18 total reported crashes
 - All single-vehicle; 6 involved wild or domestic animal; one fatal crash

| Crash Data | Crash Rate (per MVM) | Crash Severity Index | Crash Severity Rate (per MVM) |
|-----------------------------|----------------------|----------------------|-------------------------------|
| S-332 | 0.86 | 1.94 | 1.67 |
| Statewide Secondary – Rural | 1.40 | 2.25 | 3.17 |
| Percent Difference | -38.6% | -13.8% | -47.3% |

MVM = million-vehicle-miles

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INFORMATIONAL MEETING NO. 2
JULY 18TH, 2012

S-332 Corridor Future Traffic Volumes

- Average Annual Growth Rate (AAGR)
- 20 years ahead – look 20 years back....

| Site | Location | 2010 AADT | Average Annual Growth Rate | | | |
|---------|----------|-----------|----------------------------|-------------|-------------|-------------|
| | | | 1992 - 2011 | 1992 - 1999 | 2000 - 2011 | 2005 - 2011 |
| 9-2-9 | RP 1.0 | 280 | 1.57% | 3.77% | 2.55% | 4.48% |
| 9-4-3 | RP 11.0 | 100 | -0.41% | -0.54% | -4.06% | -5.49% |
| 9-4-4 | RP 26.5 | 70 | -1.49% | 7.47% | -4.36% | -6.76% |
| 44-7-5 | RP 39.5 | 50 | -2.07% | -21.67% | 17.64% | -8.97% |
| 44-8-4 | RP 49.5 | 50 | -1.15% | -3.87% | 2.00% | -3.58% |
| Average | | 110 | 0.24% | 0.45% | 1.79% | -0.72% |

Ambient background growth = 0.24%

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INFORMATIONAL MEETING NO. 2
JULY 18TH, 2012

S-332 Corridor Future Traffic Volumes

- In addition to "Ambient Background Growth", additional traffic due to potential mining activities

| Site | Location | Existing (2010) | Baseline (2032) | Scenario 1 (2032) | Scenario 2 (2032) | Scenario 3 (2032) |
|---------|----------|-----------------|-----------------|-------------------|-------------------|-------------------|
| 9-2-9 | RP 1.0 | 280 | 295 | 795 | 2,235 | 1,155 |
| 9-4-3 | RP 11.0 | 100 | 105 | 605 | 2,045 | 965 |
| 9-4-4 | RP 26.5 | 70 | 74 | 574 | 2,014 | 934 |
| 44-7-5 | RP 39.5 | 50 | 53 | 553 | 1,993 | 913 |
| 44-8-4 | RP 49.5 | 50 | 53 | 553 | 1,993 | 913 |
| Average | | 110 | 116 | 616 | 2,056 | 976 |

Uses ambient background growth = 0.24%

Depending on mining development, S-332 could realize a range of traffic volumes between 116 to 2,056 vpd

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INFORMATIONAL MEETING NO. 2
JULY 18TH, 2012

Environmental Resources

- Land Ownership
- Soil Resources and Prime Farmland
- Geologic Resources
- Water Resources
- Wetlands
- Floodplains and Floodways
- Hazardous Substances
- Air Quality
- Noise
- Visual Resources
- Biological Resources
- Vegetation
- Cultural and Archaeological Resources
- Social

Resources in blue are discussed in PPT

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INFORMATIONAL MEETING NO. 2
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Soil Resources and Prime Farmland

- Farmland of statewide importance (~28% of study area)
- Prime farmland if irrigated (~15% of study area)



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Water Resources

- Numerous crossings
- Four bridges
- Wetlands – delineated if and when a project is identified and advances



INFORMATIONAL MEETING NO. 2 JULY 18TH, 2012 26

Visual Resources

- Landscape Character
- Visual Sensitivity
- Scenic Integrity
- Landscape Visibility



INFORMATIONAL MEETING NO. 2 JULY 18TH, 2012 27

Biological Resources

- Fish and Wildlife
- Vegetation



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Fish and Wildlife T & E Species

- Black-footed Ferret (Listed Endangered)
- Pallid Sturgeon (Listed Endangered)
- Piping Plover (Listed Threatened, Critical Habitat)
- Interior Least Tern (Listed Endangered)
- Whooping Crane (Listed Endangered)
- Greater Sage Grouse (Candidate)
- Sprague’s Pipit (Candidate)

INFORMATIONAL MEETING NO. 2 JULY 18TH, 2012 29

Fish and Wildlife Montana Species of Concern

- Birds
 - Twelve species identified
- Fish
 - Eleven species identified
- Invertebrates
 - Sixteen species identified
- Mammals
 - Six species identified
- Reptiles
 - Six species identified

INFORMATIONAL MEETING NO. 2 JULY 18TH, 2012 30

Cultural and Archaeological Resources

- Twelve Mile Dam Fishing Access – 4(f) and 6(f)
- Pumpkin Creek Ranch Recreational Area – 4(f)
- Tongue / Yellowstone River Irrigation District Canal – 4(f)



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INFORMATIONAL MEETING NO. 2

JULY 18TH, 2012

Next Steps

- Continue study coordination and outreach
- Finalize environmental scan
- Finalize existing and projected conditions report
- Continue analysis of transportation needs
- Identify potential improvement options
- Draft corridor study report



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INFORMATIONAL MEETING NO. 2

JULY 18TH, 2012

Conclusion

- Questions, answers and/or comments?

Study website: <http://www.mdt.gov/pubinvolve/tongueriver/>

Study newsletters:

Study contact:

Tom Kahle
MT Department of Transportation
2701 Prospect Avenue
P.O. Box 201001
Helena, Montana 59620-1001
Email: tkahle@mt.gov
Tel: (406) 444-9211



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INFORMATIONAL MEETING NO. 2

JULY 18TH, 2012

MEETING MINUTES

INFORMATIONAL MEETING - NUMBER

DETAILS:

Location: St. Labre Indian School (Auditorium)
1000 Tongue River Road
Ashland, Montana

Date: July 18, 2012

Time: 6:00 PM – 7:30 PM

MEETING NOTIFICATION:

- A press release for the meeting was sent to various media outlets on July 9th.
- Display ads were posted in the *Broadus Powder River Examiner* and the *Forsyth Independent Press* (June 28th and July 12th).
- Information about the meeting was also posted on the study website:
<http://mdt.mt.gov/pubinvolve/tongueriver/>
- Flyer's (11" x 17") were posted at various locations in Lame Deer and Ashland by Janice Spear, Northern Cheyenne tribal transportation planner.
- Email notification was sent to those individuals on the study email list.

PLANNING TEAM MEMBER ATTENDANCE:

- Tom Roberts (MDT)
- Tom Kahle (MDT)
- Wayne Noem (MDT)
- Jeff Key (RPA)

Meeting minutes are intended to capture the general content of meeting discussions and to document comments made by the attendees. Meeting minutes may include opinions provided by attendees; no guarantees are made as to the accuracy of these statements and no fact checking of specific statements is provided or implied from the publishing of final meeting minutes.

AGENDA:

Informational Meeting for the Tongue River Road Corridor Planning Study was held on Wednesday, July 18th, 2012 at the St. Labre Indian School Auditorium in Ashland. The purpose of the meeting was to inform interested parties about the scope and purpose of the corridor planning study, present the findings of the existing conditions analysis, and to solicit input on the existing conditions and concerns within the study area that may be relevant to the corridor planning effort. A study presentation was made from 6:00 to 6:45 PM, followed by a question and answer period. The meeting ended at 7:30 PM. This additional public meeting was requested by the Northern Cheyenne Tribal Administration in hopes of reaching out to more tribal members, and those non-tribal members living in and around Ashland.

A total of 2 members of the community attended and signed in at the meeting.

COMMENTS

A number of verbal comments were made during the open house and after the presentation. In addition, comment sheets were available for all members of the audience. A summary of the comments received during the meeting is presented below:

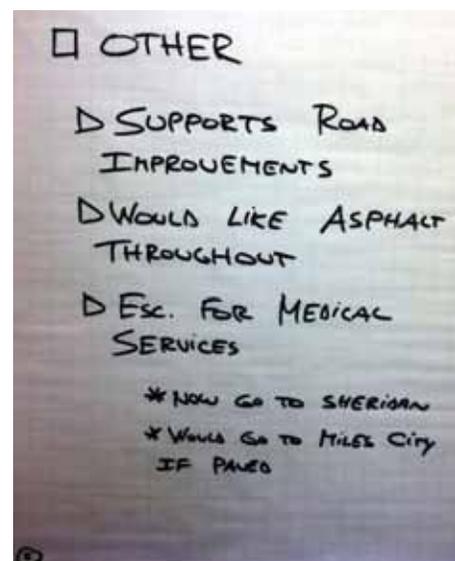
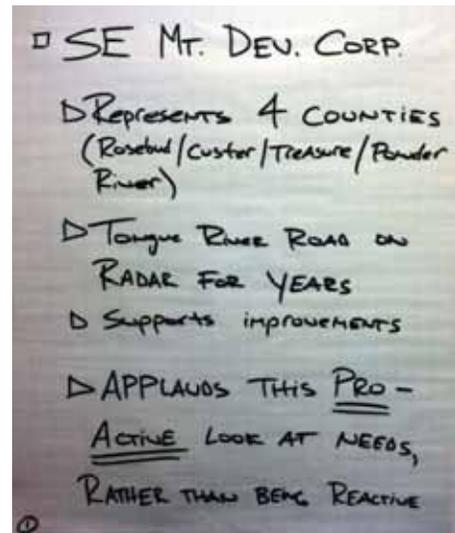
Comment Sheet No. 1

- Southeast Montana Development Corporation represents four Counties: Rosebud, Custer, Treasure and Powder River.
- Tongue River Road has been on their radar for years.
- Supports improvements to the road.
- Applauds the study and being pro-active, rather than waiting until impacts occur and being reactive.

Comment Sheet No. 2

- Supports road improvements.
- Would like to see pavement throughout the entire corridor.
- Primary concern is for medical services – now go to Sheridan but would go to Miles City if paved.

The meeting concluded at 7:30 PM. The sign-in sheet from the informational meeting is attached.





Informational Meeting

Discuss Tongue River Road Corridor Planning Study

**Wednesday, October 24, 2012 6:00 p.m.
Miles Community College, Rm. 106
2715 Dickinson St., Miles City, MT**

The Montana Department of Transportation (MDT), in partnership with Custer and Rosebud counties, is conducting the second of two informational meetings to discuss the Tongue River Road Corridor Planning Study. The corridor planning study includes all of Secondary Route 332 (known locally as Tongue River Road). Secondary Route 332 begins 10 miles south of Miles City (Reference Marker 0.0) and ends two miles north of the Northern Cheyenne Indian Reservation along Tongue River Road (Reference Marker 50.4). The purpose of the meeting is to present various improvement option concepts developed for the corridor and gather community feedback on the draft corridor study report. **Beginning on October 23, 2012, the draft corridor study report may be viewed at:**

<http://www.mdt.mt.gov/pubinvolve/tongueriver/documents.shtml>

The Tongue River Road Corridor Planning Study is a pre-environmental study that allows for earlier planning-level coordination with the public, stakeholders, and environmental resource agencies. The study will identify potential improvements and will assist in facilitating a smooth and efficient transition from transportation planning to future project development/ environmental review, if any, based on need and funding availability. The Tongue River Road Corridor Planning Study is a planning-level study and is not a design or construction project.

The meeting is open to the public and the public is encouraged to attend. MDT attempts to provide accommodations for any known disability that may interfere with a person's participation in any department service, program or activity. For reasonable accommodations to participate in this meeting, please contact Jeff Key at (406) 447-5000 at least two days before the meeting. For the hearing impaired, the TTY number is (406) 444-7696 or (800) 335-7592, or Montana Relay at 711. Alternative accessible formats of this information will be provided upon request.

Comments may be submitted in writing at the meeting, by mail to Tom Kahle, Project Manager, MDT Statewide and Urban Planning, PO Box 201001, Helena, MT. 59620-1001, or online at www.mdt.mt.gov/mdt/comment_form.shtml. Please indicate comments are for Tongue River Road Corridor Planning Study. Comments are due by November 14, 2012.

SIGN - IN SHEET

INFORMATIONAL MEETING NO. 2 - October 24, 2012

| Name | Address | Email |
|-------------------------|-------------------------------------|----------------------------|
| SCOTT RANDALL | 825 CUSTER HELENA MT | SCOTT@RPA-MT.COM |
| Tom Roberts | MDF Miles City | troberts@mdf.mt.gov |
| MARK FLX | 589 TONGUE CANYON ROAD MILES CITY | markflx@rangeweb.net |
| John Marks | Forsyth | johnmarks@rangeweb.com |
| Clara Spear | 70 Sunbear Lame Deer 59043 | |
| JIM ATCHISON | PO Box 1935 COLSTRIP, MT 59323 | semdc@bhw.net |
| DAN HADLEY | BILLINGS, MT | |
| Tia Frank | MT Glendive office | tfrank@mt.gov |
| Dan Barkemeyer | 4587 Tongue River | |
| Reg Barkemeyer | " " | |
| Mike Coryell | 110 Apple Miles City | Mikes@rpa.mt.gov |
| Ken Hasbun | 8114 Valley Drive Miles City | ksh@rpa.mt.gov |
| Carol Lambert | PO Box 2 Broadview, mt | norm@rangeweb.mt |
| Tina Spear | | |
| Clara's Out Home | 40 John Scenic Circle MC | |
| TERRY BACKLUND | Box 915 Miles City, MT | j.backlund@CD-CUSTER.MT.US |
| DAVID SIEGLE BARR RANCH | 3880 Tongue River Rd Miles City, MT | |
| JEFF RISE | RPA | |
| TEEN FARR | MOT-UTERWA | |
| WAYNE MOON | MOT-UTERWA | |
| SHANE MINTZ | MOT-grant Falls | |



October 24, 2012

INFORMATIONAL MEETING #2

TONGUE RIVER ROAD (S-332) – Corridor Planning Study

WELCOME



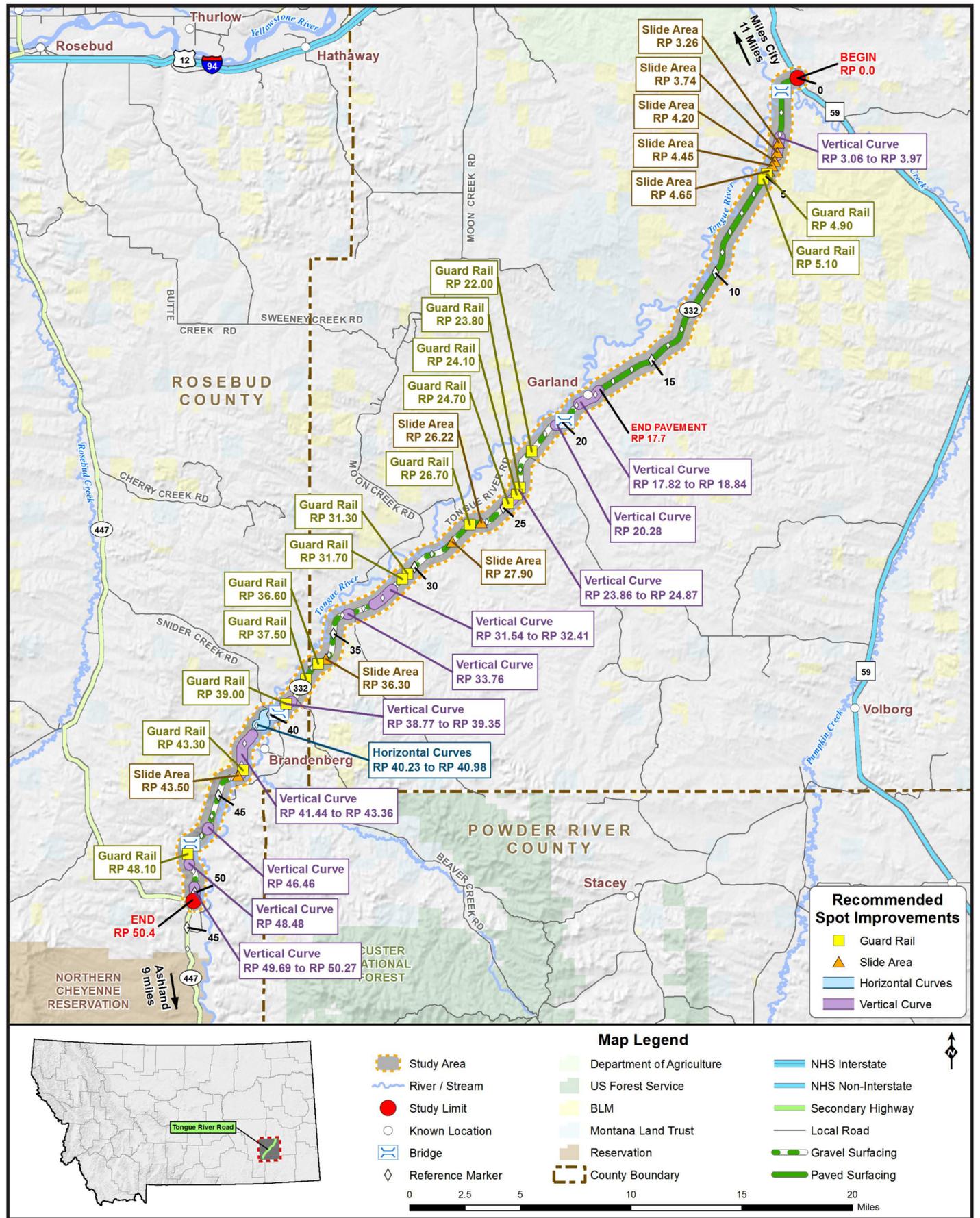
Montana Department of Transportation
Helena, Montana



INFORMATIONAL MEETING

TONGUE RIVER ROAD (S-332) – Corridor Planning Study

Potential Spot Improvements



Montana Department of Transportation
Helena, Montana

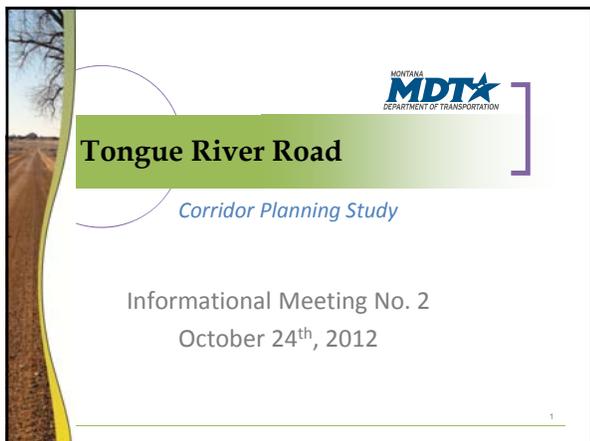
INFORMATIONAL MEETING

TONGUE RIVER ROAD (S-332) – Corridor Planning Study

Summary of Improvement Options

| Concept Title | Description | Estimated Cost |
|--|---|--|
| CONCEPT 1 – SPOT IMPROVEMENTS | | |
| <i>1.A - Vertical Curves</i> | <ul style="list-style-type: none"> Modify existing vertical curves to increase the driver's sight distance. Identified in both paved and graveled sections. 46 total curves identified. | \$1,380,000 |
| <i>1.B - Slide Areas</i> | <ul style="list-style-type: none"> Identified in both paved and graveled sections. Nine (9) areas identified. | \$2,761,000 |
| <i>1.C - Guardrail</i> | <ul style="list-style-type: none"> Protect drivers from potential safety hazards due to the steep slopes. Guardrail warrants to be evaluated prior to installation. Re-work of slopes may not be feasible. | \$1,290,000 |
| <i>1.D - Horizontal Curves (RP 40.23 – RP 40.98)</i> | <ul style="list-style-type: none"> Improve three (3) horizontal curves that do not meet current standards. Limited to area just west of the Tongue River Bridge. | \$689,000 |
| CONCEPT 2 – GRAVEL WITHOUT RECONSTRUCTION (RP 17.7 to RP 50.4) | | |
| <i>2.A - Gravel Placement</i> | <ul style="list-style-type: none"> Place new 4" gravel surface on the roadway. No widening of the roadway. No reconstruction to address identified areas of concern. | \$2,741,000 |
| <i>2.B - Double Shot / Bitumen Treatment</i> | <ul style="list-style-type: none"> Double chip seal coat on top of existing gravel road. No widening of the roadway. No reconstruction to address identified areas of concern. | \$2,183,000 |
| CONCEPT 3 – RECONSTRUCT AND WIDEN GRAVEL SECTION (RP 17.7 to RP 50.4) * | | |
| <i>Reconstruct and Widen Gravel Section</i> | <ul style="list-style-type: none"> Reconstruct gravel portion to a base width of 36' with a 32' top surface. May require additional right-of-way (not included in cost estimate). | \$25,341,000 |
| <i>Bridge Replacement</i> | <ul style="list-style-type: none"> Replace three (3) bridges. | \$1,878,000 |
| CONCEPT 4 – REHABILITATE WITH MILL / FILL / OVERLAY (RP 0.0 to RP 17.7) AND RECONSTRUCT AND WIDEN GRAVEL SECTION (RP 17.7 to RP 50.4) * | | |
| <i>Rehabilitate with Mill / Fill / Overlay (RP 0.0 to RP 17.7)</i> | <ul style="list-style-type: none"> Mill the existing asphalt pavement, fill areas for better drainage (as needed), and place a new asphalt overlay. No modifications to existing road widths. No modifications to existing bridge or hydraulic structures. | \$10,690,000 |
| <i>Reconstruct & Widen Gravel Section (RP 17.7 to RP 50.4)</i> | <ul style="list-style-type: none"> Reconstruct gravel portion to a base width of 36' with a 32' top surface. May require additional right-of-way (not included in cost estimate). | \$25,341,000 |
| <i>Bridge Replacement</i> | <ul style="list-style-type: none"> Replace three (3) bridges along gravel section. | \$1,878,000 |
| CONCEPT 5 – RECONSTRUCT WITH PAVEMENT (RP 0.00 to RP 50.4) * | | |
| <i>Reconstruct with Pavement (RP 0.0 to RP 50.4)</i> | <ul style="list-style-type: none"> Reconstruct both the paved and gravel section of the roadway to a paved section. Width dependent on AADT May require additional right-of-way (not included in cost estimate). | \$54,614,000 (24') \$63,716,000 (28') \$72,819,000 (32') \$81,921,000 (36') \$91,023,000 (40') |
| <i>Bridge Replacement</i> | <ul style="list-style-type: none"> Replace one (1) bridge along paved section. Replace three (3) bridges along gravel section. | \$2,790,000 |

* The continuation of improvements described under these concepts for the 2.7 miles of S-447 located between the intersection of S-332/S-447 and the beginning of existing pavement should be considered if and when a project is developed.



Tongue River Road
Corridor Planning Study

Informational Meeting No. 2
October 24th, 2012

1

Introduction

- Study Partners
 - Custer County
 - Rosebud County
 - MDT
 - FHWA
- Consultant – RPA team



2

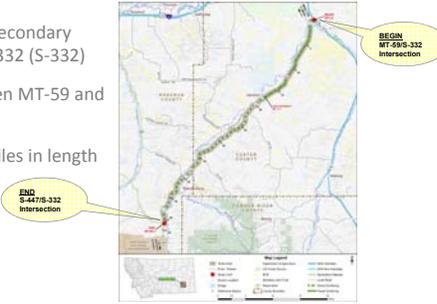
Outline of this Evening's Meeting

- Study area boundary
- Needs and objectives
- Improvement options considered
- Implementation/next steps

3

Study Area Boundary

- State Secondary Route 332 (S-332)
- Between MT-59 and S-447
- 50.4 miles in length



4

Needs & Objectives

NEED 1: IMPROVE SAFETY AND OPERATION OF S-332

Objectives (To the Extent Practicable):

- Improve geometric elements to meet current MDT design criteria
- Accommodate existing and future capacity demands within the corridor, including potential increases in semi-truck traffic
- Provide adequate clear zones to meet current MDT design criteria

5

Needs & Objectives

NEED 1: Continued

Objectives (To the Extent Practicable):

- Provide appropriate drainage facilities throughout the corridor to minimize water on the roadway
- Provide consistent roadway and bridge widths
- Provide appropriate surfacing to allow for "all-weather" travel
- Improve maintenance practices, given limited funding, to address washboards, potholes, and dust issues

6

Needs & Objectives

NEED 2: PRESERVE THE ENVIRONMENTAL, CULTURAL, RECREATIONAL AND AGRICULTURAL NATURE OF THE CORRIDOR

Objectives (To the Extent Practicable):

- Evaluate and incorporate “best practice” mitigation strategies as appropriate to reduce animal-vehicle conflicts
- Respect the agricultural nature of the corridor and allow for farm access as needed

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INFORMATIONAL MEETING NO. 2 OCTOBER 24TH, 2012

Needs & Objectives

NEED 2: *Continued*

Objectives (To the Extent Practicable):

- Avoid adverse impacts to the extent practicable, otherwise minimize adverse impacts to historic, cultural, archaeological, and environmental resources that may result from improvement options
- Evaluate fish (aquatic organism) passage issues and incorporate appropriate solutions to improve aquatic connectivity and stream function through structures and culverts
- Provide reasonable access to recreational sites in the corridor

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INFORMATIONAL MEETING NO. 2 OCTOBER 24TH, 2012

Needs & Objectives

NEED 3: MINIMIZE CONFLICTS ALONG THE CORRIDOR

Objectives (To the Extent Practicable):

- Minimize impacts to existing residential and agricultural uses along the corridor
- Minimize impacts to the Amish community, the Northern Cheyenne Indian Reservation and the St. Labre Indian School, all located south of the southern termini of S-332
- Consider all modes of transportation in the corridor

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INFORMATIONAL MEETING NO. 2 OCTOBER 24TH, 2012

Needs & Objectives

OTHER

Objectives (To the Extent Practicable):

- Reduce roadway maintenance costs
- Limit disruptions during construction as much as practicable
- Availability and feasibility of funding



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INFORMATIONAL MEETING NO. 2 OCTOBER 24TH, 2012

Improvement Options Considered

- **Concept 1** – Spot Improvements
- **Concept 2** – Gravel without Reconstruction (RP 17.7 to RP 50.4)
- **Concept 3** – Reconstruct and Widen Gravel Section (RP 17.7 to RP 50.4)
- **Concept 4** – Rehabilitate with Mill / Fill / Overlay (RP 0.0 to RP 17.7) & Reconstruct and Widen Gravel Section (RP 17.7 to RP 50.4)
- **Concept 5** – Reconstruct with Pavement (RP 0.00 to RP 50.4)

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INFORMATIONAL MEETING NO. 2 OCTOBER 24TH, 2012

Concept 1 – Spot Improvements

- **Vertical Curve Improvements** – Modifications to existing vertical crest and sag curves (*Estimated Cost: \$1,380,000*)
- **Slide Area Improvements** – Reconstruct numerous slide areas from 2011 flood events (*Estimated Cost: \$2,761,000*)
- **Guardrail Installation** – Fix steep side slopes and high embankments (*Estimated Cost: \$1,290,000*)
- **Horizontal Curve Improvements** – Modify horizontal curves between RP 40.23 and 40.98 (*Estimated Cost: \$689,000*)

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INFORMATIONAL MEETING NO. 2 OCTOBER 24TH, 2012

Concept 1 - Spot Improvements

INFORMATIONAL MEETING NO. 2

OCTOBER 24TH, 2012

Concept 2 - Gravel without Reconstruction

Concept 2.A - Gravel Placement (Estimated Cost: \$2,741,000)

- New four-inch gravel surface layer on the roadway to improve the roadway surface
- Does not include widening the roadway surface or improvement of other areas of concern

Concept 2.B - Double Shot / Bitumen Treatment (Estimated Cost: \$2,183,000)

- Double-shot / bitumen surfacing treatment on reconditioned gravel surface
- Seals surfacing course to improve roadway surface

INFORMATIONAL MEETING NO. 2

OCTOBER 24TH, 2012

Concept 3 - Reconstruct and Widen Gravel Section

- Reconstructs existing gravel portion to a 32-foot wide gravel top surface width
- On top of a roadway base that could accommodate a 36-foot wide surface width in the future
- Three new replacement bridges or culverts would be required to meet width requirements
 - Foster Creek [RP 19.87]
 - Tongue River [RP 39.61]
 - Roe and Cooper Creek [RP 47.80]
- Includes extending improvements along S-447

INFORMATIONAL MEETING NO. 2

OCTOBER 24TH, 2012

Concept 3 - Reconstruct and Widen Gravel Section

Estimated Cost:

- \$25,341,000 (Without Bridge Reconstruction)
- \$1,878,000 (Bridge Reconstruction Only)
- \$2,092,000 (Extension on S-447)

INFORMATIONAL MEETING NO. 2

OCTOBER 24TH, 2012

Concept 4 - Rehabilitate With Mill / Fill / Overlay and Reconstruct and Widen Gravel Section

- Mill, fill and overlay of the existing pavement section (no improvements to the surface width)
- Extends surfacing life without a total reconstruct (~ rehabilitation effort)
- No modifications to existing surface widths, no bridge or hydraulic structures.
- Also included are the improvements described under Concept 3

INFORMATIONAL MEETING NO. 2

OCTOBER 24TH, 2012

Concept 4 - Rehabilitate With Mill / Fill / Overlay and Reconstruct and Widen Gravel Section

Estimated Cost:

- \$10,690,000 (Pavement RP 0.0 - RP 17.7)
- \$25,341,000 (Gravel RP 17.7 - RP 50.4, without Bridge Reconstruction)
- \$1,878,000 (Bridge Reconstruction Only RP 17.7 - RP 50.4)
- \$2,092,000 (Extension on S-447)

INFORMATIONAL MEETING NO. 2

OCTOBER 24TH, 2012

Concept 5 - Reconstruct with Pavement (RP 0.00 To RP 50.4)

- Asphalt pavement throughout the entire S-332 corridor
 - AADT between 0-299 24' width
 - AADT between 300-999 28' width
 - AADT between 1,000-1,999 32' width
 - AADT between 2,000-3,000 36' width
 - AADT greater than 3,000 40' width
- Ultimately, the required width of the roadway would be determined based on future AADT values

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INFORMATIONAL MEETING NO. 2 OCTOBER 24TH, 2012

Concept 5 - Reconstruct with Pavement (RP 0.00 To RP 50.4)

- Four new replacement bridges or culverts would be necessary to meet width requirements
 - Pumpkin Creek [RP 1.02]
 - Foster Creek [RP 19.87]
 - Tongue River [RP 39.61]
 - Roe and Cooper Creek [RP 47.80]
- Includes extension of the reconstruct with pavement along S-447

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INFORMATIONAL MEETING NO. 2 OCTOBER 24TH, 2012

Concept 5 - Reconstruct with Pavement (RP 0.00 To RP 50.4)

Estimated Cost:

- \$54,614,000 (24' Width without Bridge Reconstruction)
- \$63,716,000 (28' Width without Bridge Reconstruction)
- \$72,819,000 (32' Width without Bridge Reconstruction)
- \$81,921,000 (36' Width without Bridge Reconstruction)
- \$91,023,000 (40' Width without Bridge Reconstruction)
- \$2,790,000 (Bridge Reconstruction Only)
- \$4,389,000 (Extension on S-447)

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INFORMATIONAL MEETING NO. 2 OCTOBER 24TH, 2012

Concept Summary

- Five (5) concepts developed
- Various levels of improvements
- Various levels of costs
- Dependent on traffic volumes



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INFORMATIONAL MEETING NO. 2 OCTOBER 24TH, 2012

Implementation

- Identify the improvement option(s) that meet the needs in the area;
- Identify and secure a funding source or sources; and
- Follow MDT guidelines for project nomination and development, including a public involvement process and environmental documentation

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INFORMATIONAL MEETING NO. 2 OCTOBER 24TH, 2012

Next Steps

- Draft Corridor Study Report posted October 19th, 2012
- Written comments due by **November 13th, 2012**
- Comments considered and final report by end of November, 2012
- Send comments to:
 - Study website: <http://www.mdt.gov/pubinvolve/tongueriver>
 - Study contact:
 - Tom Kahle
 - MT Department of Transportation
 - 2701 Prospect Avenue
 - P.O. Box 201001
 - Helena, Montana 59620-1001
 - Email: tkahle@mt.gov
 - Tel: (406) 444-9211

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INFORMATIONAL MEETING NO. 2 OCTOBER 24TH, 2012

MEETING MINUTES

INFORMATIONAL MEETING - NUMBER 2

DETAILS:

Location: Miles Community College, Room 106
2715 Dickinson Street
Miles City, Montana

Date: October 24, 2012

Time: 6:00 PM – 8:30 PM

MEETING NOTIFICATION:

- A press release for the meeting was posted on the Montana Department of Transportation (MDT) website on September 27th.
- A press release for the meeting was distributed to regional media outlets on October 9th.
- Display ads were posted in the Miles City Star (October 5th and 19th).
- Information about the meeting was also posted on the study website: <http://mdt.mt.gov/pubinvolve/tongueriver/>
- Study newsletters were sent to a total of 61 landowners within the study area boundary on October 16th.
- Study newsletters were also sent to the following identified interested parties, including:
 - Bill McChesney (House District 40)
 - Eric Moore (Senate District 20)
 - Montana State Highway Patrol
 - Williston Basin Interstate Pipeline Company
 - Janice Spear (Northern Cheyenne Tribe)
 - George Luther (Arch Coal Consultant)
- Email notification was sent to those individuals on the study email list.

Meeting minutes are intended to capture the general content of meeting discussions and to document comments made by the attendees. Meeting minutes may include opinions provided by attendees; no guarantees are made as to the accuracy of these statements and no fact checking of specific statements is provided or implied from the publishing of final meeting minutes.

PLANNING TEAM MEMBER ATTENDANCE:

- Shane Mintz (MDT)
- Tom Roberts (MDT)
- Tom Kahle (MDT)
- Wayne Noem (MDT)
- Jerry Backlund (Custer County)
- Jeff Key (RPA)
- Scott Randall (RPA)

AGENDA:

The Informational Meeting for the Tongue River Road Corridor Planning Study was held on Wednesday, October 24th, 2012 at Miles Community College in Miles City. The purpose of the meeting was to present the needs and objectives identified for S-332 during the study, and present the various improvement options developed through the corridor study process. In addition, participants were asked to offer their input on the improvement options developed during the study. A study presentation was made from 6:00 to 6:45, followed by a question and answer period. The meeting ended at 8:30 PM.

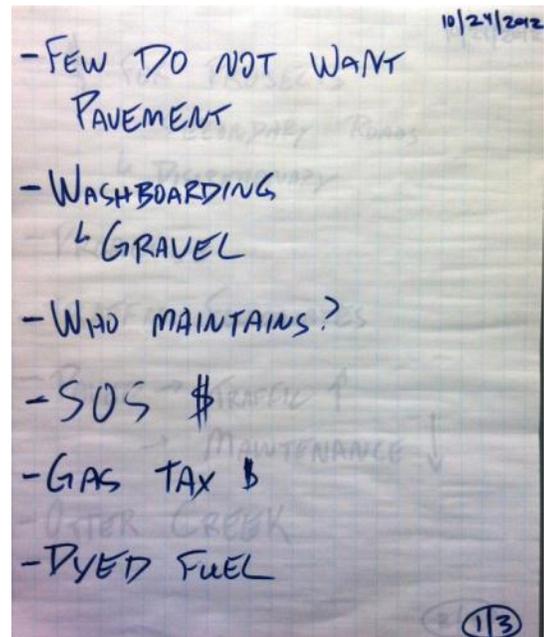
A total of 14 members of the community signed in at the meeting. This number does not include those on the Planning Team, or affiliated with MDT and RPA (7 individuals in total).

COMMENTS

A number of verbal comments were made after the presentation. In addition, comment sheets were available for all members of the audience. A summary of the comments received during the meeting is presented below:

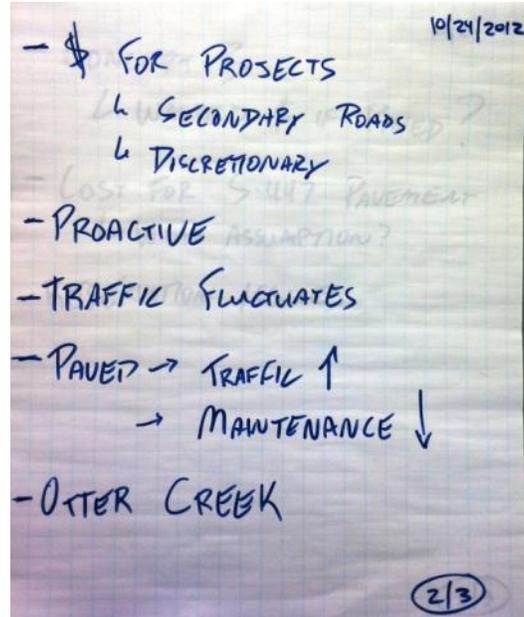
Comment Sheet No. 1

- Most people who live on the corridor would like to have pavement.
- With a gravel surface, drivers would still have to contend with washboards and dust.
- If the road was completely paved, who would maintain the paved roadway?
- If the road was paved, would farmers be fined for using dyed fuel in their vehicles while on the roadway?



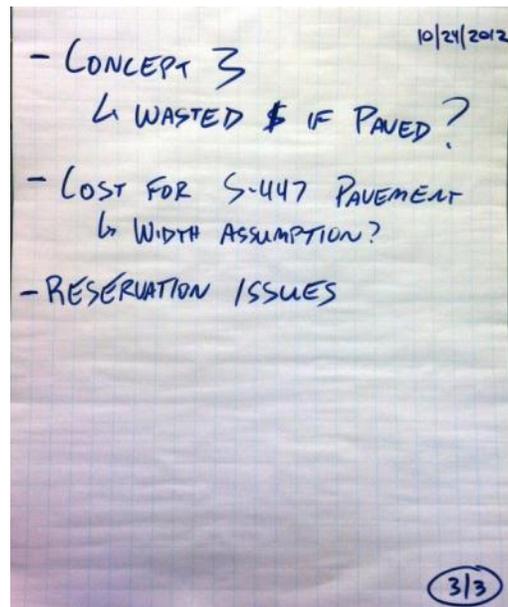
Comment Sheet No. 2

- How would the project(s) be funded? Some of the cost estimates are very large.
 - *Historically the secondary roads program would provide funding, however there is no money available for S-332 given other secondary road priorities in the Glendive District.*
 - *Discretionary funds could be a viable funding source dependent on legislative support.*
- Applaud the proactive nature of this study to stay ahead of the regional development activity.
- Traffic fluctuates up and down the corridor. During certain times of the day traffic volumes rise over and above your field review experience.
- If the road is paved, traffic will certainly rise, however, maintenance needs may decrease.
- The impact of Otter Creek coal mine remains to be seen. No matter if coal is hauled by rail or truck, traffic will increase on the road.



Comment Sheet No. 3

- For Concept 3 – Reconstruct and Place Gravel: won't this be a waste if some day in the future pavement is required?
 - *No, because the road base would be built to accommodate a future 36-foot paved top surfacing. In other words, everything below the 4-inch gravel surfacing layer would be set up to handle the future paved roadway. This includes earthwork, grades, culverts, bridges etc.*
- How did you cost out the pavement concept if you don't know what width will be required?
 - *The pavement option was based on an assumption that the maximum paved width would be 36 feet of asphalt. Furthermore, cost estimates for planning purposes were prepared for other widths and included in the report.*
- Does the Northern Cheyenne Reservation jurisdiction affect the outcomes of the study?
 - *No, the terminus of this study (i.e. S-332) is almost 3 miles away from the northern boundary of the Reservation.*



The meeting concluded at 8:30 PM. The sign-in sheet from the informational meeting is attached.



TONGUE RIVER ROAD (S-332) – Corridor Planning Study

SIGN – IN SHEET

INFORMATIONAL MEETING NO. 2 – October 24, 2012

| Name | Address | Email |
|-------------------------|-------------------------------------|--------------------------------|
| SCOTT RANDALL | 825 CUSTER HELENA MT | SCOTT@RPA-HLV.COM |
| Tom Roberts | MOF Miles City | drobert@and.gov |
| MARK FLX | 584 TONGUE CUTE ROAD MILECITY | mflx@orange.wb.net |
| John Marks | Forsyth | johnmarks@postandcommunity.net |
| SHIRL SPEAR | 70 SUNBEAR LAUREL DEER 59043 | |
| JIM ATCHISON | PO BOX 1935 COLSTRIP, MT 59323 | SEMDC@bhwi.net |
| DAN HARLEY | BILLINGS, MT | |
| Jan Frank | MT Glendive office | jfrank@mt.gov |
| Dan Barkenmeyer | 4587 Tongue River | |
| Pat Barkenmeyer | " " | |
| Mike Longwell | 110 Okanla Miles City | MILES@RPA.MT.US |
| Kim Strubel | 8114 Valley Drive Miles City | KSTRUB@MILES.COM |
| Carol Lambert | PO Box 2 Broadue mt | norm@RAREweb.net |
| Jessie Spurr | | |
| Shirley Pat Helm | 40 Tolson scenic Circle MCy | |
| TERRY BACKLUND | Box 915 Miles City, MT | j.backlund@CO-ASTER.MT.US |
| DAVID SIEGLE BALK RAUCH | 3880 Tongue River Rd Miles City, MT | |
| JEFF RISEY | RPA | |
| TOM KAPPE | MOF-HELENA | |
| WYNNE MOON | MOF-HELENA | |
| SHANE MINTZ | MOF-good Arts | |

[22]



May 4, 2012

NAME
ADDRESS

Subject: Invitation to Participate in S-332 Tongue River Road Corridor Planning Study

The Montana Department of Transportation (MDT) is conducting a pre-NEPA/MEPA Corridor Planning Study to determine cost-effective ways to address transportation needs within the Secondary Route 332 (S-332) corridor beginning 10 miles south of Miles City and ending two miles north of the Cheyenne Indian Reservation along Tongue River Road. Due to possible coal mining development southeast of Ashland, the potential exists for an increase in passenger and truck traffic on S-332. The study will analyze improvement options taking into consideration environmental issues and constraints, as well as technical feasibility and costs. This analysis will feed into any future NEPA/MEPA process if a project is forwarded from the study.

We would like to invite you to participate in an agency workshop for the S-332 Tongue River Road Corridor Planning Study to be held in Helena (video conferencing will also be made available for participants in Miles City). The purpose of this meeting is to introduce you to the S-332 Corridor Planning Study process and discuss your concerns regarding resources that could be affected by potential improvement options. The study area is located in Custer and Rosebud Counties, along S-332, from reference post (RP) 0.00 (MT-59 intersection) extending 50.4 miles southwest to RP 50.4 (S-447 intersection). The proposed study area is located within the following legal descriptions:

| <u>Township</u> | <u>Range</u> | <u>Sections</u> |
|------------------------|---------------------|--|
| 1S | 44E | 2, 3, 9, 10, 11, 15, 16, 17, 20, 21, 22, 27, 28, 33, 34 |
| 1N | 44E | 1, 11, 12, 13, 14, 15, 22, 21, 23, 27, 28, 32, 33, 34 |
| 1N | 45E | 5, 6, 7 |
| 2N | 44E | 36 |
| 2N | 45E | 1, 2, 10, 11, 12, 13, 14, 15, 16, 19, 20, 21, 22, 23, 28, 29, 30, 31, 32 |
| 2N | 46E | 4,5,6,7 |
| 3N | 46E | 1, 11, 12, 13, 14, 15, 21, 22, 23, 26, 27, 28, 31, 32, 32, 34 |
| 3N | 47E | 5,6,7 |
| 4N | 47E | 1, 11, 12, 13, 14, 22, 23, 24, 25, 26, 27, 28, 29, 31, 32, 33, 34 |
| 4N | 48E | 5, 6,7,18 |
| 5N | 47E | 13, 24, 25, 26, 35, 36 |
| 5N | 48E | 4, 5, 6, 8, 7, 17, 18, 19, 30 |
| 6N | 48E | 20, 21, 28, 29, 32, 33 |

A study area map is included with this letter, along with a CD containing the draft environmental scan. Please take a look at the study area map and identify any known resources and/or concerns within the study area. Feel free to mark the maps as you see necessary. Additional study information is available at the following website: <http://mdt.mt.gov/pubinvolve/tongueriver/>

We have identified **Wednesday, June 6, 2012 from 9:00 am – noon**, for the agency workshop.

A representative from the consulting firm, Robert Peccia and Associates, will be contacting you the third week of May to confirm your availability on this day. If you are unavailable to participate in this agency workshop on this day, I would appreciate if you would confer with your colleagues to identify an alternate representative who can discuss the identified and affected resources in the study area. The agency workshop will be held in MDT's Planning Conference Room A, which is located at 2960 Prospect Avenue. This is on the north side of U.S. Highway 12 and directly adjacent to Les Schwab Tires. For those located in eastern Montana, a remote location has been identified at the MDT Miles City Area Office, which is located at 217 North 4th Street.

On behalf of the planning team, we look forward to working with you on this important study to identify reasonable improvement options for the S-332 corridor. Please contact me at (406) 444-0879 if you have any questions prior to the meeting.

Thank you in advance for your agency's participation.

Tom Martin
Environmental Services Bureau Chief

Attachments

Copy: Shane Mintz, MDT
Tom Roberts, MDT
Lynn Zanto, MDT
Jim Skinner, MDT
Zia Kazimi, MDT
Tom Kahle, MDT
Jean Riley, MDT
Tom Atkins, MDT
Brian Andersen, MDT
Wayne Noem, MDT
Danielle Bolan, MDT
Bob Burkhardt, FHWA
Bill McChesney, HD 40 Representative
Jerry Backlund, Custer County Road and Bridge Department
Wayne Buck, Rosebud County Road and Bridge Department
Jerry Hamilton, Custer County Representative/Landowner
Jeff Key, Robert Peccia and Associates
Ken Leonard, Cambridge Systems
File

Distribution List:

Stephen Potts, US Environmental Protection Agency
Mike McGrath, US Fish & Wildlife Service
Todd Tillinger, US Army Corps of Engineers
Elaine Raper, Bureau of Land Management
Debbie Johnson Morford, Bureau of Land Management
Mark Aberg, MT Department of Natural Resources & Conservation Eastern Land Office
Brad Schmitz, MT Fish, Wildlife and Parks – Region 7
Kenneth Backes, MT Fish, Wildlife and Parks – Region 7
John Ensign, MT Fish, Wildlife and Parks – Region 7
Beau Downing, MT Fish, Wildlife and Parks - Headquarters
Doris Fischer, MT Fish, Wildlife and Parks - Headquarters
Allan Kuser, MT Fish, Wildlife & Parks – Headquarters
Bonnie Lovelace, MT Department of Environmental Quality
Robert Ray, MT Department of Environmental Quality
Jeff Ryan, MT Department of Environmental Quality
Mark Baumler, MT Historical Society

WORKSHOP AGENDA

RESOURCE AGENCY WORKSHOP

WORKSHOP GOALS:

This workshop will include a presentation of the *Tongue River Road Corridor Planning Study* and discussion about resource area concerns and issues located within the study area boundary. The workshop will begin promptly at 9:00 AM, and will end no later than NOON. The following items will be discussed at this resource agency workshop:

WORKSHOP AGENDA:

- I. Welcome and Introductions (9:00 AM—9:15 AM)
- II. Presentation about Planning Study (9:15 AM—10:00 AM)
- III. Discussion about Resource Areas—Issues and Concerns (10:00 AM—?)
- IV. Conclusion and Next Steps

DETAILS:

Location: HELENA

MDTCNF Planning A Conference Room
2960 Prospect Avenue

MILES CITY

MDT Miles City Area Office
217 North 4th Street

Date: June 6, 2012

Time: 9:00 AM – NOON

FOR QUESTIONS CONTACT:

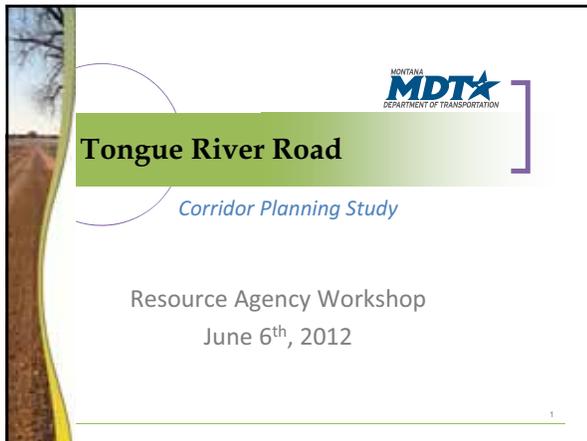
Jeff Key, PE

RPA Project Manager

(406) 447-5000

Jeff.key@rpa-hln.com

The MDT and RPA attempt to provide accommodations for any known disability that may interfere with a person participating in any service, program, or activity associated with this project. Alternative accessible formats of this information will be provided upon request. For further information call (406) 447-5000 or TTY (800) 355-7592, or call Montana Relay at 711. Accommodation requests must be made at least 48 hours prior to any scheduled meetings and/or other activities.



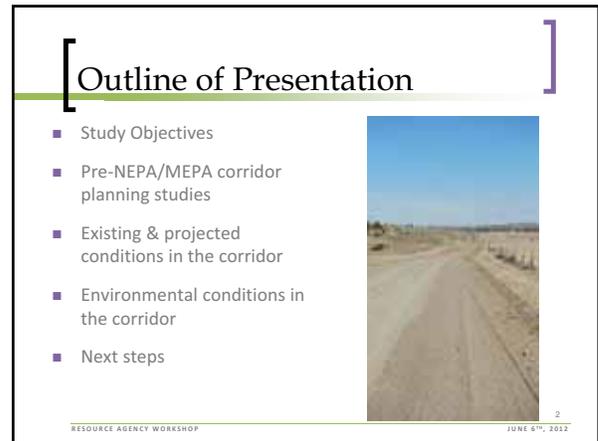
MONTANA
MDT
DEPARTMENT OF TRANSPORTATION

Tongue River Road

Corridor Planning Study

Resource Agency Workshop
June 6th, 2012

1



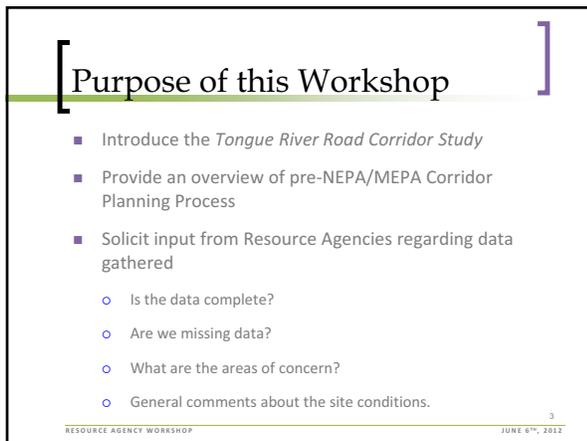
Outline of Presentation

- Study Objectives
- Pre-NEPA/MEPA corridor planning studies
- Existing & projected conditions in the corridor
- Environmental conditions in the corridor
- Next steps



2

RESOURCE AGENCY WORKSHOP JUNE 6TH, 2012



Purpose of this Workshop

- Introduce the *Tongue River Road Corridor Study*
- Provide an overview of pre-NEPA/MEPA Corridor Planning Process
- Solicit input from Resource Agencies regarding data gathered
 - Is the data complete?
 - Are we missing data?
 - What are the areas of concern?
 - General comments about the site conditions.

3

RESOURCE AGENCY WORKSHOP JUNE 6TH, 2012

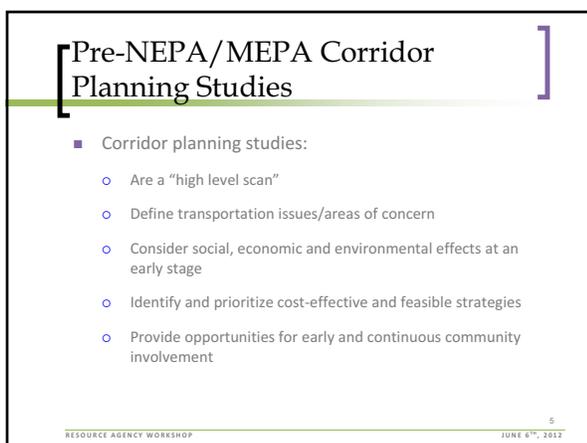


Goals and Purpose of Study

- Engage constituents early and throughout study
- Review existing conditions and identify constraints
- Identify needs and objectives
- Identify short-range and long-range improvements
- Develop planning level cost estimates

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RESOURCE AGENCY WORKSHOP JUNE 6TH, 2012



Pre-NEPA/MEPA Corridor Planning Studies

- Corridor planning studies:
 - Are a "high level scan"
 - Define transportation issues/areas of concern
 - Consider social, economic and environmental effects at an early stage
 - Identify and prioritize cost-effective and feasible strategies
 - Provide opportunities for early and continuous community involvement

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RESOURCE AGENCY WORKSHOP JUNE 6TH, 2012



What is a Corridor Planning Study?

- Corridor planning studies are:
 - Not a NEPA/MEPA Study or Environmental Study
 - Not a Preliminary or Final Design Project
 - Not a Construction or Maintenance Project
 - Not a Right of Way Acquisition Project

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RESOURCE AGENCY WORKSHOP JUNE 6TH, 2012

Study Area Boundary

- State Secondary Route 332 (S-332)
- Between MT-59 and S-447
- 50.4 miles in length

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Tongue River Railroad (TRR)

- This study is not related to the TRR
- Sole focus on S-332

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Study Schedule

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Public Involvement Activities

- Two informational meetings
- Presentations and outreach to interested parties, stakeholders, resource agencies and land owners as warranted
- Study newsletters
- Website/toll free line
- Informal meetings

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Identified Interested Parties

- Bill McChesney (House District 40)
- Eric Moore (Senate District 20)
- Montana State Highway Patrol
- Landowners in the Corridor
- Williston Basin Interstate Pipeline Company
- Northern Cheyenne Tribe
- Arch Coal

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S-332 Corridor Context

- Functionally classified as a Rural Collector
- Posted speeds vary between 45 mph and 70 mph
- Serves multiple uses
 - Local traffic
 - Recreational traffic
 - Farm-to-market agricultural traffic
 - Horses / horse-and-buggies
 - Mining related traffic

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S-332 Corridor Physical Characteristics

- Two-lane roadway
- Asphalt surfacing – first 17.7 miles
- Gravel surfacing – remaining 32.7 miles
- 147 access points, of which 10 are “public” approaches
- Constructed or improved at various times (as early as 1930 and as recently as 1998)
 - Emergency slide repairs in 2011



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JUNE 6th, 2012

S-332 Corridor Traffic Data

- Ranges from 280 vehicles per day (vpd) near Miles City to 50 vpd near Ashland (2010 counts)

| Site | Loc. | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|--------|---------|------|------|------|------|------|------|------|------|------|------|
| 9-2-9 | RP 1.0 | 190 | 170 | 180 | 260 | 180 | 140 | 270 | 250 | 180 | 190 |
| 9-4-3 | RP 11.0 | 140 | 150 | 90 | 80 | 80 | 160 | 180 | 90 | 110 | 130 |
| 9-4-4 | RP 26.5 | 70 | 90 | (a) | (a) | 80 | 210 | 100 | 110 | 90 | 110 |
| 44-7-5 | RP 39.5 | 100 | 100 | 70 | 90 | (a) | 90 | 40 | 10 | (a) | (a) |
| 44-8-4 | RP 49.5 | 60 | 100 | 60 | 60 | (a) | 60 | 90 | 40 | (a) | 40 |

Year 2010 Volume Highest Near Miles City

| Site | Loc. | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|--------|---------|------|------|------|------|------|------|------|------|------|------|
| 9-2-9 | RP 1.0 | 190 | 290 | 220 | (a) | 220 | 230 | 220 | 220 | 280 | (a) |
| 9-4-3 | RP 11.0 | 160 | 210 | 150 | 150 | 120 | 100 | 100 | 100 | 100 | 100 |
| 9-4-4 | RP 26.5 | 100 | 140 | 100 | 130 | 90 | 70 | 70 | 70 | 70 | 80 |
| 44-7-5 | RP 39.5 | 20 | 20 | 30 | (a) | 80 | 70 | 70 | 70 | 50 | (a) |
| 44-8-4 | RP 49.5 | 70 | 30 | 90 | (a) | 60 | 60 | 60 | 60 | 50 | (a) |

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JUNE 6th, 2012

S-332 Corridor Roadway Geometrics - Horizontal

- Corridor consists of both level and rolling terrain
- Seven horizontal curves do not meet current standards

| RP | Element | Value (ft) |
|-------|---------|------------|
| 39.52 | Radius | 955 |
| 40.23 | Radius | 350 |
| 40.66 | Radius | 300 |
| 40.88 | Radius | 350 |
| 42.21 | Radius | 500 |
| 42.97 | Radius | 500 |
| 44.37 | Radius | 1,000 |

Reverse curves just west of Tongue River Bridge



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S-332 Corridor Roadway Geometrics - Vertical

- Grades
 - Nine areas have vertical grades greater than 5.0% (exceeds current standards)
 - Of the nine, two have grades greater than 7.0%
- Curves
 - Thirty-four curves do not meet current standards
 - Of the 34, 13 curves do not meet current standards for stopping sight distance (SSD)
 - An additional 12 locations are estimated to not meet SSD

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S-332 Corridor Roadway Geometrics - Clear Zone

- Seven slide areas
- Fourteen steep fill slopes



Slide Area (note pavement edge)

Steep fill slope

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S-332 Corridor Roadway Geometrics - Widths

- Determined from MDT’s 2011 Montana Road Log
 - Surface width, lane width, shoulder width, surfacing thickness, and base thickness

| Begin RP | End RP | Lanes | Width | | | Surfacing |
|----------|--------|-------|---------|------|----------|-----------|
| | | | Surface | Lane | Shoulder | |
| 0.0 | 5.7 | 2 | 26 | 12 | 1 | Asphalt |
| 5.7 | 12.2 | 2 | 32 | 12 | 4 | Asphalt |
| 12.2 | 17.7 | 2 | 24 | 12 | 0 | Asphalt |
| 17.7 | 20.0 | 2 | 28 | 10 | 4 | Gravel |
| 39.6 | 41.0 | 2 | 32 | 12 | 4 | Gravel |
| 41.0 | 44.7 | 2 | 26 | 9 | 4 | Gravel |
| 44.7 | 50.4 | 2 | 28 | 10 | 4 | Gravel |

Widths Are Of Interest

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S-332 Corridor Access Points

| Begin RP | End RP | Length (mi) | Access Points | Density (Access / mi) | > 30° (NOTE 1) | Public Approach | |
|----------|--------|-------------|---------------|-----------------------|----------------|-----------------|----------------|
| | | | | | | Access Points | > 30° (NOTE 1) |
| 0.0 | 6.0 | 6.0 | 27 | 4.5 | 1 | 3 | 0 |
| 6.0 | 12.0 | 6.0 | 26 | 4.3 | 1 | 0 | 0 |
| 12.0 | 17.7 | 5.7 | 15 | 2.6 | 0 | 0 | 0 |
| 17.7 | 24.0 | 6.3 | 20 | 3.2 | 3 | 1 | 1 |
| 24.0 | 31.0 | 7.0 | 7 | 1.0 | 0 | 1 | 0 |
| 31.0 | 37.2 | 6.2 | 20 | 3.2 | 2 | 1 | 0 |
| 37.2 | 44.0 | 6.8 | 21 | 3.1 | 5 | 3 | 2 |
| 44.0 | 50.4 | 6.4 | 11 | 1.7 | 0 | 1 | 0 |
| Total | | 50.4 | 147 | 2.9 | 12 | 10 | 3 |

NOTE 1: Measured from perpendicular (i.e. a "Tee" approach).

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S-332 Corridor Bridge Crossings

- Four bridge crossings
 - RP 1.02 (Pumpkin Creek)
 - RP 19.87 (Foster Creek)
 - RP 39.61 (Tongue River)
 - RP 47.80 (Unnamed Drainage)

None of the bridges are structurally deficient or functionally obsolete



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S-332 Corridor Safety (Reported Crashes)

- For period between January 1, 2001 and December 31, 2010
- 18 total reported crashes
 - All single-vehicle; 6 involved wild or domestic animal; one fatal crash

| Crash Data | Crash Rate (per MVM) | Crash Severity Index | Crash Severity Rate (per MVM) |
|-----------------------------|----------------------|----------------------|-------------------------------|
| S-332 | 0.86 | 1.94 | 1.67 |
| Statewide Secondary – Rural | 1.40 | 2.25 | 3.17 |
| Percent Difference | -38.6% | -13.8% | -47.3% |

MVM = million-vehicle-miles

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JUNE 6TH, 2012

S-332 Corridor Future Traffic Volumes

- Average Annual Growth Rate (AAGR)
- 20 years ahead – look 20 years back....

| Site | Location | 2010 AADT | Average Annual Growth Rate | | | |
|---------|----------|-----------|----------------------------|-------------|-------------|-------------|
| | | | 1992 - 2011 | 1992 - 1999 | 2000 - 2011 | 2005 - 2011 |
| 9-2-9 | RP 1.0 | 280 | 1.57% | 3.77% | 2.55% | 4.48% |
| 9-4-3 | RP 11.0 | 100 | -0.41% | -0.54% | -4.06% | -5.49% |
| 9-4-4 | RP 26.5 | 70 | -1.49% | 7.47% | -4.36% | -6.76% |
| 44-7-5 | RP 39.5 | 50 | -2.07% | -21.67% | 17.64% | -8.97% |
| 44-8-4 | RP 49.5 | 50 | -1.15% | -3.87% | 2.00% | -3.58% |
| Average | | 110 | 0.24% | 0.45% | 1.79% | -0.72% |

Ambient background growth = 0.24%

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JUNE 6TH, 2012

S-332 Corridor Future Traffic Volumes

- In addition to "Ambient Background Growth", additional traffic due to potential mining activities

| Site | Location | Existing (2010) | Baseline (2032) | Scenario 1 (2032) | Scenario 2 (2032) | Scenario 3 (2032) |
|---------|----------|-----------------|-----------------|-------------------|-------------------|-------------------|
| 9-2-9 | RP 1.0 | 280 | 295 | 795 | 2,235 | 1,155 |
| 9-4-3 | RP 11.0 | 100 | 105 | 605 | 2,045 | 965 |
| 9-4-4 | RP 26.5 | 70 | 74 | 574 | 2,014 | 934 |
| 44-7-5 | RP 39.5 | 50 | 53 | 553 | 1,993 | 913 |
| 44-8-4 | RP 49.5 | 50 | 53 | 553 | 1,993 | 913 |
| Average | | 110 | 116 | 616 | 2,056 | 976 |

Uses ambient background growth = 0.24%

Depending on mining development, S-332 could realize a range of traffic volumes between 116 to 2,056 vpd

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Environmental Resources

- Land Ownership
- Soil Resources and Prime Farmland
- Geologic Resources
- Water Resources
- Wetlands
- Floodplains and Floodways
- Hazardous Substances
- Air Quality
- Noise
- Visual Resources
- Biological Resources
 - Fish and Wildlife
 - Vegetation
- Cultural and Archaeological Resources
- Social

Resources in blue are discussed in PPT

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Land Ownership

- Predominantly privately owned
 - Agricultural and ranch land
- Some public land
 - BLM
 - Montana State Land Trust

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Soil Resources and Prime Farmland

- Farmland of statewide importance (~28% of study area)
- Prime farmland if irrigated (~15% of study area)



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Geologic Resources

- S-332 traverses the alluvial terraces of the Tongue River
 - Gravel, sand, silt and clay
- Occasionally climbing onto exposed area of the Fort Union Formation
 - Sandstone, siltstone, mudstone and clay

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Water Resources

- Predominant surface waters:
 - Tongue River
 - Classified as impaired and is a section 303(d) listed waterbody
- Numerous intermittent drainages
- Numerous irrigation facilities



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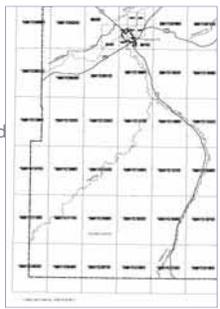
Wetlands

- Wetlands associated with the Tongue River and associated drainages
- If a project, or projects, advances, a wetland impact evaluation would be required

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Floodplains and Floodways

- 100-Year Flood (base flood for floodplain management programs)
- If a project, or projects, advances, coordination with Custer and Rosebud Counties will be required
- Zone D
 - Areas in which flood hazards are undetermined, but possible



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[Hazardous Substances]

- NRIS
 - No UST, LUST, remediation, landfill or NPL sites
 - Five abandoned mine sites

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[Air Quality]

- Attainment area
 - PM-2.5
 - PM-10
 - Carbon monoxide (CO)
- Mobile Source Air Toxins (MSAT)
 - May be required if project development activities commence

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[Noise]

- Traffic noise may need to be evaluated if a "Type I" project is developed
- A "Type I" project includes:
 - A significant shift in horizontal or vertical alignments
 - Increasing the number of through lanes
 - Increasing the traffic speeds and volume
- Noise abatement measures may be necessary if noise impacts exceed appropriated thresholds

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[Visual Resources]

- Landscape Character
- Visual Sensitivity
- Scenic Integrity
- Landscape Visibility



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[Biological Resources]

- Fish and Wildlife
- Vegetation



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[Fish and Wildlife]

T & E Species

| | |
|---|--------------------------------------|
| ■ Black-footed Ferret (Listed Endangered) | ■ Whooping Crane (Listed Endangered) |
| ■ Pallid Sturgeon (Listed Endangered) | ■ Greater Sage Grouse (Candidate) |
| ■ Piping Plover (Listed Threatened, Critical Habitat) | ■ Sprague's Pipit (Candidate) |
| ■ Interior Least Tern (Listed Endangered) | |

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RESOURCE AGENCY WORKSHOP JUNE 6th, 2012

Fish and Wildlife Montana Species of Concern

- Birds
 - Twelve species identified
- Fish
 - Eleven species identified
- Invertebrates
 - Sixteen species identified
- Mammals
 - Six species identified
- Reptiles
 - Six species identified

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RESOURCE AGENCY WORKSHOP JUNE 6th, 2012

Vegetation

- Threatened and Endangered Species
 - No endangered, threatened, proposed, or candidate species
- Species of Concern
 - Nine species of concern (each) in Custer and Rosebud Counties

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RESOURCE AGENCY WORKSHOP JUNE 6th, 2012

Cultural and Archaeological Resources

- Twelve Mile Dam Fishing Access – 4(f) and 6(f)
- Pumpkin Creek Ranch Recreational Area – 4(f)
- Tongue / Yellowstone River Irrigation District Canal – 4(f)
- Numerous “other” sites



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RESOURCE AGENCY WORKSHOP JUNE 6th, 2012

Social

- Scan includes:
 - Population and growth statistics
 - Race and ethnic statistics
 - Employment and income statistics
- Environmental justice will need to be evaluated further during the project development process

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RESOURCE AGENCY WORKSHOP JUNE 6th, 2012

Environmental Scan

- Draft Environmental Scan has been completed (May 2012)
- Helps provide information to develop needs and compare conceptual improvements options
 - Areas of concern?
 - Greater or lesser impacts?
 - Can impacts be avoided, minimized or mitigated – and at what cost?
 - Procedural requirements?

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RESOURCE AGENCY WORKSHOP JUNE 6th, 2012

Next Steps

- Complete existing and projected conditions report
- Identify constraints
- Develop transportation needs and objectives
- Identify potential improvement options
 - Short-range and long-range
- Draft Planning Study Report



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RESOURCE AGENCY WORKSHOP JUNE 6th, 2012

Conclusion

- Questions, answers and/or comments?

Study website: <http://www.mdt.gov/pubinvolve/tongueriver/>

Study newsletters:

Study contact:

Tom Kahle
MT Department of Transportation
2701 Prospect Avenue
P.O. Box 201001
Helena, Montana 59620-1001
Email: tkahle@mt.gov
Tel: (406) 444-9211



MEETING MINUTES

RESOURCE AGENCY WORKSHOP

DETAILS:

Location: Helena – MDTCNF Planning A Conference Room
2960 Prospect Avenue

Miles City – MDT Miles City Area Office
217 North 4th Street

Date: June 6, 2012

Time: 9:00 AM – 10:30APM

ATTENDANCE:

- Tom Kahle (MDT)
- Wayne Noem (MDT)
- Jean Riley (MDT)
- Jeff Ryan (MDEQ)
- Stephen Potts (EPA)*
- Beau Downing (MFWP)
- Mike Backes (MFWP)**
- Mike McGrath (USFWS)
- Shannon Johnson (USACE)**
- Dalice Landers (BLM)**
- Jerry Backlund (Custer County)**
- Marilyn Gedrose (MDT)**
- Larry Sickerson (MDT)
- Jeff Key (RPA)
- Trisha Bodlovic (RPA)
- Ken Leonard (CS)*

* Denotes call-in // ** Denotes participation at MDT Miles City Area Office

AGENDA:

The resource agency workshop for the *Tongue River Road Corridor Planning Study* was held on Wednesday, June 6th, 2012. The purpose of the workshop was to present the study to the resource agencies, and to review and discuss known resources within the environmental scan boundary. The meeting began at 9:00 AM and ended at 10:30 AM.

Meeting minutes are intended to capture the general content of meeting discussions and to document decisions. Meeting minutes may include opinions provided by attendees; no guarantees are made as to the accuracy of these statements and no fact checking of specific statements is provided or implied from the publishing of final meeting minutes.

WELCOME AND INTRODUCTIONS

Jeff Key provided a welcome and made opening remarks for the resource agency workshop. Introductions for individuals present and for those calling in were made.

WORKSHOP PRESENTATION

Jeff Key gave a presentation about the planning study and known resources within the environmental scan boundary. The primary focus of the meeting was to ensure that the information captured in the *Environmental Scan* was accurate and that any additional information or concerns from the resource agencies were addressed.

The following comments and questions were made during the meeting:

- Culverts throughout the corridor must allow for fish passage, even in intermittent drainages. Although there may be no documented fisheries in these drainages, during periods where there is water, fish will use these drainages. Culverts should be installed that can perpetuate these seasonal flows. (Beau Downing)
- All tributaries within 2 miles of the Tongue River are potentially utilized by fish species (Mike McGrath)
- Culverts should be sized at least to a bankfull dimension. Culverts that serve perennial flows definitely need to be designed to provide not only fish passage, but also other aquatic organism passage (AOP). Culverts that serve flows that may only be seasonal still need to consider the same design features as perennial flows. (Jeff Ryan)
- When cultural resource studies occur, there needs to be tribal consultation. (Shannon Johnson)
 - *The tribe has requested a presentation on the planning study. (Jeff Key)*
- Although the pallid sturgeon has not been recorded in the Tongue River in this area, junior pallid sturgeon will use the Tongue River near Miles City. The Tongue River historically was used by adult pallid sturgeons. (Mike McGrath)
- A deadline for comments from the resource agencies is needed. (Jean Riley)
 - *Resource agencies need to get written comments to Tom Kahle within 2 weeks in order to get them incorporated into the Environmental Scan and the Existing and Projected Conditions Report. (Jeff Key)*
- If projects are identified and advanced, special attention should be made to candidate species in the area, specifically the Sprague's pipit and sage grouse. An analysis to assess potential impacts to wildlife with the occurrence of mining development will be required. (Mike McGrath)
- Any future projects should avoid or minimize impacts and encroachments to streams and wetlands. MDT should be sure to contact MDEQ staff with TMDL during any project(s) development and submit road plans to MDEQ. (Stephen Potts)
- The planning level cost estimates generated for identified projects should be as accurate as possible. Any side costs due to mitigation needs should be added up-front and included in the cost estimates. (Larry Sickerson)
 - *In past corridor studies, planning cost estimates have included construction costs and contingencies, but did not include right-of-way, preliminary design, and other costs. The cost*

estimates will rely on representative projects that have been completed in the area, and a fairly robust contingency applied to the total cost. (Jeff Key)

- It should be noted in the environmental scan that most animal/vehicle collisions are unreported in the study area. (Larry Sickerson)
- There will be a desire for structures to be in place to protect wildlife due to the sensitivity of the area. (Jeff Ryan)
- Per MDEQ 401 certification general conditions of the Army Corps 404 permits, bridge deck drainage needs to be directed to the ends of the bridge rather than directly into the state water they span. In addition to that, where practicable, this drainage needs to be directed to a detention basin instead of direct discharge into state waters. Bridge length should span as much of the floodplain as practicable. (Jeff Ryan)
- The drainage in ditches along the highway that is directed to state waters should also be directed to detention basin(s) before discharge into state waters. (Jeff Ryan)

The meeting ended at 10:30 AM.

TONGUE RIVER ROAD (S-332)

Corridor Planning Study

Inside This Issue

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Study Description

The Montana Department of Transportation (MDT), in partnership with Custer and Rosebud Counties, is conducting a *Corridor Planning Study* of Secondary Route 332 (S-332), known locally as “Tongue River Road”. S-332 is functionally classified as a rural major collector on the Secondary Highway System. S-332 serves as a north-south corridor between Miles City and Ashland that roughly parallels the Tongue River, passing through rolling terrain that consists of farm and ranch land.

The purpose of the study is to determine financially feasible improvement options to address safety and geometrical concerns within the transportation corridor based on needs presented by the community, the study partners, and resource agencies. Due to possible coal mining development southeast of Ashland, the potential exists for an increase in passenger and truck traffic on S-332.

The study will include a comprehensive package of short- and long-term recommendations intended to address the transportation needs of the corridor over the planning horizon (year 2032), with particular attention given to the next 5 to 10 years. These recommendations will assist the study partners in targeting the most critical needs and appropriate allocation of resources.

What is a Corridor Planning Study?

A *Corridor Planning Study* is a planning-level assessment of the study area occurring before conducting project-level environmental compliance activities under the National and Montana Environmental Policy Acts (NEPA / MEPA). The study involves early communication with interested parties to help identify needs, constraints, and opportunities for a corridor and to help determine if there are implementable improvements given available resources and local support.

The *Corridor Planning Study* is developed strictly as a planning project and not a design or construction project. The study is designed to help facilitate a smooth and efficient transition from transportation planning to project development/ environmental review if a project is forwarded from the study.

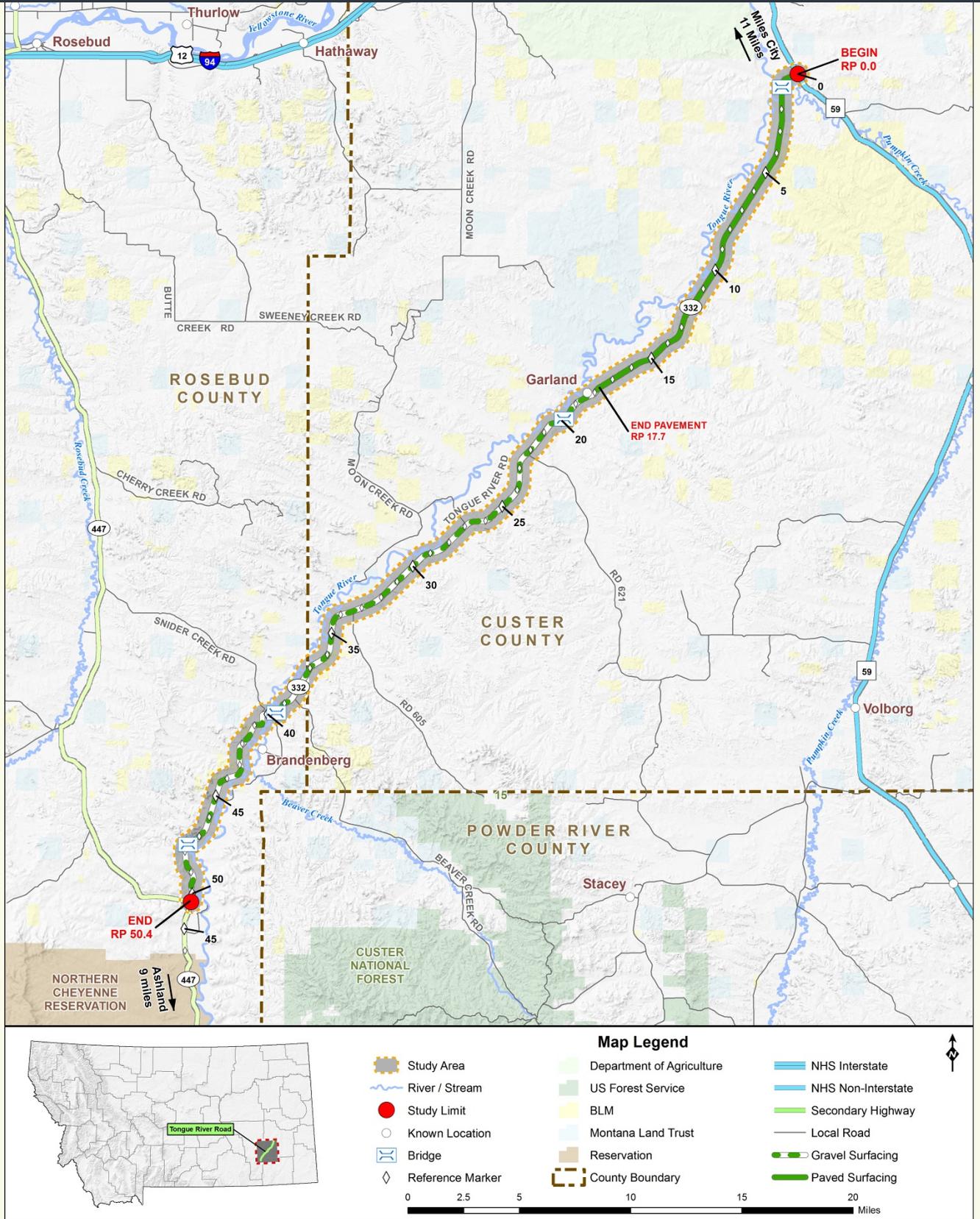
Informational Meeting #1

Thursday, May 31, 2012
6:00 PM
Miles Community College
2715 Dickinson Street
Room #106
Miles City, MT

The public is welcome and encouraged to attend. We hope to see you there!

Study Area

The study area for the Tongue River Road Corridor Planning Study includes a half-mile buffer on each side of S-332. The study area begins at the junction of MT-59 (RP 0.0), approximately 11 miles south of Miles City, and ends at the junction of S-447 (RP 50.4), approximately nine miles north of Ashland.



Existing Conditions—Key Findings

Transportation System

Surfacing

- Longitudinal and transverse cracking in the asphalt surfacing (RP 0.0 to RP 17.7).
- Evidence of asphalt failure due to recent slides at intermittent locations.
- Gravel surfacing from RP 17.7 to RP 50.4. in fair condition.

Drainage

- Nine locations with evidence of recent slides indicating potential drainage issues.
- Four existing bridges with no drainage issues noted.

Horizontal Alignment

- Seven horizontal curves do not meet current standards.

Vertical Alignment

- 46 vertical curves were estimated to not meet current standards.
- Nine locations have grades that were estimated to not meet current standards.

Roadside Clear Zones (i.e. horizontal clearance)

- 22 locations were estimated to have clear zones that do not meet current standards based on field review.

Access Points

- Three public approaches do not meet current standards based on intersection angles.
- Nine private approaches do not meet current standards based on intersection angles.

Environmental Considerations

Prime Farmland

- Approximately 28% of the study area is designated as farmland of statewide importance.
- Approximately 15% of the study area is designated as prime farmland if irrigated.

Water Resources

- Tongue River is located within the study area.
- Numerous tributaries to the Tongue River exist within the study area.

Wetlands

- Wetlands associated with the Tongue River and associated drainages are located intermittently within the study area.

Hazardous Substances

- There are five abandoned mine sites within the study area.

Fish and Wildlife

- Seven endangered, threatened, proposed, or candidate species are listed for Custer and Rosebud Counties.
- 39 species of concern for Custer County and 47 species of concern for Rosebud County were listed.

Vegetation

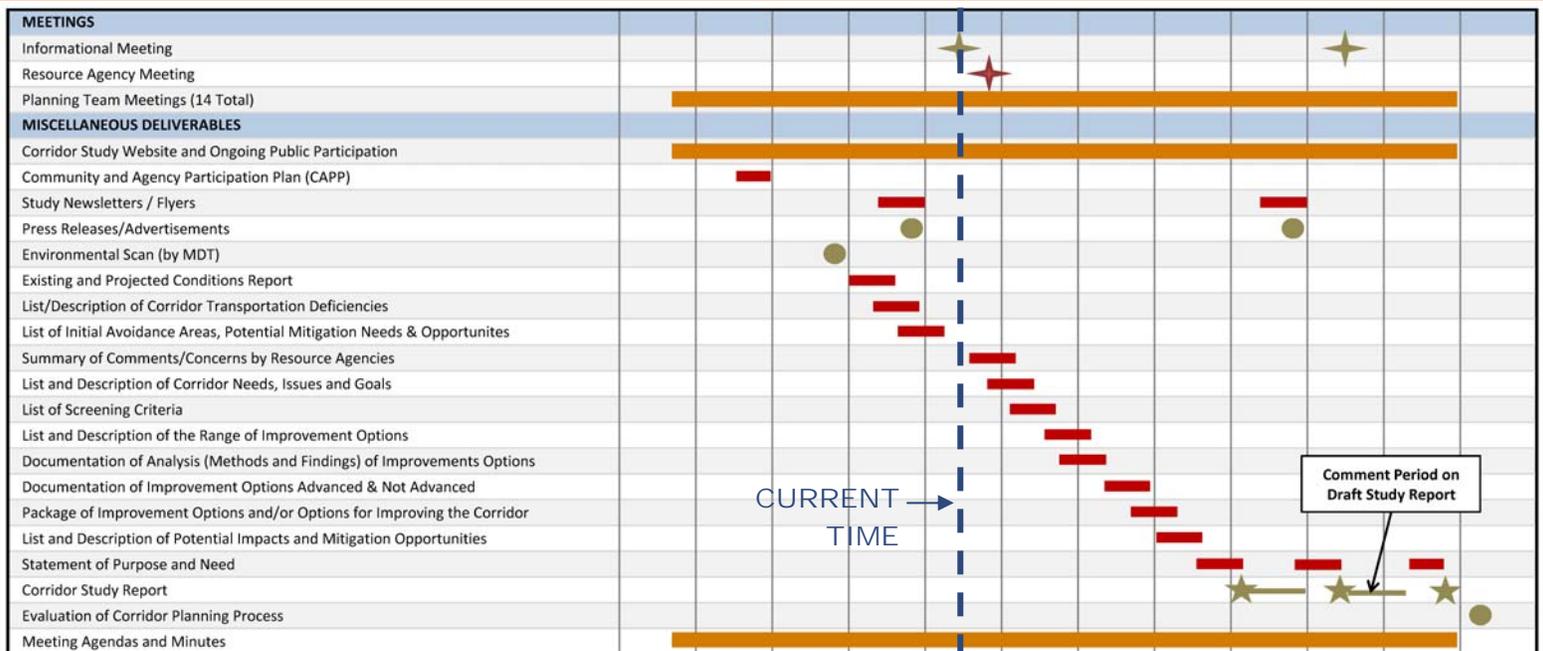
- No endangered, threatened, proposed, or candidate plant species are expected to occur within the study area.
- Nine plant species of concern for Custer County and eleven for Rosebud County were listed.

Cultural and Archaeological Resources

- 97 separate cultural resources are known to exist within the study area.
- Three 4(f) and one 6(f) resources are located within the study area.

Study Schedule

The Tongue River Road Corridor Planning Study began in January 2012 and is expected to be completed by the end of November 2012.



Contacts:

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Project Manager
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tkahle@mt.gov

Jeff Key, PE – RPA
Project Manager
406-447-5000
Jeff.key@rpa-hln.com

**Check out the
Study Website at:**
[www.mdt.mt.gov/
pubinvolve/tongueriver](http://www.mdt.mt.gov/pubinvolve/tongueriver)

Public Involvement Opportunities

Public involvement is important to any successful corridor study process. The purpose is to ensure a proactive process that provides opportunities for the public to be involved in all phases of the corridor study. The public is invited to participate in the process through community informational meetings and ongoing study information review and input.

A study website has been developed to provide online opportunities to comment on the *Tongue River Road Corridor Planning Study* effort. Dates, times, and locations for all community outreach events will be announced prior to the events through local media and the study mailing list.

The study team will collect and consider all community comments received to better understand the community view of potential issues. Those with a specific interest in the study are encouraged to join the study mailing list. They can do so by submitting their name and contact information to Jeff Key at jeff.key@rpa-hln.com.

MDT attempts to provide accommodations for any known disability that may interfere with a person participating in any service, program, or activity associated with this study. Alternative accessible formats of this information will be provided upon request. For further information, call (406) 447-5000 or TTY (800) 335-7592, or call Montana Relay at 711. Accommodation requests must be made at least 48 hours prior to the scheduled activity and / or meeting.



TONGUE RIVER ROAD (S-332)

Corridor Planning Study

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Corridor Planning Study Highlights

The Montana Department of Transportation (MDT), in partnership with Custer and Rosebud Counties, initiated a *Corridor Planning Study* of Secondary Route 332 (S-332) from approximately reference post (RP) 0.00 (MT-59 intersection) extending 50.4 miles southwest to approximately RP 50.4 (S-447 intersection). Known locally as “Tongue River Road”, S-332 is functionally classified as a rural major collector on the Secondary Highway System. S-332 serves as a north-south corridor between Miles City and Ashland that generally parallels the Tongue River, passing through rolling terrain that consists of farm and ranch land.

The purpose of the study is to determine potential improvement options to address safety and geometrical concerns within the transportation corridor based on needs presented by the community, the study partners, and resource agencies. The study also considers potential traffic volumes based on proposed coal development in the region. The study examined geometric characteristics, crash history, and existing and projected operational characteristics of the S-332 corridor. Existing and projected physical constraints, land uses, and environmental resources were also analyzed.

The study, intended as a planning study and not a design project, was developed through a collaborative process with MDT, Custer and Rosebud Counties, and the Federal Highway Administration (FHWA) and involved focused outreach to the community, key stakeholders, and resource agencies. An evaluation of known and publically available resource information was conducted. The study includes the following elements:

- Research and analysis of existing S-332 roadway conditions, including identification of corridor issues and areas of concern.
- Synthesis of known environmental resources and impacts in the study area.
- Identification and documentation of existing and future conditions.
- Consultation and coordination with local officials, stakeholders, resource agencies, and the community.
- Identification of corridor needs and objectives.
- Development of corridor improvement options with consideration to costs, available funding, feasibility, community input, and known environmental resource constraints.
- Documentation of potential funding mechanisms for improvement options.

Final Informational Meeting

Wednesday, October 24, 2012

6:00 PM

Miles Community College

2715 Dickinson Street

Room #106

Miles City, MT

The public is welcome and encouraged to attend. We hope to see you there!

Corridor Needs and Objectives

Based on the analyses of existing and future conditions of the study area, the following needs and objectives were established and used in the development of improvement options.

NEED 1: IMPROVE SAFETY AND OPERATION OF S-332

Objectives (To the Extent Practicable)

- Improve geometric elements to meet current MDT design criteria.
- Accommodate existing and future capacity demands within the corridor, including potential increases in semi-truck traffic.
- Provide adequate clear zones to meet current MDT design criteria.
- Provide appropriate drainage facilities throughout the corridor to minimize water on the roadway.
- Provide consistent roadway and bridge widths.
- Provide appropriate surfacing to allow for “all-weather” travel.
- Improve maintenance practices, given limited funding, to address washboards, potholes, and dust issues.

NEED 2: PRESERVE THE ENVIRONMENTAL, CULTURAL, RECREATIONAL AND AGRICULTURAL NATURE OF THE CORRIDOR

Objectives (To the Extent Practicable)

- Evaluate and incorporate “best practice” mitigation strategies as appropriate to reduce animal-vehicle conflicts.
- Respect the agricultural nature of the corridor and allow for farm access as needed.
- Avoid adverse impacts to the extent practicable, otherwise minimize adverse impacts to historic, cultural, archaeological, and environmental resources that may result from improvement options.
- Evaluate fish (aquatic organism) passage issues and incorporate appropriate solutions to improve aquatic connectivity and stream function through structures and culverts.
- Provide reasonable access to recreational sites in the corridor.

NEED 3: MINIMIZE CONFLICTS ALONG THE CORRIDOR

Objectives (To the Extent Practicable)

- Minimize impacts to existing residential and agricultural uses along the corridor.
- Minimize impacts to the Amish community, the Northern Cheyenne Indian Reservation and the St. Labre Indian School, all located south of the southern termini of S-332.
- Consider all modes of transportation in the corridor.

OTHER

Objectives (To the Extent Practicable)

- Reduce roadway maintenance costs.
- Limit disruptions during construction as much as practicable.
- Availability and feasibility of funding.

Improvement Options and Strategies

Multiple improvement option concepts were developed after a comprehensive review of publically available information relative to environmental resources and existing infrastructure, and focused outreach with the public, stakeholders, and various resource agencies.

Both small and large scale improvement options were identified. Small scale (i.e. spot improvements) may be as simple as installing guardrail. Larger, more complex improvements include placing new gravel surfacing on the existing gravel roadway, widening the gravel section of the roadway to a consistent width, or paving the gravel portion of S-332.

Improvement options are described in terms of “concepts” as a way of packaging options together. The concepts identified for potential implementations are described as follows:

- **Concept 1** identified several individual, geographically distinct spot improvements. These improvements are aimed at addressing identified roadway issues and areas of concern. They include bringing past slide areas up to standards, fixing sub-standard vertical curves (and associated grades), improving sub-standard horizontal curvature just west of the Tongue River Bridge, and installing guardrail at locations with apparent high, steep fill slopes.
- **Concept 2** includes improving the gravel roadway from RP 17.7 to RP 50.4 without major reconstruction. This can be done by either placing new gravel surfacing on the currently graveled portion of S-332 or could consist of a double-shot / bitumen surfacing treatment on top of the existing gravel road. Under both scenarios, no reconstruction or widening of the roadway would occur.
- **Concept 3** would result in the reconstruction and widening of the existing gravel portion of the roadway from RP 17.7 to RP 50.4.
- **Concept 4** consists of a mill, fill, and overlay of the existing pavement section between RP 0.0 and RP 17.7 and the reconstruction and widening of the existing gravel portion of the roadway from RP 17.7 to RP 50.4.
- **Concept 5** includes a total reconstruction of S-332 from RP 0.0 to RP 50.4 to include asphalt surfacing.

Improvement Options Summary

Inherent to any improvement concept (or concepts) there will need to be sensitivity to wildlife and aquatic connectivity concerns. Due to the proximity to the Tongue River, implementation of any of the improvement concepts may necessitate close coordination with resource agencies to identify areas of sensitivity in regards to wildlife and aquatic needs. The following table contains a summary of the potential improvement options along with planning level cost estimates.

| Concept Title | Description | Estimated Cost |
|--|---|--|
| CONCEPT 1 – SPOT IMPROVEMENTS | | |
| <i>1.A - Vertical Curves</i> | <ul style="list-style-type: none"> Modify existing vertical curves to increase the driver's sight distance. Identified in both paved and graveled sections. 46 total curves identified. | \$1,380,000 |
| <i>1.B - Slide Areas</i> | <ul style="list-style-type: none"> Identified in both paved and graveled sections. Nine (9) areas identified. | \$2,761,000 |
| <i>1.C - Guardrail</i> | <ul style="list-style-type: none"> Protect drivers from potential safety hazards due to the steep slopes. Guardrail warrants to be evaluated prior to installation. Re-work of slopes may not be feasible. | \$1,290,000 |
| <i>1.D - Horizontal Curves (RP 40.23 – RP 40.98)</i> | <ul style="list-style-type: none"> Improve three (3) horizontal curves that do not meet current standards. Limited to area just west of the Tongue River Bridge. | \$689,000 |
| CONCEPT 2 – GRAVEL WITHOUT RECONSTRUCTION (RP 17.7 to RP 50.4) | | |
| <i>2.A - Gravel Placement</i> | <ul style="list-style-type: none"> Place new 4" gravel surface on the roadway. No widening of the roadway. No reconstruction to address identified areas of concern. | \$2,741,000 |
| <i>2.B - Double Shot / Bitumen Treatment</i> | <ul style="list-style-type: none"> Double chip seal coat on top of existing gravel road. No widening of the roadway. No reconstruction to address identified areas of concern. | \$2,183,000 |
| CONCEPT 3 – RECONSTRUCT AND WIDEN GRAVEL SECTION (RP 17.7 to RP 50.4) * | | |
| <i>Reconstruct and Widen Gravel Section</i> | <ul style="list-style-type: none"> Reconstruct gravel portion to a base width of 36' with a 32' top surface. May require additional right-of-way (not included in cost estimate). | \$25,341,000 |
| <i>Bridge Replacement</i> | <ul style="list-style-type: none"> Replace three (3) bridges. | \$1,878,000 |
| CONCEPT 4 – REHABILITATE WITH MILL / FILL / OVERLAY (RP 0.0 to RP 17.7) AND RECONSTRUCT AND WIDEN GRAVEL SECTION (RP 17.7 to RP 50.4) * | | |
| <i>Rehabilitate with Mill / Fill / Overlay (RP 0.0 to RP 17.7)</i> | <ul style="list-style-type: none"> Mill the existing asphalt pavement, fill areas for better drainage (as needed), and place a new asphalt overlay. No modifications to existing road widths. No modifications to existing bridge or hydraulic structures. | \$10,690,000 |
| <i>Reconstruct & Widen Gravel Section (RP 17.7 to RP 50.4)</i> | <ul style="list-style-type: none"> Reconstruct gravel portion to a base width of 36' with a 32' top surface. May require additional right-of-way (not included in cost estimate). | \$25,341,000 |
| <i>Bridge Replacement</i> | <ul style="list-style-type: none"> Replace three (3) bridges along gravel section. | \$1,878,000 |
| CONCEPT 5 – RECONSTRUCT WITH PAVEMENT (RP 0.00 to RP 50.4) * | | |
| <i>Reconstruct with Pavement (RP 0.0 to RP 50.4)</i> | <ul style="list-style-type: none"> Reconstruct both the paved and gravel section of the roadway to a paved section. Width dependent on AADT May require additional right-of-way (not included in cost estimate). | \$54,614,000 (24') \$63,716,000 (28') \$72,819,000 (32') \$81,921,000 (36') \$91,023,000 (40') |
| <i>Bridge Replacement</i> | <ul style="list-style-type: none"> Replace one (1) bridge along paved section. Replace three (3) bridges along gravel section. | \$2,790,000 |

* The continuation of improvements described under these concepts for the 2.7 miles of S-447, located between the intersection of S-332/S-447 and the beginning of existing pavement, should be considered if and when a project is developed.

Contacts:

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Check out the Study Website at:

[www.mdt.mt.gov/
pubinvolve/tongueriver](http://www.mdt.mt.gov/pubinvolve/tongueriver)

4 page

Input Wanted

The draft *Corridor Planning Study* will be made available for review and comment on **October 23, 2012**. Copies can be accessed via the study website at: <http://mdt.mt.gov/pubinvolve/tongueriver/>. The deadline for receiving comments is **November 13, 2012**.

Comments may be submitted in writing at the Informational Meeting, online via the study website, or by mail to **Tom Kahle**, MDT Statewide and Urban Planning, Project Manager, PO Box 201001, Helena, MT. 59620-1001. Please indicate comments are for the *Tongue River Road Corridor Planning Study*. MDT will collect and consider all comments to better understand the community's view of potential issues and concerns within the study area.

Next Steps

After the public comment period closes, comments will be reviewed and the *Corridor Planning Study* will be finalized.

The ability to implement improvement options for S-332 is dependent on the availability of existing and future federal, state, local, and private funding sources. At the current time, there is no funding identified to complete the improvement options contained in the study.

MDT attempts to provide accommodations for any known disability that may interfere with a person participating in any service, program, or activity associated with this study. Alternative accessible formats of this information will be provided upon request. For further information, call (406) 447-5000 or TTY (800) 335-7592, or call Montana Relay at 711. Accommodation requests must be made at least 48 hours prior to the scheduled activity and / or meeting.

