

April 6, 2012

Via email: [mdtstip@mt.gov](mailto:mdtstip@mt.gov), [paujohnson@mt.gov](mailto:paujohnson@mt.gov)

Paul Johnson  
**Montana Department of Transportation**  
Project Analysis Bureau  
Rail, Transit and Planning Division

Re: Comments on Montana Department of Transportation 2012-2016 STIP

Dear Mr. Johnson:

As we discussed on the phone yesterday, Montanans for Safe Wildlife Passage (MSWP) is pleased to submit the following comments on the Draft Montana Department of Transportation Statewide Transportation Improvement Program (STIP) that was developed in accordance with the requirements of Section 135 of 23 USC (United States Code) and addresses Montana's transportation needs for fiscal years 2012 through 2016.

MSWP formed last year 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.

Through these comments, we hope to bring to your attention the importance of wildlife considerations early in the transportation planning process. We would also like to highlight specific projects on the STIP where wildlife issues are a priority, including recommended actions the Montana Department of Transportation can take to mitigate effects to the motoring public as well as Montana's wildlife.

## **I. Safe Wildlife Passage In Montana.**

### **A. Good planning for wildlife means safer highways for Montanans.**

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 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 *et al.* 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 *et al.* 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%.<sup>1</sup>

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 *et al.* 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.

The cost averages for larger animals, such as elk and moose, are even higher (\$3,000 and \$4,000, respectively) (Huijser *et al.* 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, including lynx (*id.*)<sup>2</sup>.

Studies indicate providing wildlife passage across highways save lives, animals, and money. Wildlife crossings (with fencing) are estimated to reduce vehicle collisions with ungulates by 80 to 90% (Woods 1990, Clevenger *et al.* 2001, Dodd *et al.* 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.<sup>3</sup> 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 *et al.* 2008).

Here in Montana, numerous wildlife crossings installed in the Ravalli area on Hwy 93 N. thanks to a collaboration between the Confederated Salish and Kootenai Tribes (CSKT), the Montana Department of Transportation and Federal Highway Administration, are heralded as a pre-eminent example in the West. In 2010, MDT contracted with Western Transportation Institute (WTI) at Montana State University to conduct the post-construction research with regard to the effectiveness of the mitigation measures. Two reports, the 2010 annual report and the 2011 annual report detail the results of post-construction wildlife-vehicle collision and wildlife crossing monitoring research performed by CSKT and WTI. During 2010, 27 of the 41 wildlife crossing structures were monitored for wildlife activity via motion-sensitive wildlife cameras. Over 12,000 wildlife crossing events, by a range of over 20 species were documented, including grizzly bears, black bears, bobcat, mountain lions, badgers, river otters, weasels, moose, and deer (Huijser *et al.* 2011)<sup>4</sup>.

Emerging studies in the United States and Canada provide a valuable cost-benefit decision support tool to identify the threshold values above which individual mitigation measures start generating benefits in

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<sup>1</sup> State Farm Insurance, September 28, 2009. Deer-Vehicle Collision Frequency Jumps 18 Percent In Five Years. Bloomington, Illinois.

<sup>2</sup> Threatened, Endangered, and Candidate Species in Montana (November 2011). Found on-line at: [http://www.fws.gov/montanafieldoffice/Endangered\\_Species/Listed\\_Species/TEClist.pdf](http://www.fws.gov/montanafieldoffice/Endangered_Species/Listed_Species/TEClist.pdf)

<sup>3</sup> CDOT Briefs. March 6, 2009. I-70 temporarily closed today to move elk from median. Post Independent, Glenwood Springs, CO.

<sup>4</sup> Online at: [http://peopleswaywildlifecrossings.org/index.php?option=com\\_content&view=article&id=55&Itemid=60](http://peopleswaywildlifecrossings.org/index.php?option=com_content&view=article&id=55&Itemid=60)

excess of costs for reducing collisions with large ungulates over a 75-year period (Huisjer *et al.* 2009). 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 (*id.*). In addition to saving human and animal lives, inclusion of strategies to mitigate wildlife-vehicle collisions on Montana's highways thus will save the Montana Department of Transportation 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.

**B. Federal and regional efforts support the integration of wildlife considerations early in the planning process.**

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:

- 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.

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)<sup>5</sup> 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 committed to implement mitigation measures aimed at offsetting the identified harm.

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 *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"* (emphasis added, Attachment at 2). Montana Department of Transportation should similarly incorporate 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.

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<sup>5</sup> Found online at <http://fwp.mt.gov/fishAndWildlife/conservationInAction/crucialAreas.html>

## II. STIP Priority Projects for Wildlife.

MSWP has reviewed the 2012-2016 STIP project list and has identified the following projects to be of interest due to the probability of the need for wildlife mitigation measures, the likely opportunity based upon topography, and the fact that the project is categorized as "Reconstruction".

<b>District</b>	<b>Highway</b>	<b>Road Segment</b>	<b>Wildlife Concerns and Recommendations</b>
Butte (2)	I-15 (4392)	Monida-Lima Seismic Retrofit Bridge Replacement	Monida Pass is a wildlife movement corridor of regional significance for grizzly bears, wolves, and other wide-ranging carnivores in the region known as the "High Divide" along the Montana – Idaho border. We suggest that the bridge replacement take into consideration wildlife passage.
Butte (2)	I-15 (6854)	Monida Bridge Replacement	<i>Same as above.</i>
Butte (2)	US -191 (7578 and related projects)	South of Bozeman & Jct of Hwy 84	Numerous species of concern.
Butte (2)	Hwy 84 (7580)	Norris	Area identified by Craighead Institute as an important linkage for carnivores in the High Divide between the Madison and Tobacco Root ranges; topography provides opportunity for crossings.
Butte (2)	I-90 (3871)	West Bozeman Interchange Bridge Replacement	Near Bozeman Pass – a vital wildlife corridor between the Bridger and Gallatin Mountain ranges where numerous species of concern cross to find summer or winter ranges.
Butte (2)	US-12 (4803)	Checkerboard – Martinsdale E Reconstruction	Located near potentially significant area for wildlife crossings between the Castle and Crazy Mountain ranges and also along the north fork of the Musselshell River.
Butte (2)	I-90, US-191 (7749)	Creeley Creek Bridge Replacement	Near potentially significant area for wildlife crossings.
Butte (2)	US-89 (4577)	Cedar Creek – 16 km north of Gardiner Bridge Replacement	North of Yellowstone National Park; near potentially significant area for wildlife crossing.*
Butte (2)	US-191, US-287 (7575)	W. Yellowstone North; Near Hebgen Lake	Important for wildlife migrating in/out of Yellowstone NP.
Butte (2)	I-90, US-191 (7572)	Rocky Canyon	Expand existing wildlife exclusionary fencing/crossings project.
Butte (2)	I-90 (3871)	East of Bozeman	Tie these in to existing wildlife exclusionary fencing/crossings project.
Butte (2)	I-90 (7468)	Three Forks, Manhattan	Important river crossings for ungulates. High safety concern for motorists.
Missoula (1)	US-2 (4773)	West of Kalispell	American Wildlands data shows Idaho Hill just to the west as a major wildlife linkage area.

Missoula (1)	US-200 (4039 and related projects)	East of Thompson Falls	Significant Bighorn Sheep problem area.
Missoula (1)	US-200 (4039 and 1011)	Hwy 200 Reconstruction and Bridge Work	High priority area for movement of large mammals and important area for regional traffic.
Missoula (1)	S-574 (6137)	Huson-East	Fish and wildlife passage.
Missoula (1)	US-2 (1027)	Swamp Creek - East, Libby Creek South	Grizzly Bear passage.
Missoula (1)	I-90 (5831)	Saltese-East	Grizzle Bear movement into the Bitterroots.
Missoula (1)	I-90 (5831/5832 )	East of Lookout Pass	Median barriers are problem for wildlife movement, could address this during project.
Missoula (1)	MT 83 (1233)	Near Clearwater Jct	A lot of investment for wildlife habitat by Blackfoot Challenge in this area.
Billings (5)	US-12 (4889)	Near Two Dot	Could be area of significant wildlife crossings and topography provides opportunity for crossings.
Great Falls (3)	US-89 (7636)	Kiowa Jct – near E. Glacier	Numerous species – near border of Glacier NP.*
Glacier NP	GR-1	Second half of Going to the Sun Road	Numerous species in Glacier NP.
Glacier NP	GR-1	Siyeh Bend to Rising Sun	Numerous species in Glacier NP.
Public Lands Highway Discretionary	SH-43; Pioneer Mtn. Scenic Byway	MP 16.6-27.6	Important linkage for numerous species in the High Divide.

*\*Note: These projects were not mapped by the districts, but were found in the tables. We request that you update the district maps to reflect these projects, or provide a full project map in the STIP.*

### III. Conclusion

In conclusion, MSWP respectfully requests that the Montana Department of Transportation consider incorporating wildlife-related mitigation measures and include their cost in the project budget at the earliest point of review for STIP projects, especially those identified in Section II of this comment letter. We also encourage you to work with MT Fish, Wildlife and Parks to utilize their CAPS decision support tool early in the planning process.

We would be happy to conduct site visits with you as you continue the design process for the above-mentioned projects. Wildlife mitigation can often be achieved by considering relatively minor adjustments to the project, such as lengthening bridges and/or increasing the number and size of culverts to provide safe passage. If you would like to meet with us, please don't hesitate to contact Monique DiGiorgio at the contact information below.

Respectfully submitted,

Monique DiGiorgio, member, Western Environmental Law Center  
[digorgio@westernlaw.org](mailto:digorgio@westernlaw.org), 406-451-0051, 219 East Story Street, Bozeman, Montana 59715

Jacquelyn Corday, member, Citizen Advocate  
[maureencorday@yahoo.com](mailto:maureencorday@yahoo.com)

Kylie Paul, member, People's Way Partnership  
[kyliepaul@hotmail.com](mailto:kyliepaul@hotmail.com)

Renee Callahan, member, Center for Large Landscape Conservation  
[renee@climateconservation.org](mailto:renee@climateconservation.org)

Betsy Hands, member, Montana Smart Growth Coalition  
[betsy@mtsmartgrowth.org](mailto:betsy@mtsmartgrowth.org)

Rebecca A. Lloyd, member, Yellowstone to Yukon Conservation Initiative, Missoula, MT  
[rebeccay2y@gmail.com](mailto:rebeccay2y@gmail.com)

Bethanie Walder, member, Wildlands CPR  
[wildlandscpr@wildlandscpr.org](mailto:wildlandscpr@wildlandscpr.org)

cc: Doris Fischer (MT Fish, Wildlife and Parks), Brian Hasselbach (Federal Highway Administration, ROW & Environmental Specialist); Kevin McClaury (Federal Highway Administration, Division Administrator), Bonnie Gundrum (MDT, Resources Supervisor)

Via e-mail: [dofischer@mt.gov](mailto:dofischer@mt.gov), [brian.hasselbach@dot.gov](mailto:brian.hasselbach@dot.gov), [Kevin.McLaury@dot.gov](mailto:Kevin.McLaury@dot.gov), [bgundrum@mt.gov](mailto:bgundrum@mt.gov)

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Attachment: FHWA June 1, 2010 Memorandum



# Memorandum

Subject: **INFORMATION:** FHWA Wildlife Vehicle Collision (WVC) Reduction Study Training Course

Date: June 1, 2010

From: <sup>for</sup> Joe Toole *Joe Toole*  
Associate Administrator for  
Office of Safety

In Reply Refer To: HEPE

Gloria M. Shepherd *Gloria M. Shepherd*  
Associate Administrator for  
Planning, Environment, and Realty

To: Directors of Field Services  
Federal Lands Highway Division Engineers  
Division Administrators

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 Safety Research and Development, the Office of Project Development and Environmental Review, and the Office of Federal Lands. The web-based course is now available at: <http://www.environment.fhwa.dot.gov/WVCtraining/index.asp>.

This training is based on the findings of the Wildlife Vehicle Collision Reduction Study: Report to Congress which is available at: <http://www.tfhr.gov/safety/pubs/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/hconnect/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.

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.



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.

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 vehicle drivers and passengers. In addition to the information resources outlined above, many states have collaborated with non-governmental organizations to develop regional 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.

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](mailto:mary.gray@dot.gov), or by phone at by at 360-753-9487 or Dennis Durbin at 202-366-2066, [dennis.durbin@dot.gov](mailto: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](mailto:carol.tan@fhwa.dot.gov) in the Office of Safety Research and Development.