December 30, 2011

Via email: WFL.Planning@dot.gov

U.S. Department of Transportation
Federal Highway Administration
Office of Federal Lands Highway
Western Federal Lands Highway Division
610 E 5th Street
Vancouver, WA 98661

Re: Comments on Montana Forest Highway Long-Range Transportation Coordination Plan (2011-2031)

Dear Sir/Madam:

Montanans for Safe Wildlife Passage (MSWP) submits the following comments on the Draft Montana Forest Highway Long-Range Transportation Coordination Plan (2011-2031) (Plan). As detailed below, MSWP applauds the Montana Department of Transportation (MDT); the U.S. Department of Agriculture, Forest Service, Region 1 (USFS); and the Federal Highway Administration, Western Federal Lands (WFLHD) (collectively, the Agencies) for addressing a variety of issues important to Montanans, including recognizing the benefits to people and wildlife of wildlife crossings, committing to evaluate opportunities for wildlife safe crossings during new and existing road enhancement and construction, and recognizing the need to reduce the negative effects of roadways on Montana's wildlife.

The Plan, however, could be improved by adopting the following proposed recommendations. In particular, the Agencies should revise the Plan to ensure that it:

(1) Expands its decision-making criteria to consider the negative effects of paving and other upgrade proposals to wildlife in order to prevent road upgrades that would be significantly harmful;
(2) Recognizes that increased connectivity is the best insurance policy for wildlife in the face of climate change;
(3) Considers other mitigation measures such as road decommissioning; and
(4) Includes funding for wildlife-related mitigation during the nomination process so that those costs are taken into consideration at the earliest point of review for new and existing road enhancement and construction.

I. Introduction to Montanans for Safe Wildlife Passage.

MSWP formed this 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.

II. The Plan identifies issues important to Montanans for Safe Wildlife Passage.

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%.[1]

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*.)[2].

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 *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,

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[1] State Farm Insurance, September 28, 2009. Deer-Vehicle Collision Frequency Jumps 18 Percent In Five Years. Bloomington, Illinois.

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

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 *et al*. 2008). Here in Montana, in talking about 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, through camera work and tracking surveys, there were documented a bit over 6,500 wildlife crossings or uses of the crossing structures."[4]

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 forest highways thus will save the Agencies' 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. The Plan commits to evaluate opportunities for aquatic and wildlife safe crossings during new and existing road enhancement and construction.

The Plan acknowledges the effect of wildlife-vehicle collisions on Montana's roadways and that roads can act as barriers to movement for both aquatic and wildlife species, potentially disturbing the ability of these species to find food and mates, and, ultimately, to survive. We are pleased that the Plan: 1) commits to evaluate installing safe passages for aquatic and wildlife species during new and existing road enhancement and construction, and 2) pledges to consider guidance from the Western Governors' Association (WGA) Wildlife Corridors Initiative (Western Governors' Association 2008), including:

- Making the preservation of wildlife corridors and crucial habitat priorities for transportation planning, design, and construction;
- Integrating conservation and transportation coordination, planning, and implementation across jurisdictions.

We also support the Plan's commitment to review and consider tools such as FWP's Crucial Areas Planning System (CAPS), when planning for aquatic and wildlife passage. Among other things, CAPS can be used to generate GIS maps that depict habitat areas for fish and wildlife, including crucial areas for aquatic and wildlife corridors. Where the WGA, CAPS, and/or other tools demonstrate that a proposed

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

[4] KXLH 9, June 29, 2011. Animal crossing structures saving lives in Montana. Found online: http://www.kxlh.com/news/animal-crossing-structures-saving-lives-in-montana/?fb_comment_id=fbc_10150288607176077_17520218_10150289352616077

project may be in important wildlife habitat, thereby potentially harming aquatic and wildlife connectivity, the Agencies have properly committed to implement mitigation measures aimed at offsetting the identified harm.

C. The Plan recognizes a need to reduce the negative effects of roadways on aquatic organisms and wildlife.

The Plan also commits to reduce the negative effects of roadways on Montana's terrestrial and aquatic wildlife. In particular, as Forest highway projects are developed, the Agencies have pledged to cooperatively identify needs and opportunities to preserve or restore aquatic and wildlife passage, and to develop appropriate crossings. The Plan further commits the Agencies to consider preservation and enhancement of corridors and important habitat in *all phases* of Forest Highway project development.

Where roads interfere with movement of aquatic or wildlife species, the Agencies will evaluate opportunities for safe crossings, especially for more heavily traveled routes. For aquatic species, the Plan indicates that bridges or culverts allowing for aquatic passage should be used where roads cross streams. For mammals, reptiles, and amphibians, constructed wildlife under- and/or overpasses may be necessary to allow for safe passage. This is particularly true where no natural alternatives exist, and the road impedes established wildlife travel routes. In addition to the WGA Wildlife Corridors Initiative and CAPS, discussed above, the Agencies will look to other planning efforts for guidance, including the PACFISH and INFISH Management Strategies (USFS) for aquatic species.

Such considerations will certainly help improve fish and wildlife passage, which we strongly support. In Section III of our letter, we make recommendations to strengthen this element of the Plan.

III. The Plan can be improved by adopting MSWP's proposed recommendations.

The following recommendations will help ensure full consideration of Forest Highway projects in regards to mitigation measures and coordinating with Forest Service programs. We also offer specific suggestions that will help improve wildlife connectivity. However, even with these recommendations, sometimes the best approach is to *not* pave or widen a Forest Highway, and thus the first step in the decision-making process should always be to fully consider the impacts to wildlife and aquatic species. This is especially true in cases where projects will hinder wildlife connectivity and/or significantly increase pollution. Even the best mitigation practices will not always be sufficient to address Forest Highway impacts, and the Plan should recognize that dropping a project may be the best way to protect the natural environment.

A. The Plan should include information regarding the negative impacts of paving on wildlife and include that as a criterion in the decision-making process.

The majority of forest road improvement projects usually involve a paving proposal. Under the Environmental Quality & Health section of the Plan, however, there is no information regarding the negative impacts on wildlife of paving a gravel forest road. The information provided below should be considered for inclusion in the Plan.

1) Pavement results in a large increase in vehicle speed resulting in more wildlife roadkill.

Most gravel roads require traveling around 25-35 mph. Paving can increase this speed to 45-65 mph depending on the width of the road and curves (and the driver). Many studies have shown that higher speeds equal a much larger amount of animals being killed by cars as the driver's reaction time is reduced to a fraction of the time of slower speeds.[5] There is a relatively high probability that any Montana forest highway is going to pass through lands that provide habitat for numerous wildlife species, and thus a high probability that the species that tend to move around in their territory will be negatively impacted by paving. This should be taken into consideration in determining whether or not paving the proposed road is appropriate.

2) Pavement equals reduced travel time, which results in increased traffic - a greater barrier to wildlife.

Because paving significantly reduces travel time, dust, and wear & tear on vehicles, studies have shown that paving leads to increased residential development of rural areas.[6] One only has to look at the Bitterroot Valley to see the dramatic impact paving some of the gravel roads has had over the past decade. Additionally, the easier travel will increase the number of visitors to the particular area (trailheads, campgrounds etc). The combined additional residential and visitor traffic will increase noise along the road, which impacts birds and wildlife, and also will lead to more roadkill.

3) Impacts of increased residential development to wildlife.

In addition to the impacts of increased traffic on the road, more residential development also has negative impacts on certain species of wildlife. Black bear, grizzly bear, wolves, bobcat, lynx, cougar, elk, and moose, to name a few, are all negatively impacted by increased residential development. Those impacts include loss of habitat, disturbance from humans and their livestock and pets, problems with garbage, outdoor storage of BBQs, pet food, bird food etc (bears and other animal attractants).[7] In the book, "The Nature of Southwestern Colorado: Recognizing Human Legacies and Restoring Natural Places," by Deborah D. Paulson and William L. Baker, both professors of geography at the University of Wyoming, the authors discuss the century-plus of environmental impacts of settlement in southwestern Colorado. They point out that rural sprawl "has inherent negative impacts, many of which cannot be overcome, not even by the most conscientious homeowner. The lower elevations around mountains provide critical winter range for big game, valleys are the most productive farmland, and streamside (riparian) habitat supports two-thirds of Colorado's plant and animal species. Yet these are the very lands where sprawl is concentrated because they are largely private and are preferred locations for home-sites." The authors note that, "most insidious, roads fragment the landscape, increasing edges that favor generalist species such as skunks and coyotes and reducing large habitat blocks needed by more specialized species."

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[5] Higher vehicle speeds are usually associated with an increase in road-kill (Gunther *et al.*, 1998; Seiler, 2005). A Grand Teton National Park 2010 study regarding WVCs states "Our results that associated higher speeds with WVCs were similar to a 1997 study in Yellowstone National Park, where '[the] speed of vehicles was the primary factor contributing to vehicle wildlife collisions' (Curry et al. 2010)."

[6] Headwaters Economics, September 2008. Land Use Effects of Paving Rural Roads in Western Montana. Found online at: http://headwaterseconomics.org/land/reports/paving-rural-roads/

[7] American Planning Association Report No 470/471 1997. Habitat Protection Planning: Where the Wild Things Are.

The authors cite a list of other problems, including invasive, noxious and non-native plant species that proliferate in rural subdivisions due to the disturbance of the ground inherent in such development. They also catalog the increased killing of wildlife, some rare or threatened, by domestic cats and dogs in such rural subdivisions. The authors also point out that the presence of rural subdivisions in close proximity to public lands is compromising the ability of those public lands to be effectively managed, particularly in the area of fire management, prevention of fuel buildups, and prescribed burning.

In summary, the Plan needs to include such information about the many negative impacts to wildlife that upgrading a road from gravel to asphalt has on wildlife and consideration of this factor should be included in the decision-making process of whether or not paving is appropriate for the particular road being considered for an upgrade.

4) Paving introduces chemical pollutants.

We also urge careful consideration of the trade-offs in impacts from dirt to paved road upgrades in regards to reducing stream sedimentation by paving a road, while increasing chemically contaminated runoff. One likely result is an increase in road use coupled with the associated chemical pollutants vehicles leave behind while travelling on forest roads. Even though the amounts are usually small, increased use levels of forest highways create situations where chemical pollutants can cause real harm to the roadside environment and beyond. These pollutants may include inorganic (lead, zinc, chromium, iron and chloride) and organic polycyclic aromatic hydrocarbons (PAHs).

Herbicides are another added source of highway pollutants and while they may extend the useful life of asphalt pavement by preventing the spread of weeds, many have a long biodegradation half-life; in some cases one application can inhibit plant growth for more than a year. For example, in areas around treated roads, studies found prometon is present in surface water, groundwater and rainfall (Capel et al. 1999).

Another source of pollution is direct leaching of PAHs from the asphalt road itself. In the past, PAHs in roadside runoff were solely attributed to deposition from car exhaust fumes. However, research from Australia indicates that relatively high concentrations of PAHs can be introduced into soils through leaching from bitumen surfaces." (Sadler et al. 1997).

De-icing salt is another major highway pollutant. Piatt and Krause (1974) found that de-icing salts concentrate in the leaf tissue of roadside aspens, leading to leaf damage and mortality. Another impact of salt is that it can attract wildlife to roadsides, putting them in danger of vehicle collisions. Highway salt can also reach streams and channels in quantities sufficient to affect downstream aquatic ecosystems," (Forman and Deblinger 2000). A study by Gjessing et al. (1984) examined the effect of highway traffic pollutants (zinc, lead, chromium, iron, chloride and PAHs) on lake water quality. They found that the washout water and snow from the highway was rich in inorganic and organic pollutants, and that these pollutants are accumulated either in the soil and vegetation or in the water sediments." Finally, Trombulak and Frissell (2000) describe that maintenance and use of roads can contribute at least five different types of pollutants to the environment: heavy metals, salt, organic molecules, ozone, and nutrients.

Given the potential for increased chemical pollution from upgraded Forest Highways, we respectfully request the Tri-Agency adopt specific project evaluation criteria to consider this impact. In cases where road-related chemical runoff would cause significant negative impacts to waterways, and where sedimentation is not a significant issue, the road upgrade project should consider other alternatives to paving.

B. The Plan should recognize that increased connectivity is the best insurance policy for wildlife in the face of climate change.

The importance of wildlife crossings in making highways more permeable has become paramount in order to increase the ability of wildlife to adapt to climate change. Climate change affects natural systems and wildlife populations by exacerbating the negative effects of habitat loss, degradation, and fragmentation. Local climate disruptions are changing long-term patterns of fire, drought, and flood, as well as seasonal patterns of precipitation and temperature. To adapt and survive, many wildlife species will need to adjust their home ranges and movement patterns (Chen *et al*. 2011).

Scientific reviews of the best strategies to protect biodiversity highlight the importance of maintaining landscape connectivity to assure species can move in reaction to climate induced changes (Madley *et al*. 2009). Further, upon a review of 25 years of peer-reviewed articles, the most oft cited recommendation to protect biodiversity in the face of climate change was to increase connectivity (Heller & Zavelata 2009). To bolster this argument, Gilbert-Norton *et al*. (2010), in their review of empirical studies of corridors, found that corridors increase movement between habitat patches by approximately 50% compared to patches that are not connected with corridors. Thus, conserving corridors is not only strategic and climate smart, but a proven method of allowing wildlife to move in response to environmental change.

Although the Plan recognizes the need to adapt to address the current and anticipated effects of climate change, to be effective, the Plan must identify and protect ecological connectivity for plants and animals and build resiliency on the landscape. Specifically, the Agencies should maintain and improve long-term connectivity for all native, terrestrial and aquatic species on public lands by committing to the following:

- Design highway projects bisecting seasonal big game migration or movement between ranges to reduce or mitigate animal-vehicle collisions and facilitate connectivity between seasonal habitats.
- Design and build structures, such as fences, roads, and canals, so that they do not create unreasonable or unnecessary movement barriers or hazards for terrestrial and aquatic wildlife.
- Design new, replacement, and reconstructed stream crossing sites (culverts, bridges, and other stream crossings) to provide and maintain passage for fish, other aquatic species, and/or riparian associated terrestrial species (constructed barriers may be maintained in instances where native species benefit from species isolation).

Each of these actions is consistent with the USDA-Forest Service, "National Roadmap to Responding to Climate Change" (2010), which recommends that the Forest Service immediately undertake initiatives to connect habitats to improve adaptive capacity; collaborate with partners to develop land management plans that establish priority locations for maintaining and restoring habitat connectivity to mitigate effects of climate change; seek partnerships with private landowners to provide migration corridors across private lands; remove or modify physical impediments to the movement of species most likely to be

affected by climate change; manage forest and grassland ecosystems to decrease fragmentation; and continue to develop and restore important corridors for fish and wildlife.

C. The Plan should consider other mitigation measures such as road decommissioning.

We support the Plan's direction to be context sensitive and coordinate with partner's long range planning efforts. The Plan explains, "[t]o be "context sensitive," project planning, design, and construction must all consider the total context within which a transportation facility will exist," (p. 19). This total context should include the whole watershed, (scales dependant on various long-range plans), and landscapes that include wildlife corridors. Within these larger contexts, road decommissioning can lead to significant ecological improvements that may help mitigate forest highway projects by reducing upstream sedimentation and wildlife fragmentation. Additionally, such improvements may also reduce mitigation needs and costs at forest highway project sites.

The Plan discusses Tri-Agency coordination with Forest Service programs, regulations and plans that have a direct connection to forest highways; we urge this section be expanded to include the Watershed Condition Framework and travel analysis reports.

The Plan includes a discussion of the Travel Management Rule, but only within the scope of Subpart B; the section that authorizes the designation of off-road vehicle use. However, another section deals specifically with the Forest Service road system and is particularly relevant to the Plan. On November 10, 2010, the Chief's Office of the Forest Service distributed the attached directive memorandum entitled, Travel Management, Implementation of 36 CFR, Part 212, Subpart A (36 CFR 212.5(b)), to all line officers and program directors. The memorandum directs all national forests to identify, through a science-based analysis, an ecologically and fiscally sustainable minimum road system by 2015. To meet this requirement, each forest will produce a travel analysis report that lists all roads to be decommissioned. In addition to the five years it will take to conduct this analysis nationally, it will likely take decades to actually implement the minimum system on-the-ground. But the reports developed through this process will, over the long-term, create a blueprint for future road maintenance and decommissioning investments, including Legacy Roads and Trails Remediation Initiative funding. Each forest will also use the travel analysis reports when developing specific project proposals, and they should be included the Plan.

The Watershed Condition Framework (WCF) is another Forest Service planning effort that is relevant to the Forest Highway program. In short, the WCF's goal is to maintain or improve whole watersheds; it does so through a six-step process that classifies current conditions and prioritizes watersheds in need of restoration. It also requires development and implementation of action plans followed by monitoring to determine the plans' effectiveness. The WCF is designed to work within existing budgets, use GIS technology with quantitative measures when possible, and focus on factors that have the greatest influence on watershed conditions, (Watershed Condition Class Technical Guide, 2011). Ultimately, the WCF's goal is to return areas to a more natural, pristine state with high watershed functionality (e.g. integrity). Currently the Forest Service has assigned condition classes for every watershed it manages, (based on the 6th code HUC scale), and each national forest chose two priority watersheds and developed

action plans that identify project(s) that will improve its condition.[8] The agency will continue to identify priority watersheds and develop associated action plans. The Forest Highway Program should coordinate projects with the Forest Service in a way that helps improve WCF condition classes, (or maintains those functioning properly), and complements the action plans.

D. The Agencies should include funding for wildlife-related mitigation in the initial project budgets.

The Plan proposes a variety of ways in which to leverage funds from other Forest Highway Program sources to increase project benefits, including wildlife-related mitigation. Examples offered include combining Forest highway funds with funds designated for:

- Recreation to provide additional pedestrian or bicycle improvements
- Fish and wildlife to enhance habitat in addition to project mitigation, and
- Adjacent transportation project(s) to develop a larger project with a consistent, coordinated design and with fewer construction impacts.

In addition to leveraging funds from other Forest highway sources, the Agencies should prioritize funding for wildlife-related mitigation as an early integration in project budgets. Specifically, the Agencies should follow the direction of the FHWA in its 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). The Agencies 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.

Finally, MSWP requests that the Agencies set aside a minimum of 5% of their program funds for wildlife-related mitigation projects. This is well within the discretion of the Agencies, which acknowledge that they are able to set aside a certain percentage of program funds for specific project types. The requested minimum 5% is equal to the percentage of all reported motor-vehicle collisions that are due to wildlife (300,000 out of 6 million) (Huijser *et al*. 2007), and thus is a reasonably comparable amount to allot for spending to decrease wildlife-vehicle collisions.

[8] The WCF uses a one to three scale, where (1) means the watershed is functioning properly, (2) the watershed is at risk and (3) indicates it is impaired.

IV. Conclusion

For the reasons discussed above, we respectfully request that the Agencies adopt MSWP's proposed recommendations, including revising the Plan to ensure that it: (1) expands its decision-making criteria to consider the negative effects of paving and other upgrade proposals to wildlife in order to prevent road upgrades that would be significantly harmful; (2) recognizes that increased connectivity is the best insurance policy for wildlife in the face of climate change; (3) considers other mitigation measures such as road decommissioning; and (4) includes funding for wildlife-related mitigation during the nomination process so that those costs are taken into consideration at the earliest point of review for new and existing road enhancement and construction.

Respectfully submitted,

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Attachment: FHWA June 1, 2010 Memorandum

U.S. Department of Transportation
Federal Highway Administration

Memorandum

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

Date: June 1, 2010

From: for Joe Toole
Associate Administrator for
Office of Safety

In Reply Refer To: HEPE

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.tfhrc.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.

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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, or by phone at by at 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.