

# Montanans for Safe Wildlife Passage



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# Today's goals



1. Formation of MSWP
2. Why is this important?
3. MSWP activities & member projects
4. Key challenges
5. Opportunities to work together



BITTERROOT  
SAPPHIRE  
CORRIDOR  
COALITION



CRAIGHEAD INSTITUTE  
*Building Conservation Solutions for People and Wildlife*



MPG  
RANCH



THE CENTER FOR  
LARGE LANDSCAPE  
CONSERVATION

  
YELLOWSTONE TO YUKON  
CONSERVATION INITIATIVE

**Citizen Advocates**



*Gallatin Wildlife Association*





**MISSION:** MSWP advocates for innovative solutions to maintain habitat connectivity and provide safe passage for Montana's people, fish, and wildlife.





# GOAL: MSWP seeks to reduce collisions involving wildlife by 20% within 5 years



## Wildlife Crossings

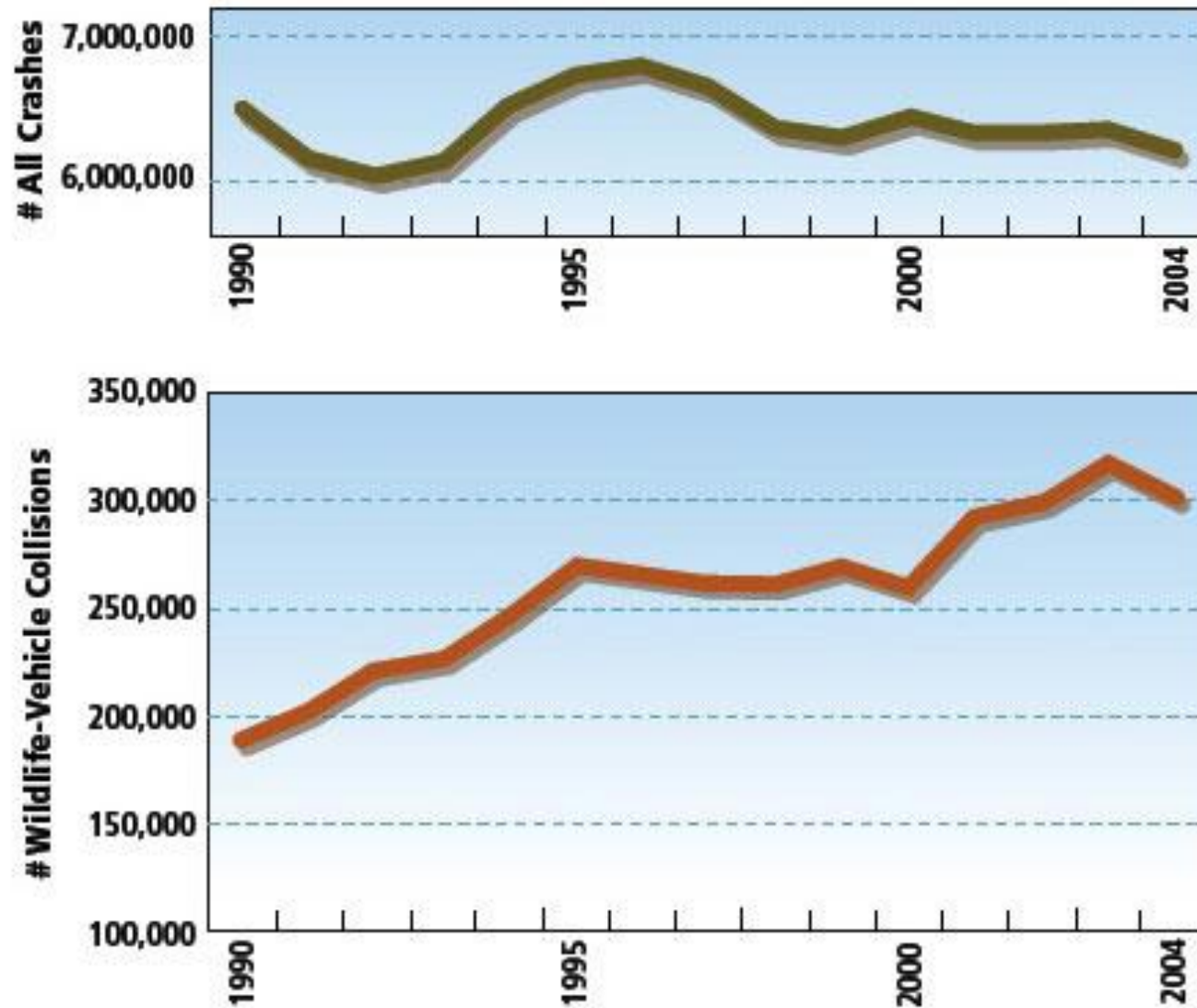
### WILDLIFE-SENSITIVE DESIGN

Wildlife-sensitive design seeks to protect animals while helping to reduce animal-vehicle conflicts. This type of design makes use of bridge-like structures (overpasses), culvert-like structures (underpasses), barriers, and escape structures. Barriers block animal crossings, while escape structures encourage animals to exit the roadway.



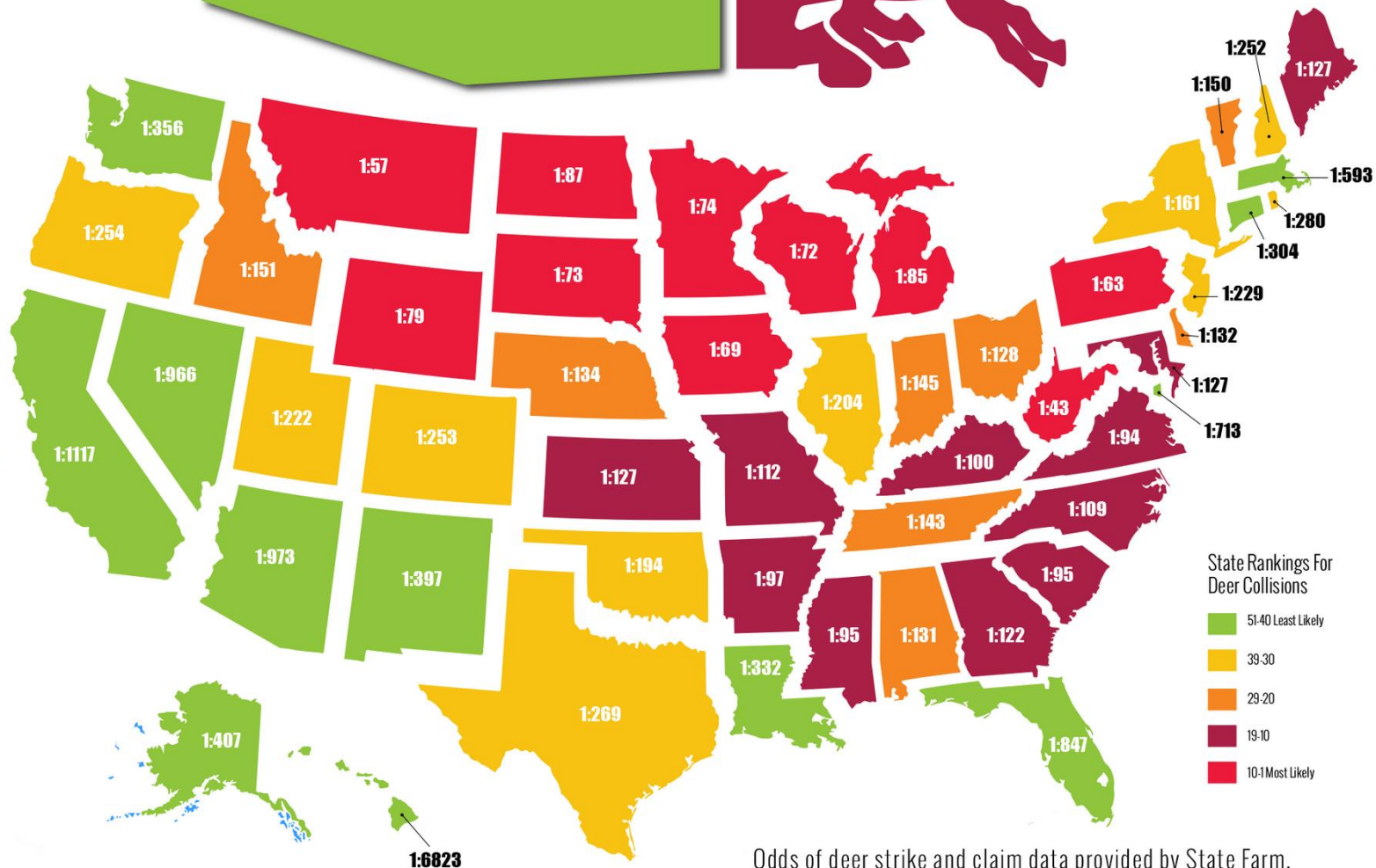
Wildlife using crossings in MT

## Total U.S. Crashes Versus Crashes Involving Animals, 1990–2004



(Huijser et al. 2008)

# Worst States For Deer Collisions



Odds of deer strike and claim data provided by State Farm.

MONTANANS

for SAFE WILDLIFE PASSAGE



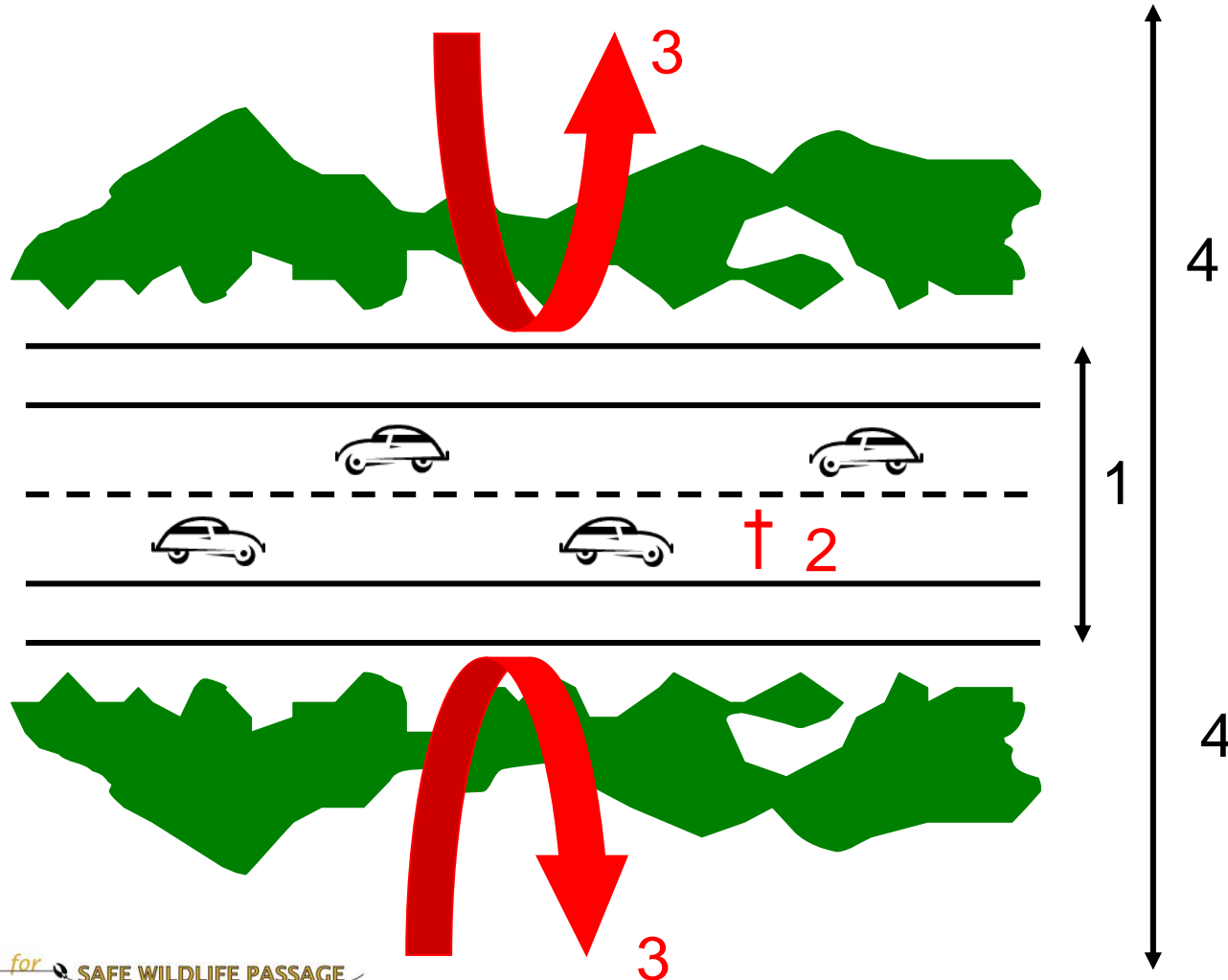




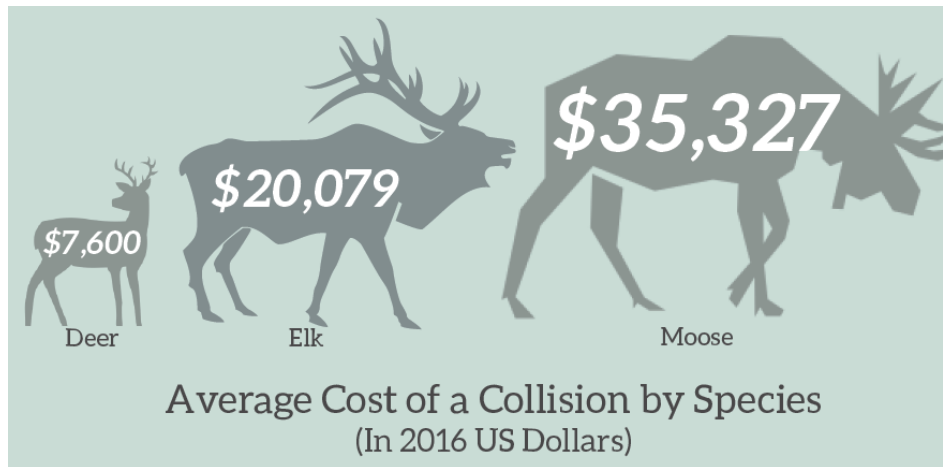


# Some Ecological Impacts of a Road

1. Loss of habitat, 2. Road mortality, 3. Barrier effect, 4. Reduced habitat quality







Costs	Deer	Elk	Moose
Vehicle repair costs	\$2,622	\$4,550	\$5,600
Human injuries	\$2,702	\$5,403	\$10,807
Human fatalities	\$1,002	\$6,683	\$13,366
Towing, accident attendance, and investigation	\$125	\$375	\$500
Hunting value	\$116	\$397	\$387
Carcass removal and disposal	\$50	\$75	\$100
<b>Total (2007 \$)</b>	<b>\$6,617</b>	<b>\$17,483</b>	<b>\$30,760</b>

# If we build them, will they come?

2012-03-28 8:34:03 AM

M 1/5

0 0°C



Banff National Park

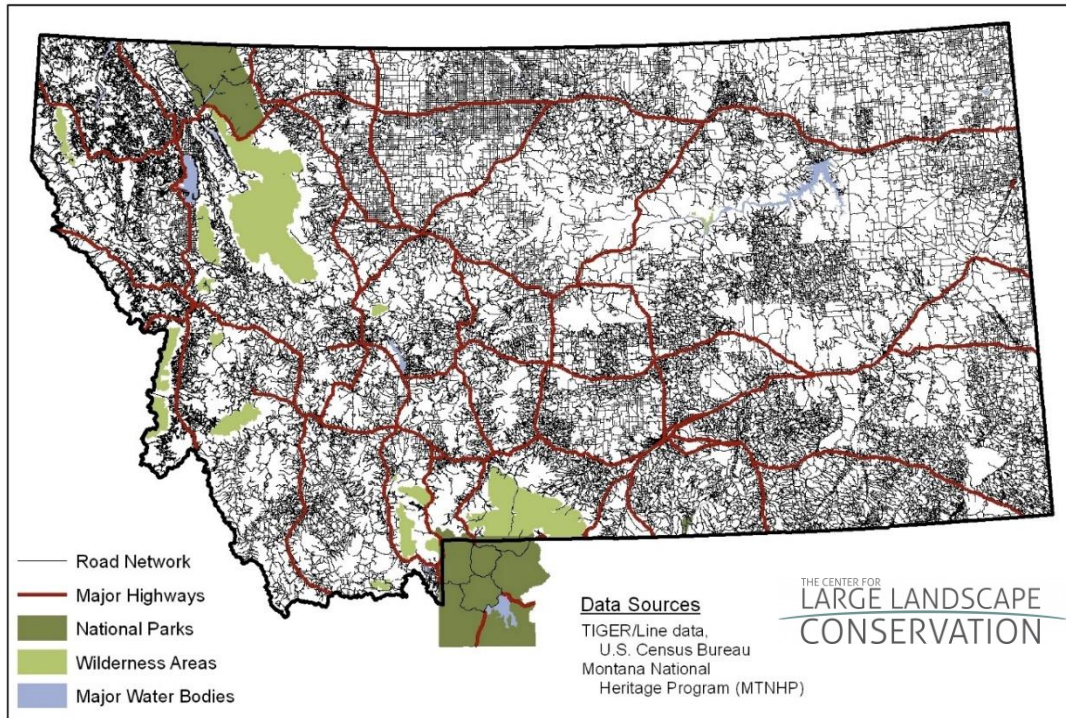
World's longest wildlife crossing  
monitoring project (1996-2014)

> 150,000 crossings detected

11 large mammal species



# MSWP Activities

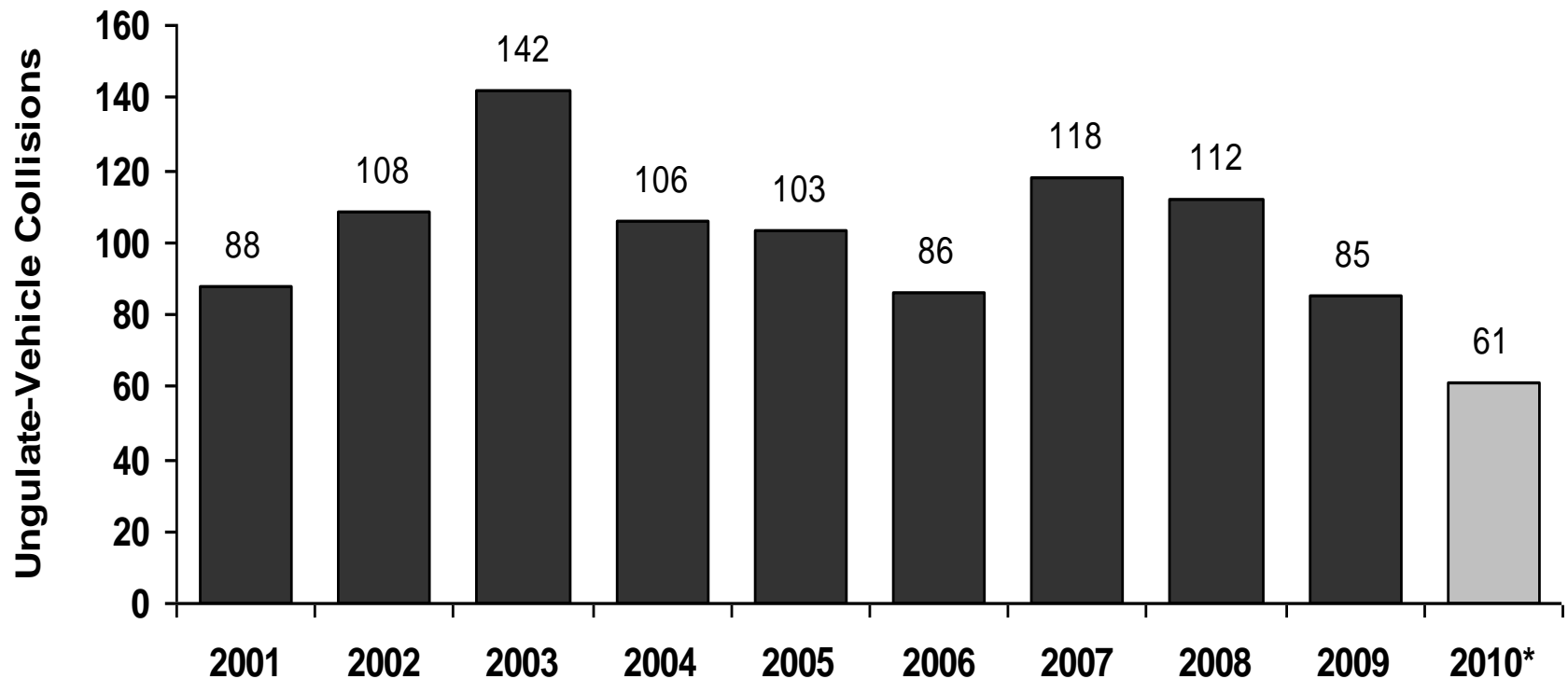


- Education & Outreach
  - Op-eds
  - Website
  - News articles
- File comments
  - Long-range plans
  - STIP
  - Corridor Studies
- Identify and support potential mitigation projects

# Member Project: I-90/Bozeman Pass

## RESULTS

### Pass-wide Data Summary

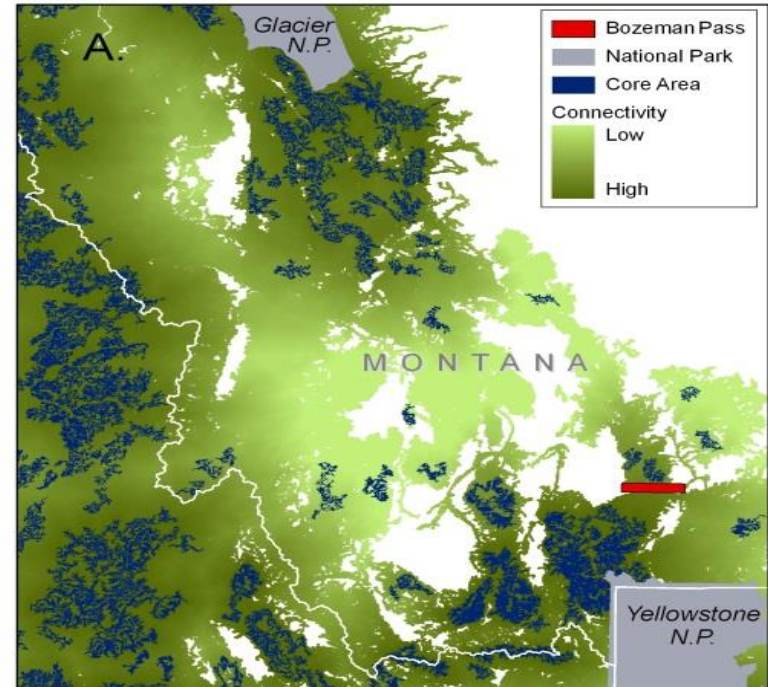
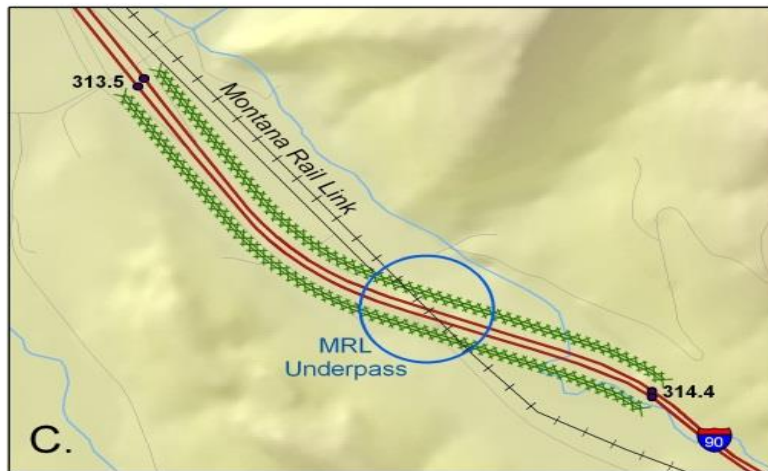


UVC totals by year, mileposts 309.5–333.0



# Member Project: I-90/Bozeman Pass

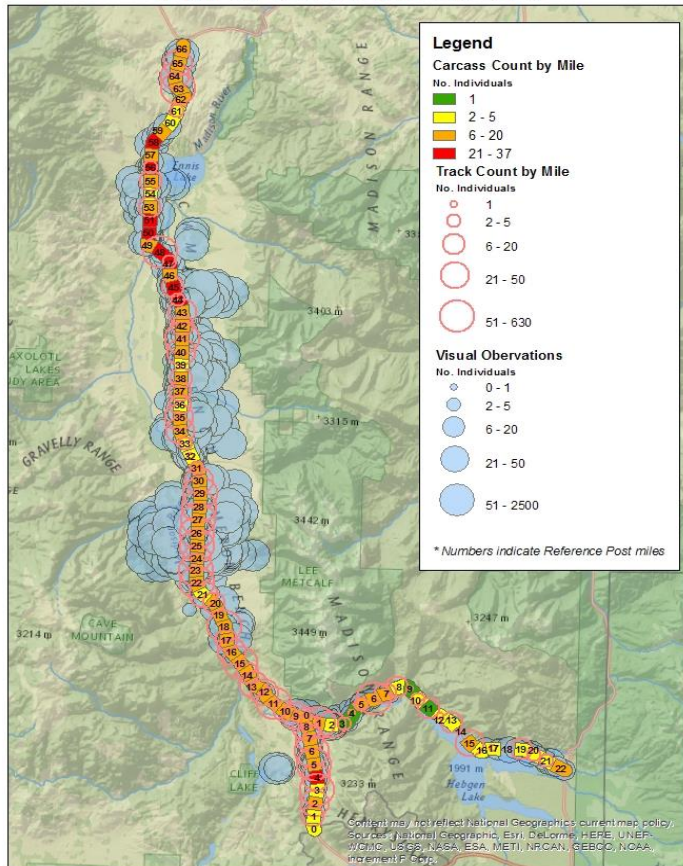
Bozeman Pass Study Area



# Member Project: US 87/287

## Madison Valley

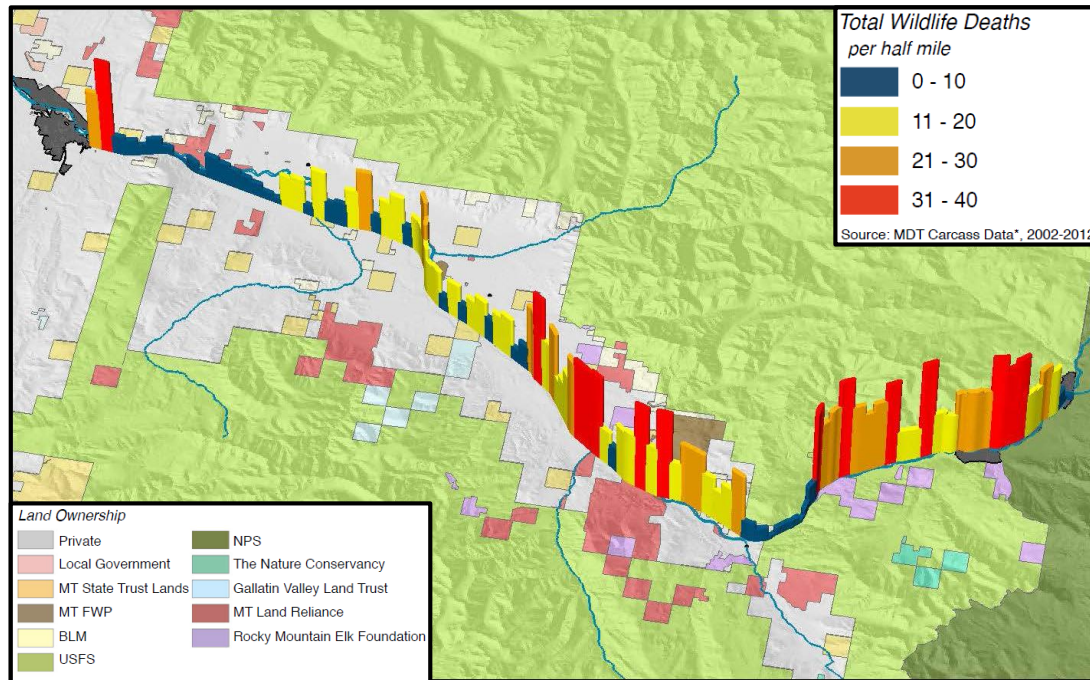
Observations recorded during the study period  
(April 5, 2012 to April 10, 2014)





# Member Project: US 89

## Paradise Valley



- MDT 52-mile corridor study from Livingston to Gardiner, gateway to Yellowstone National Park
- Wildlife involved in 50% (142) of crashes (286) over 5 years
- 1600+ large mammal carcasses over 11 years

WILDLIFE-VEHICLE CONFLICTS					
13	Grade Separated Crossing Structures-overpasses	As needed	Consider grade separated crossing structures (overpass) on a case-by-case basis during project-level design.	As needed	\$2,800,000 EA (overpass)
	Grade Separated Crossing Structures-underpasses	As needed	Consider grade separated crossing structures (underpass) on a case-by-case basis during project-level design.	As needed	\$750,000 EA (underpass)
	Animal Detection System (At-grade Crossing)	As needed	Consider animal detection system installation on a case-by-case basis during project-level design.	As needed	\$220,000 per mile
	Wildlife Signage	As needed	Consider additional wildlife signing on a case-by-case basis during project-level design.	As needed	\$600 EA

# Member Project: MT 86

## Bridger Canyon



### 2016

Week of Aug 21. Deer by the "M."

Week of Aug 21. Deer by Creekwood

Sept 3. Cow elk. at 7424 Bridger Canyon Rd

Sept 19. Deer in field beside road at 7424 Bridger Canyon Rd

Week of Sept 25. deer by 7280 Bridger Canyon Rd

Oct 13. Deer at Hamm's

Oct 14. Deer in front of Story Mill trailer court

Oct 24. Mule deer directly across from Hamm's house

Oct 26. Deer on Rouse/Bridger Canyon Rd in 1300 -1400 block

Dec 4. Mule deer at Papke residence

Dec 30. 2 deer across from Pete Serreno's residence

### 2017

Mar 6. One deer, whitetail possibly, S side near 5622 Bridger Canyon Rd

March 29. One deer at Papke residence, One deer at 6140 Bridger Canyon Rd.

Both looked like young whitetail.

First week of May. Elk on Bridger Canyon Rd at bend by Hamm's, MM 9.

Herd crossing road in rain storm. Elk slid under Brenda Greenberg's car.

June 24. Young whitetail across from Creekwood

July 20. Black bear 7157 Bridger Canyon Rd

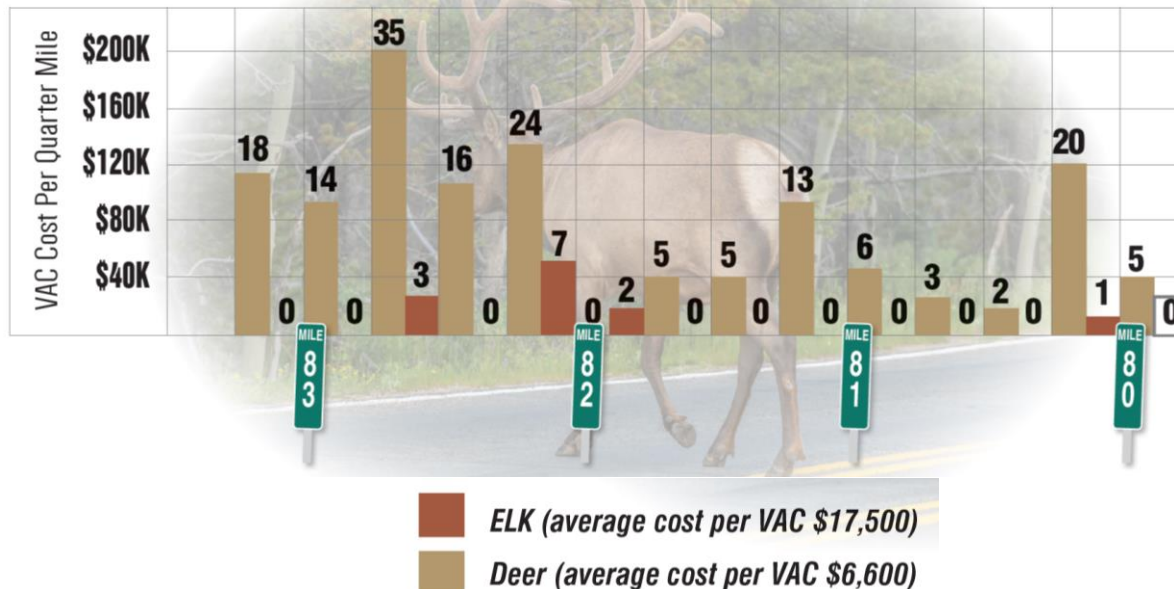
August 8. Mule deer doe 6788 Jackson Creek Rd



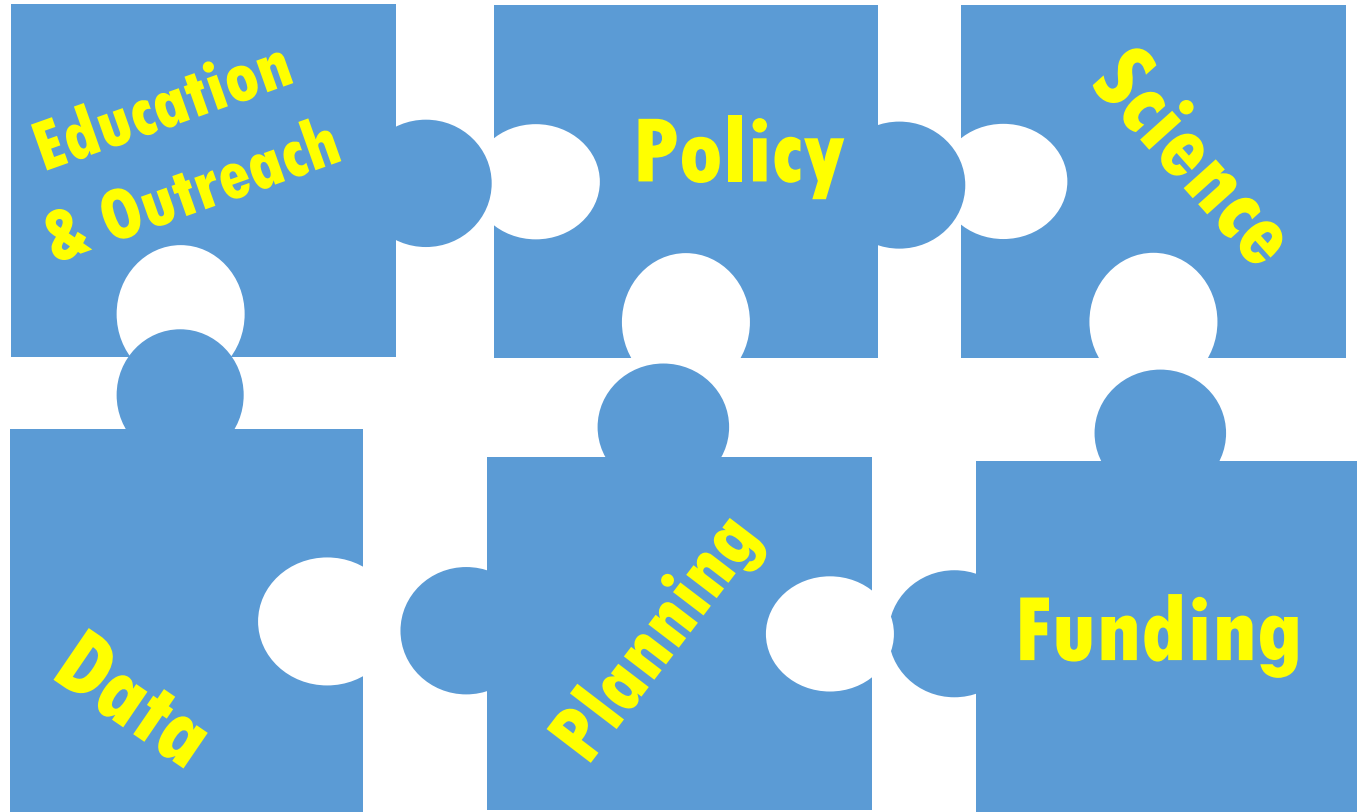
# Member Project: I-90 E/W of Missoula & US 93 S of Lolo

## VEHICLE ANIMAL COLLISIONS - (DEER/ELK) AND COSTS PER QUARTER MILE

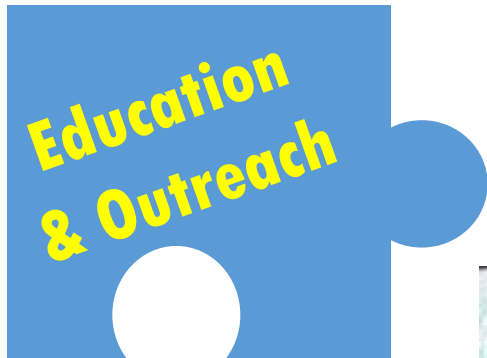
US-93 South of Lolo, MT: mile 79.5 through 83.25  
January 1, 2004 through December 31, 2013



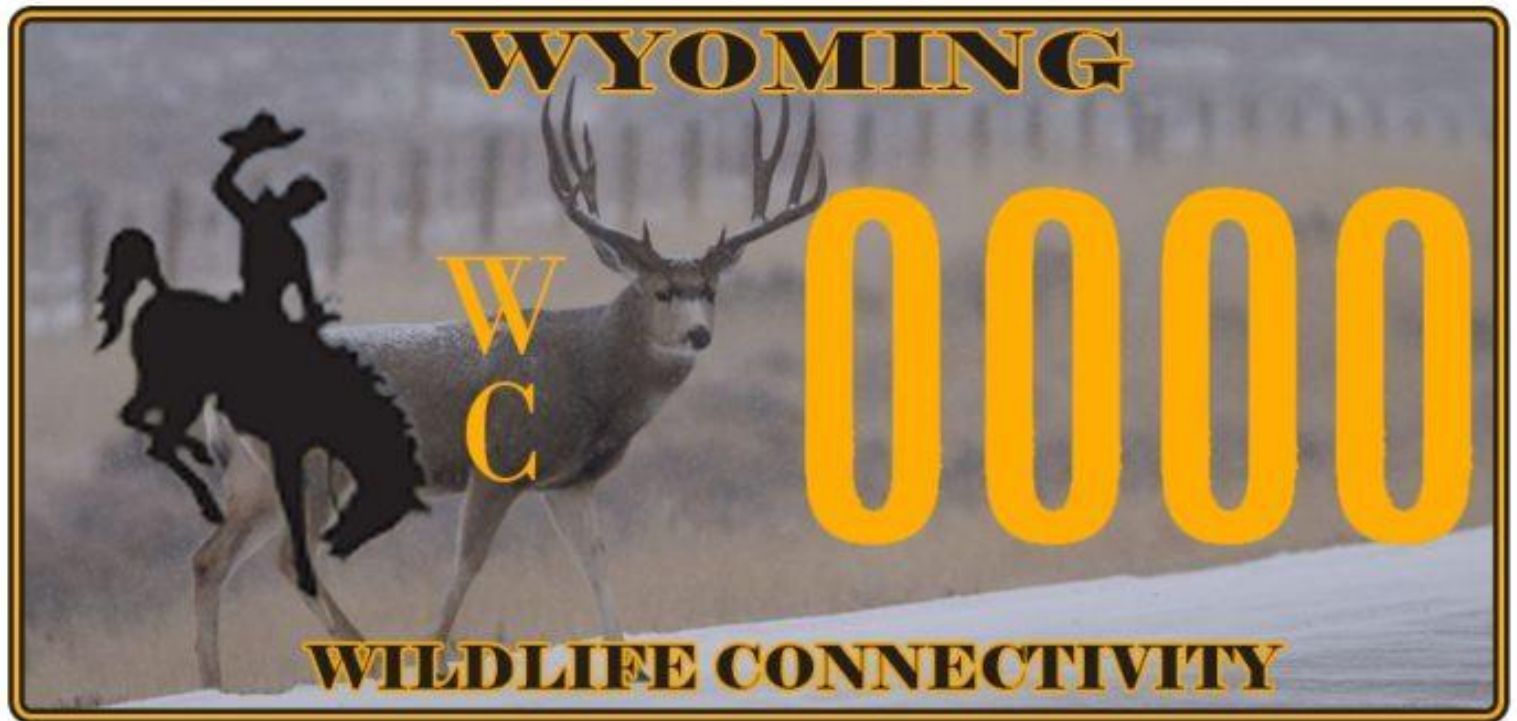
# The Challenge-Opportunity Puzzle







**Policy**



**MONTANANS**

*for*

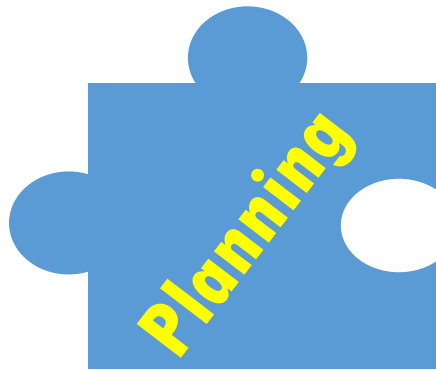
**SAFE WILDLIFE PASSAGE**



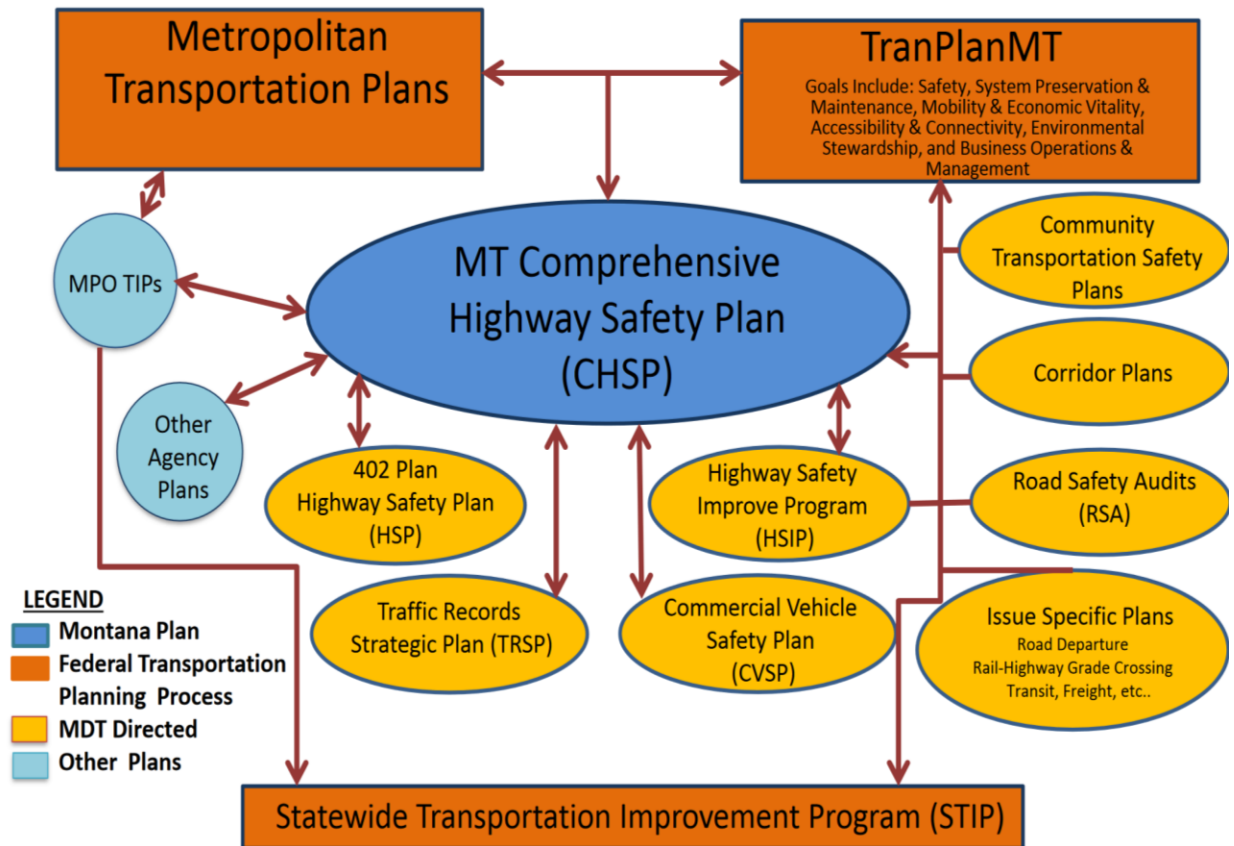
A small silhouette of a bison standing with its head down, positioned above a thin horizontal line.

# HIGHWAY MITIGATION FOR WILDLIFE IN NORTHWEST MONTANA

Estimating The Impacts  
Of Exurban Growth And Traffic Demand  
On Grizzly Bears  
And Other Key Wildlife Species



## Relationship of Montana's Safety Plan (CHSP) with Agency Safety Plans & Programs





# Funding



# Mission mismatch







The  
**\$64,000**  
Question

**GROUND**

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for

SAFE WILDLIFE PASSAGE

“We spend \$8 billion a year running over wildlife. If we took that cost and quartered it, we could build 200 animal crossings a year, and the problem of roadkill would disappear within a generation.”

TED ZOLI, HNTB BRIDGE ENGINEER, MACARTHUR FELLOW

