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

BOURG

RECONYX

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BITTERROOT SAPPHIRE CORRIDOR COALITION

CRAIGHEAD INSTITUTE
Building Conservation Solutions for People and Wildlife

FUTURE WEST

Greater YELLOWSTONE COALITION
EST. 1983

MPG RANCH

NATIONAL WILDLIFE FEDERATION

THE CENTER FOR LARGE LANDSCAPE CONSERVATION

YELLOWSTONE TO YUKON
CONSERVATION INITIATIVE



Gallatin Wildlife Association

NATIONAL PARKS CONSERVATION ASSOCIATION

Citizen Advocates

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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

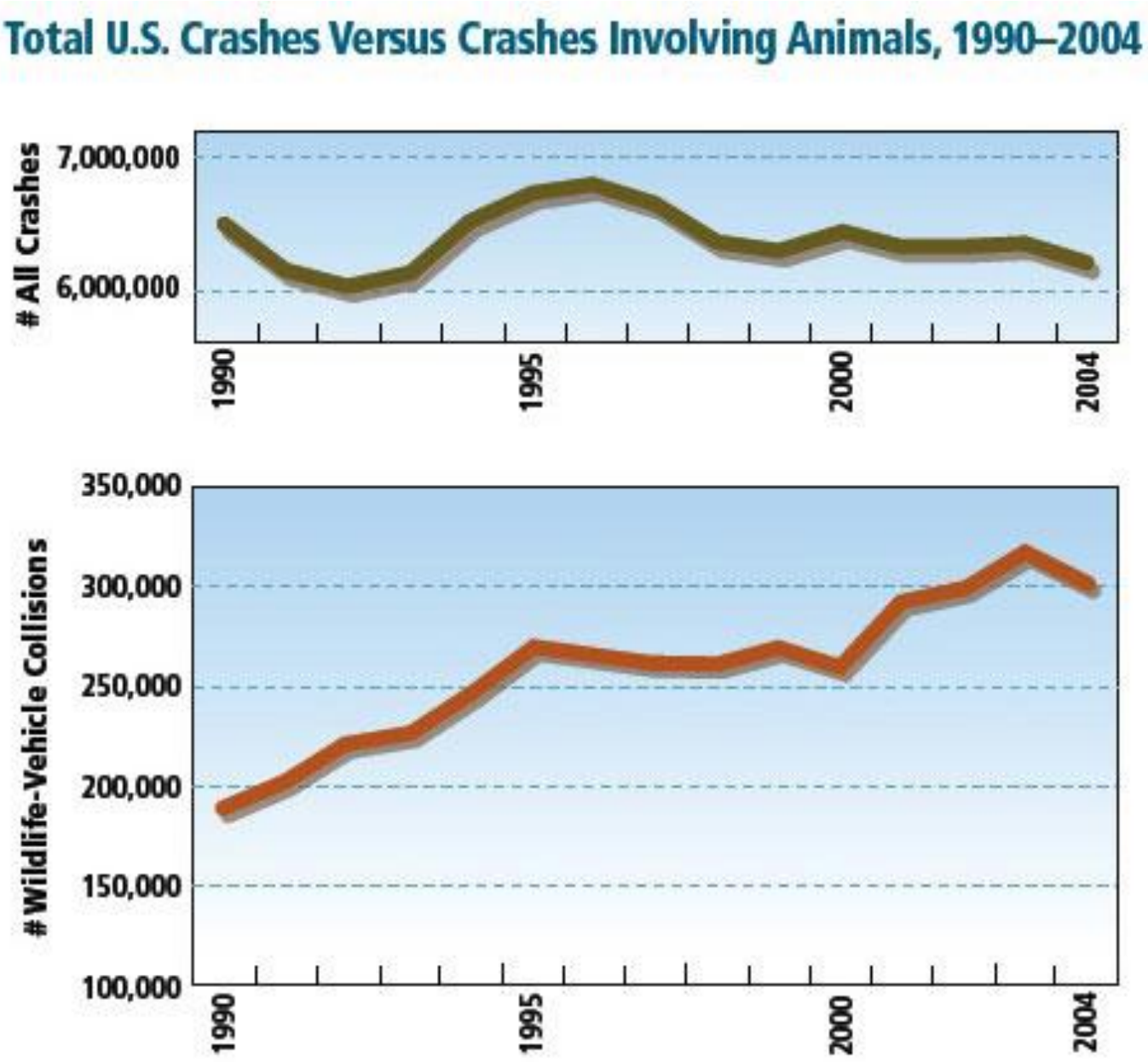
WILDLIFE-SENSITIVE DESIGN

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

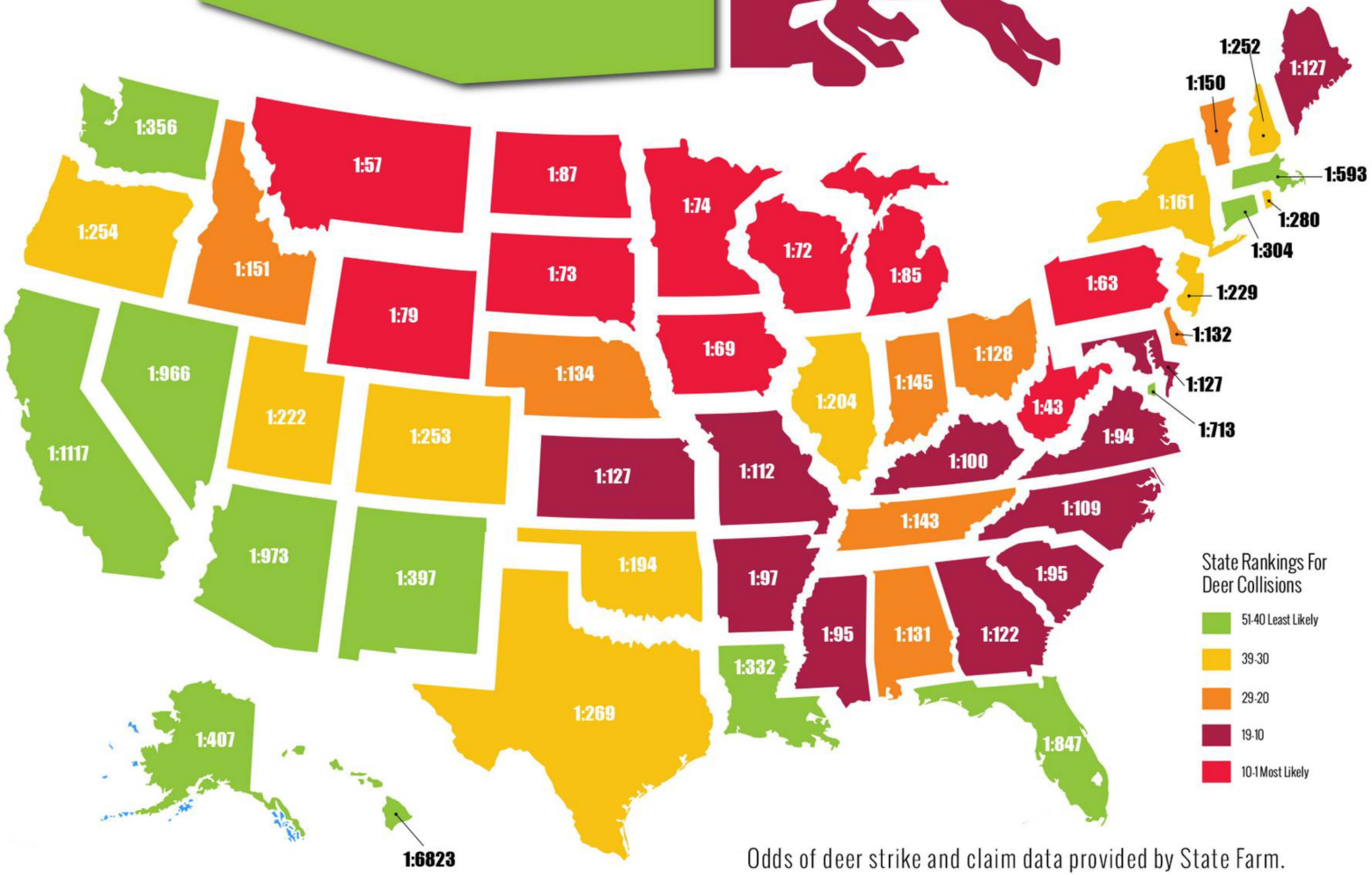
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(Huijser et al. 2008)

Worst States For Deer Collisions





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

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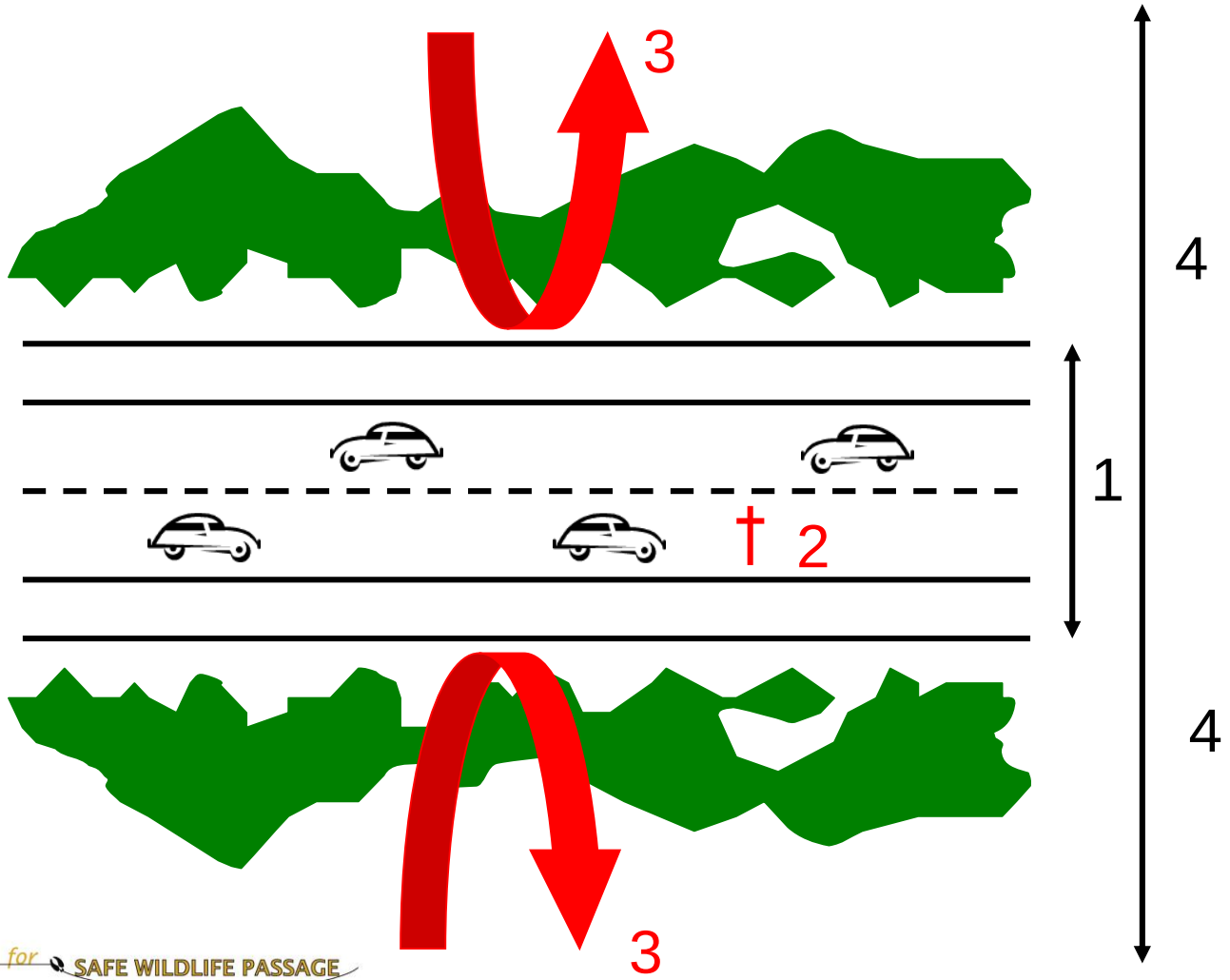




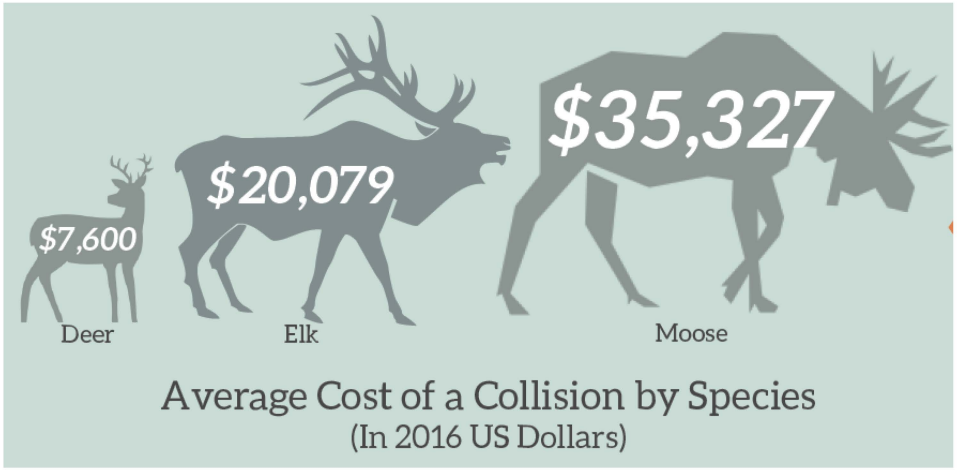
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Some Ecological Impacts of a Road

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



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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
Total (2007 $)	**$6,617**	**$17,483**	**$30,760**

If we build them, will they come?



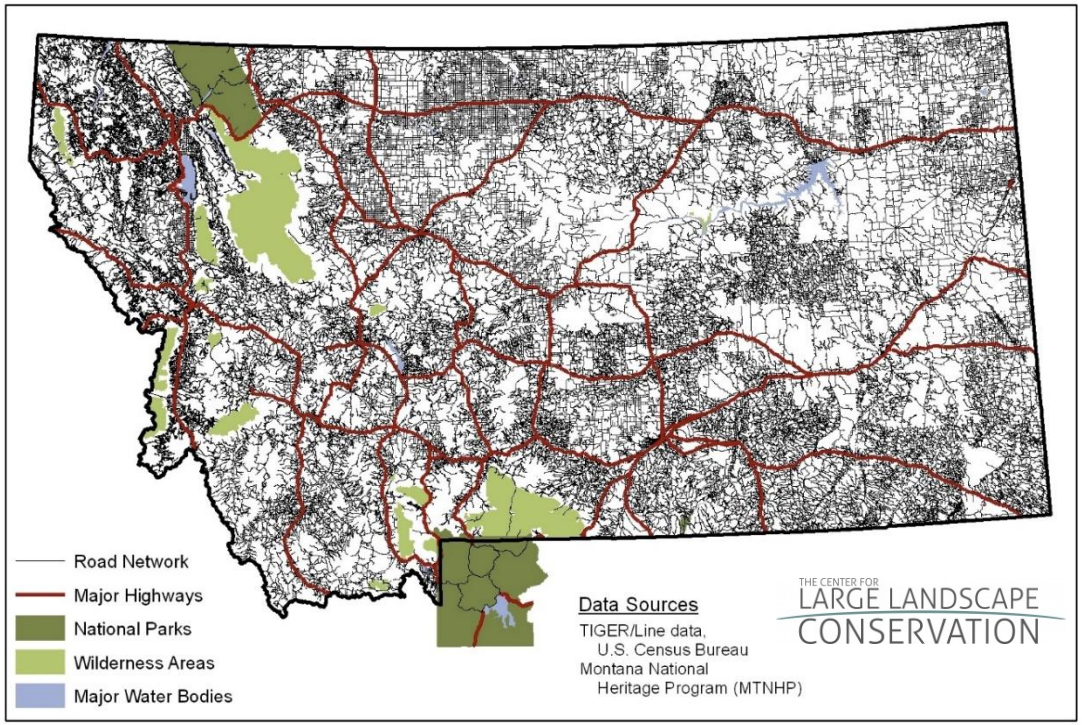
Banff National Park

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

> 150,000 crossings detected

11 large mammal species

MSWP Activities

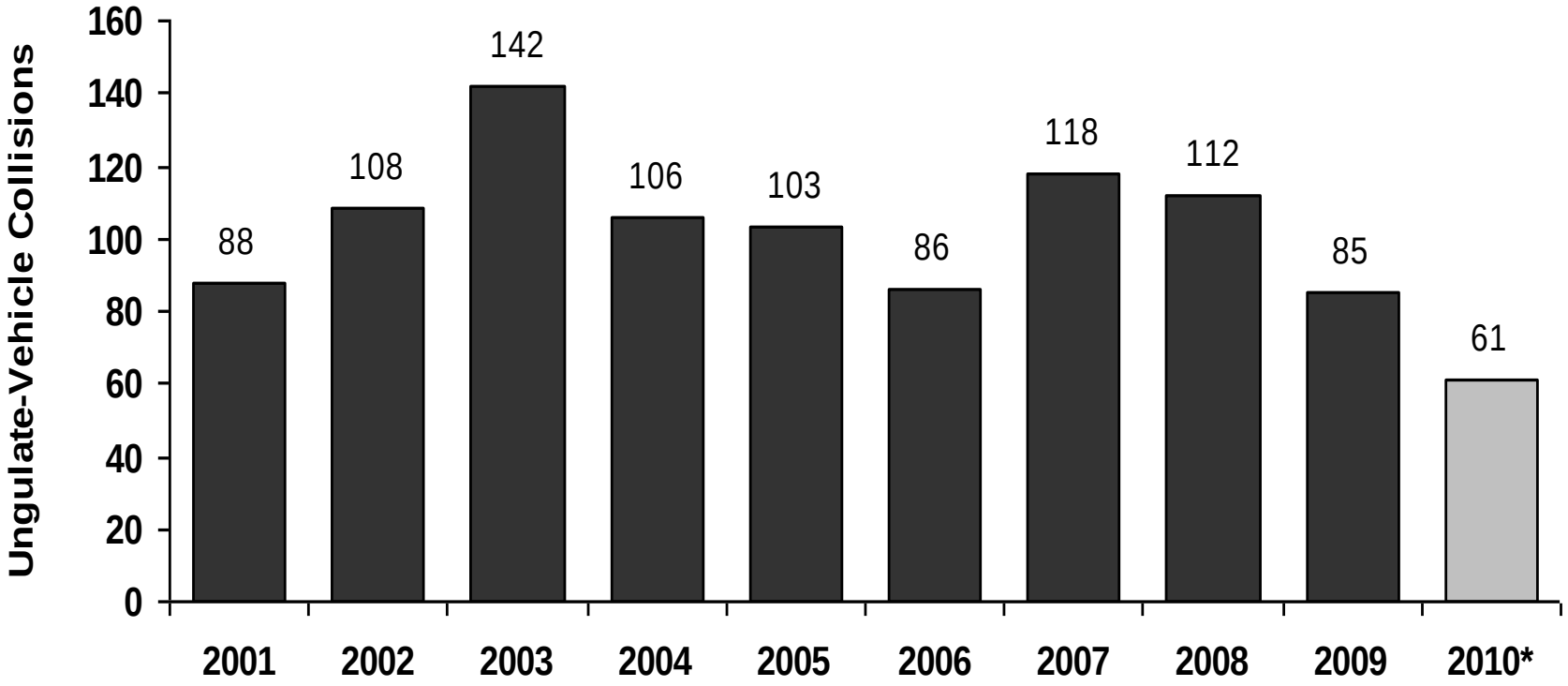


- Education & Outreach
  - Op-eds
  - Website
  - News articles
- File comments
  - Long-range plans
  - STIP
  - Corridor Studies
- Identify and support potential mitigation projects

Member Project: I-90/Bozeman Pass

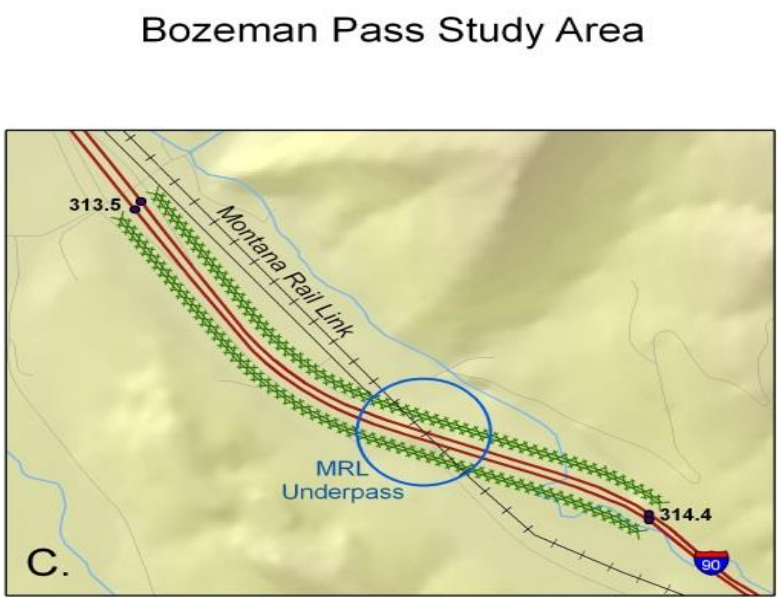
RESULTS

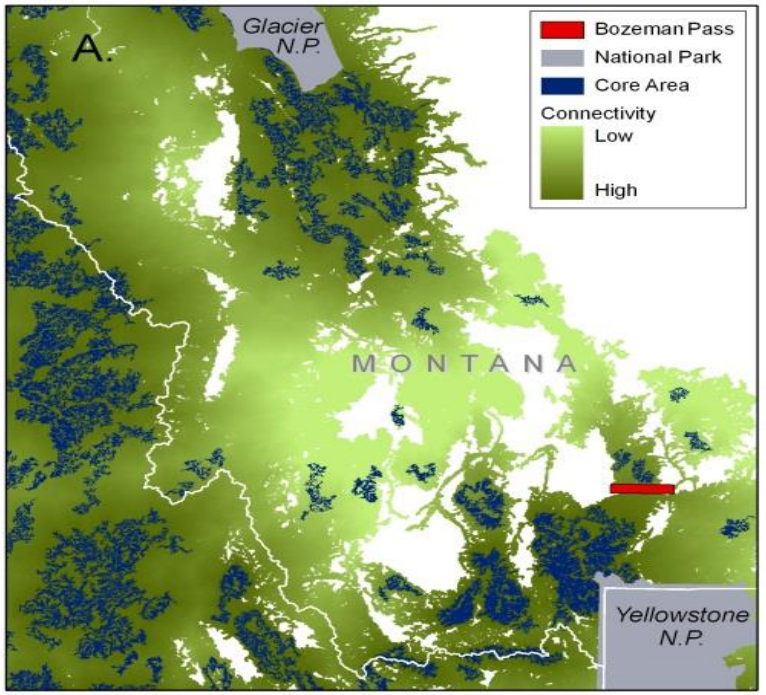
Pass-wide Data Summary



UVC totals by year, mileposts 309.5–333.0

Member Project: I-90/Bozeman Pass

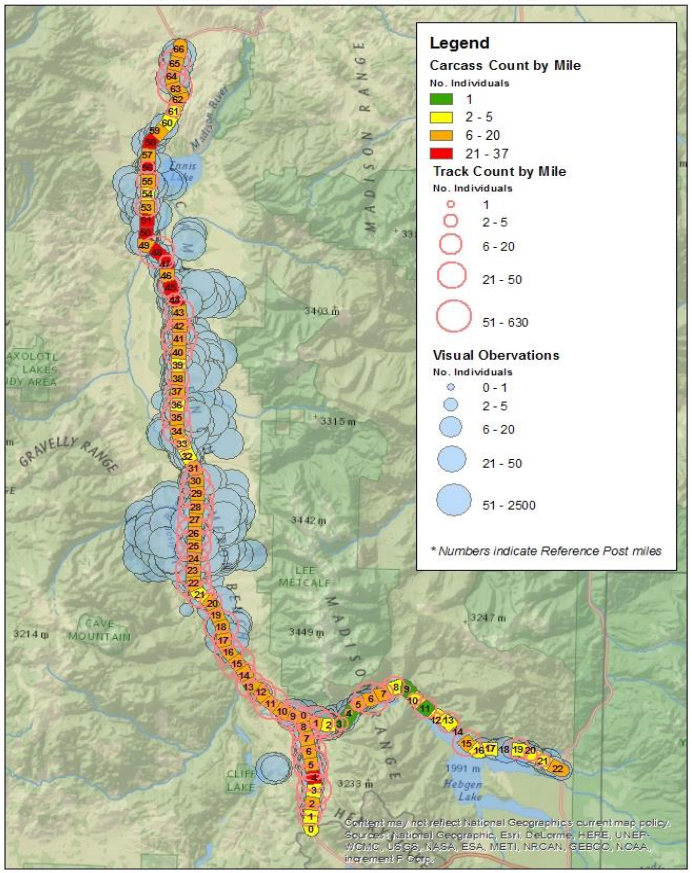






Member Project: US 87/287 Madison Valley

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

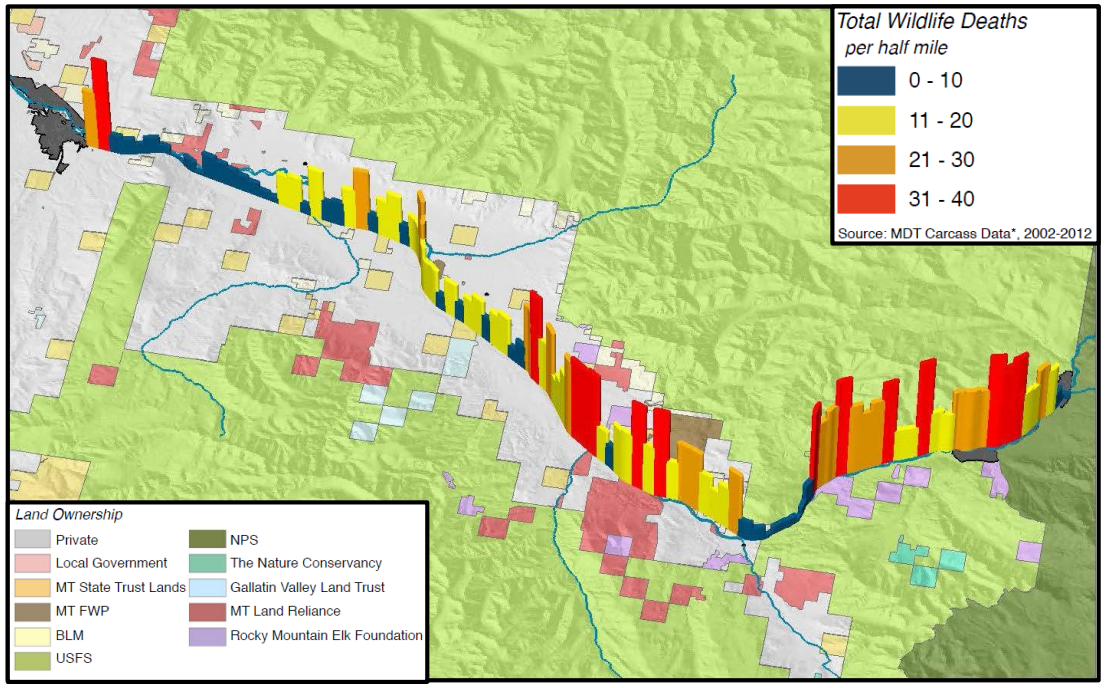




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Member Project: US 89 Paradise Valley



- 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

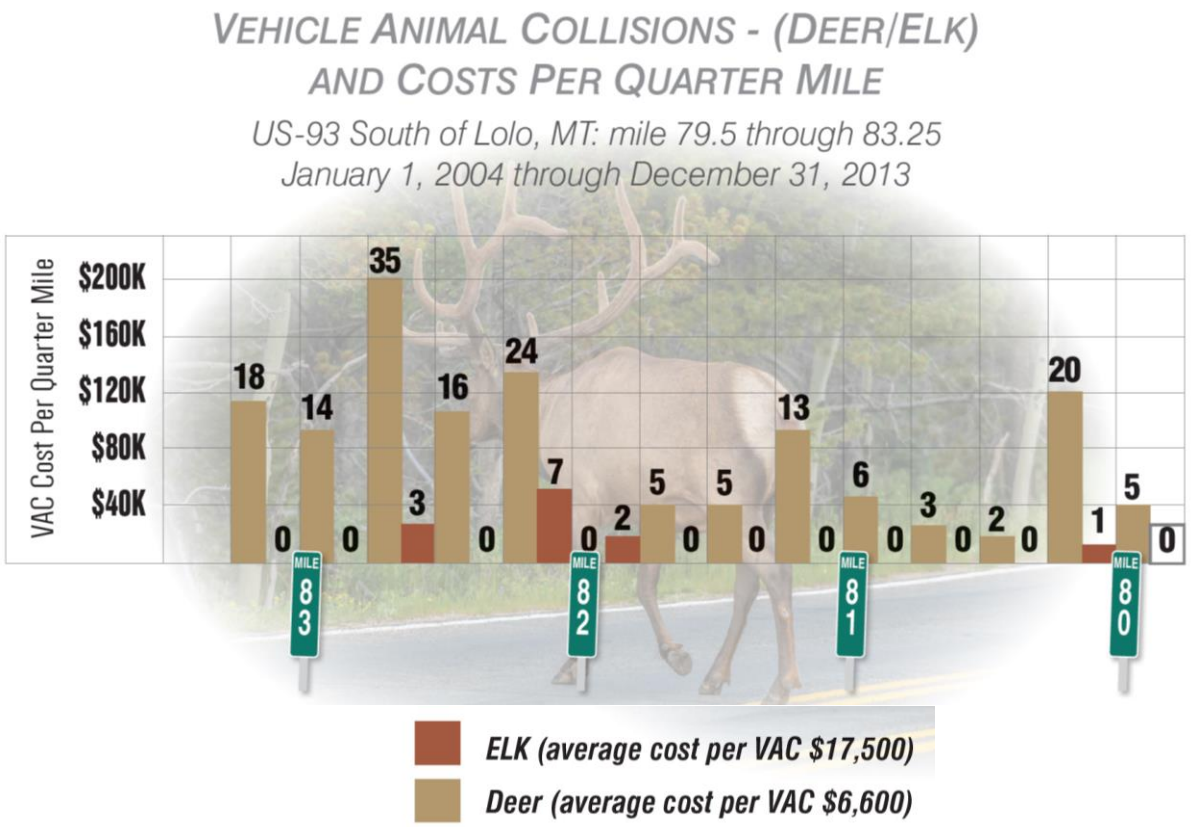
Member Project: MT 86 Bridger Canyon



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

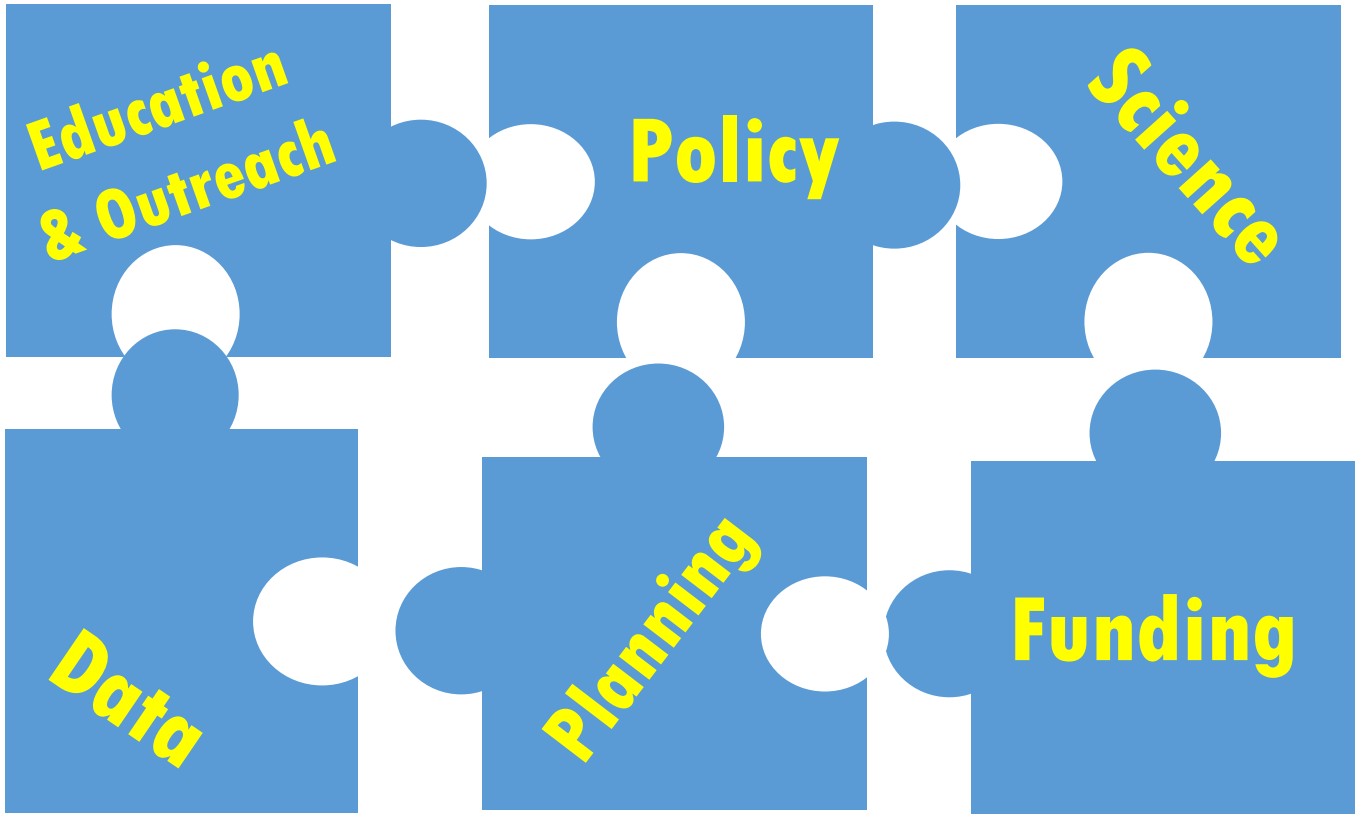
2017
Mar 6. One deer, whitetail possibly, S side near 5622 Bridger Canyon Rd
March 29. One deer at Papke residence, One deer at 6140 Bridger Canyon Rd.
Both looked like young whitetail.
First week of May. Elk on Bridger Canyon Rd at bend by Hamm's, MM 9.
Herd crossing road in rain storm. Elk slid under 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

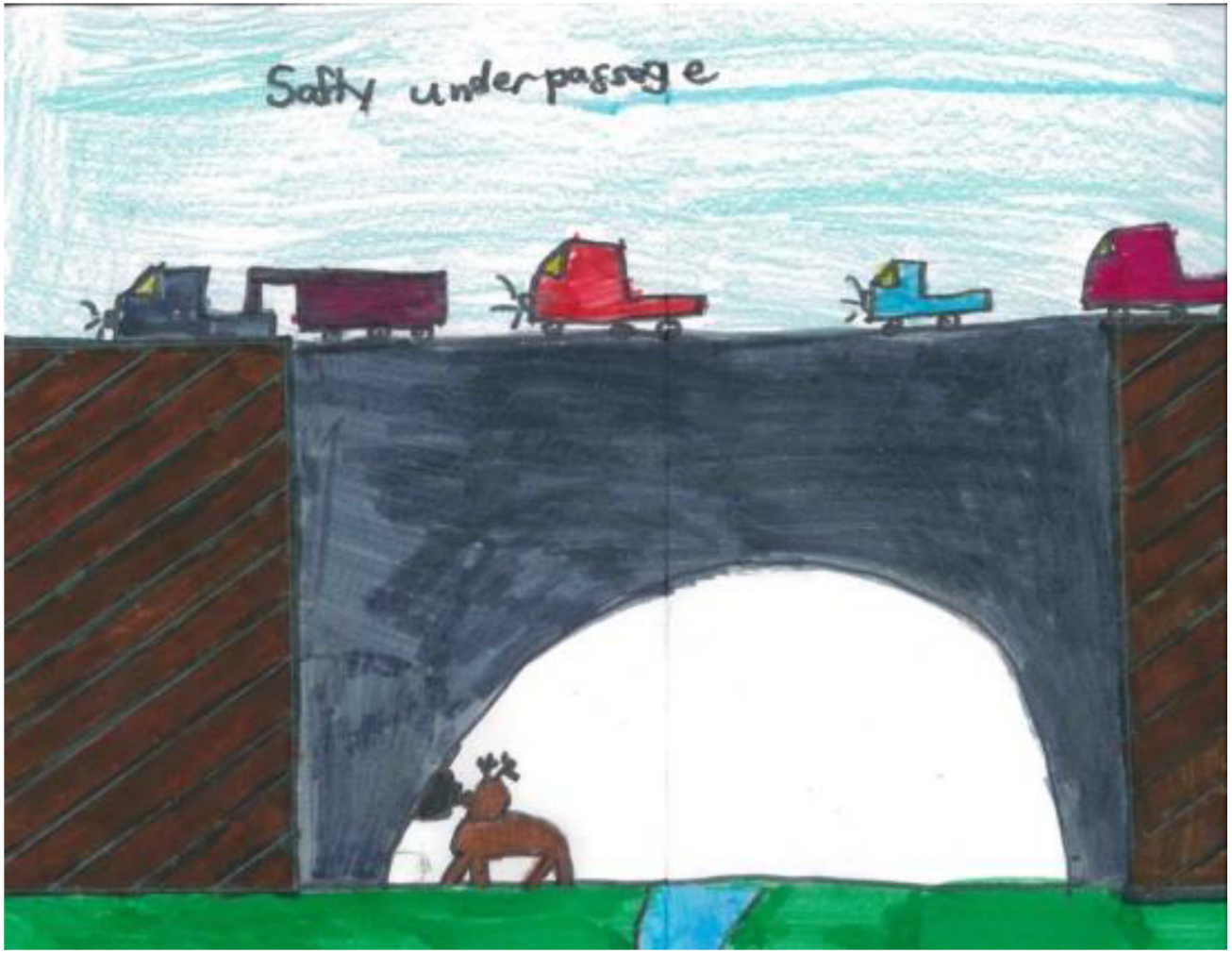


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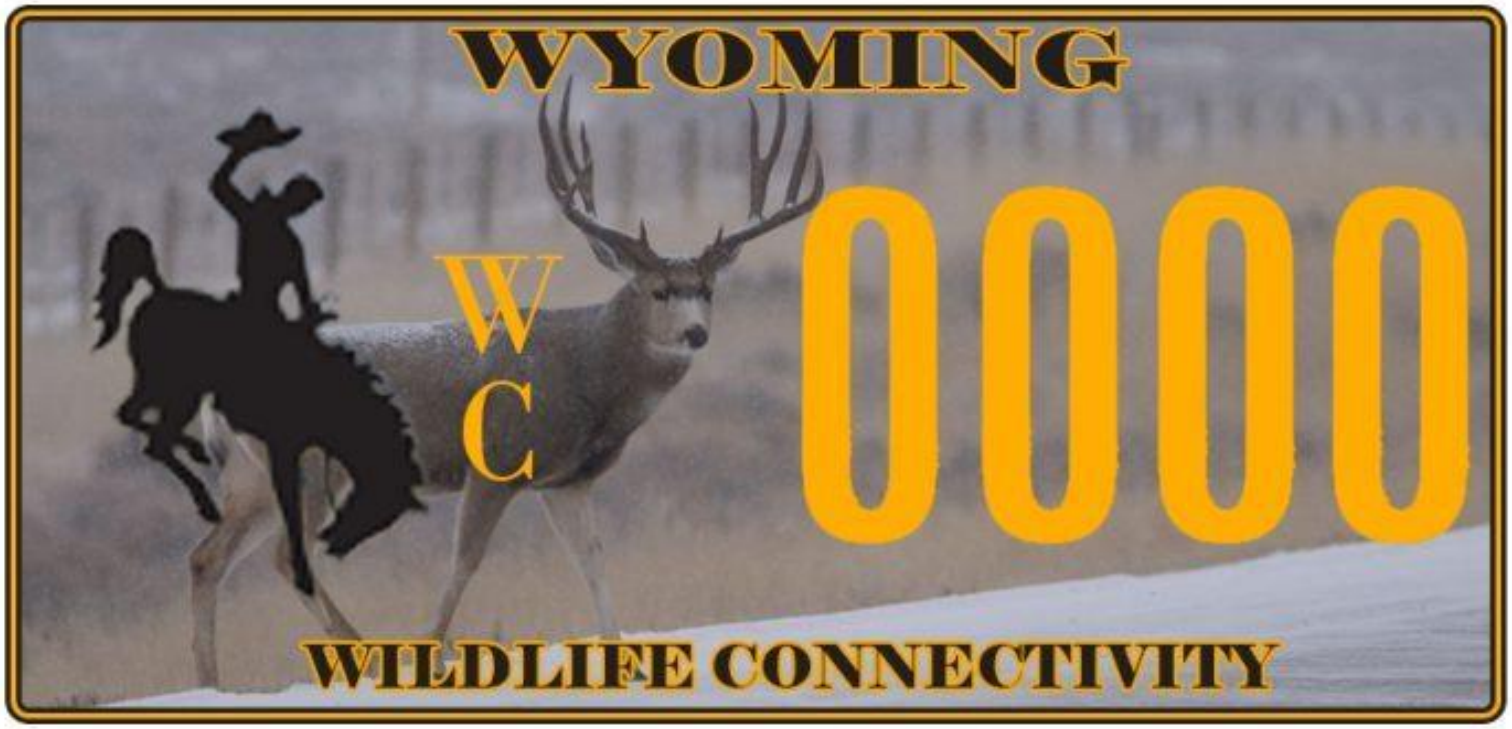
The Challenge-Opportunity Puzzle



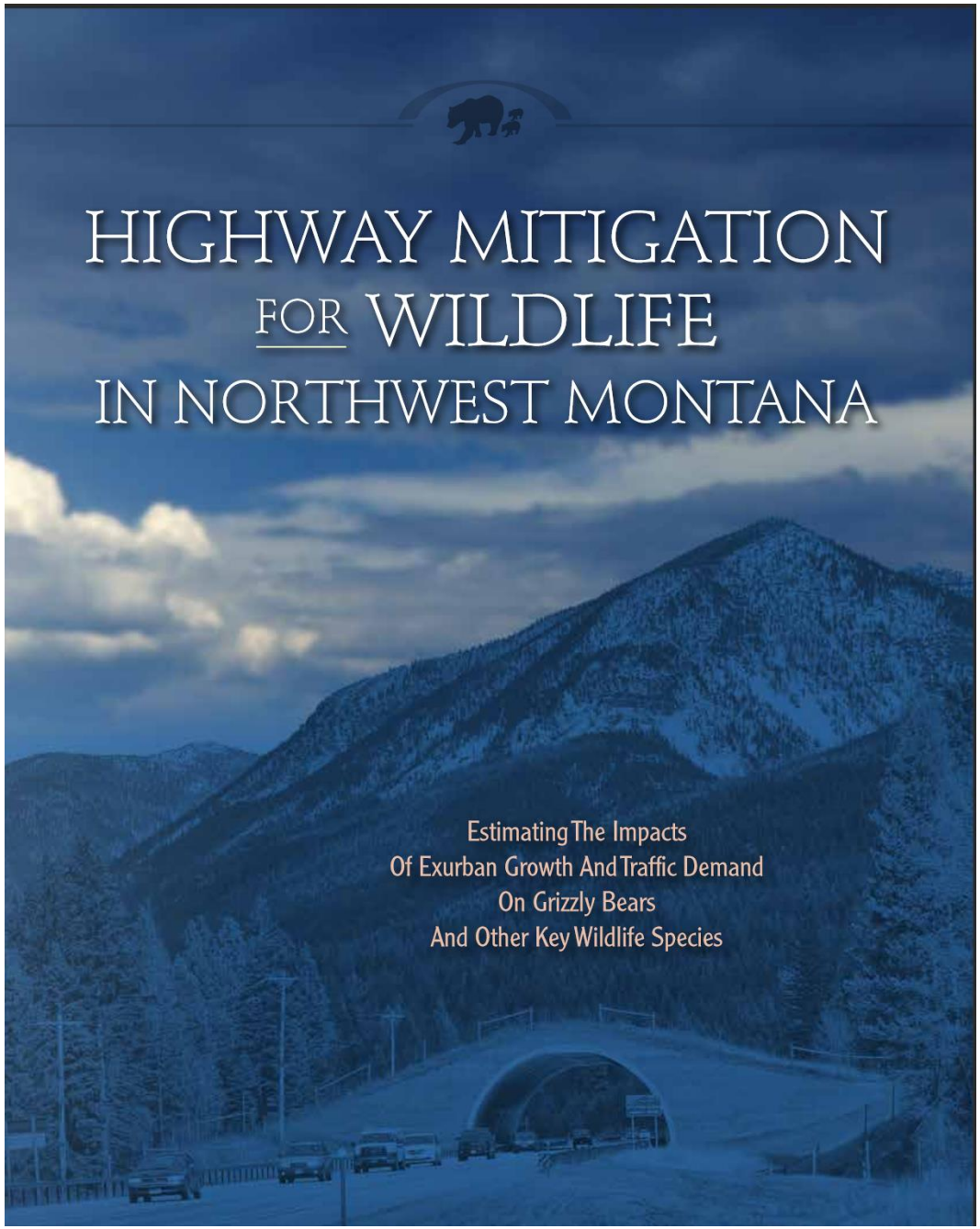
Education & Outreach



Policy



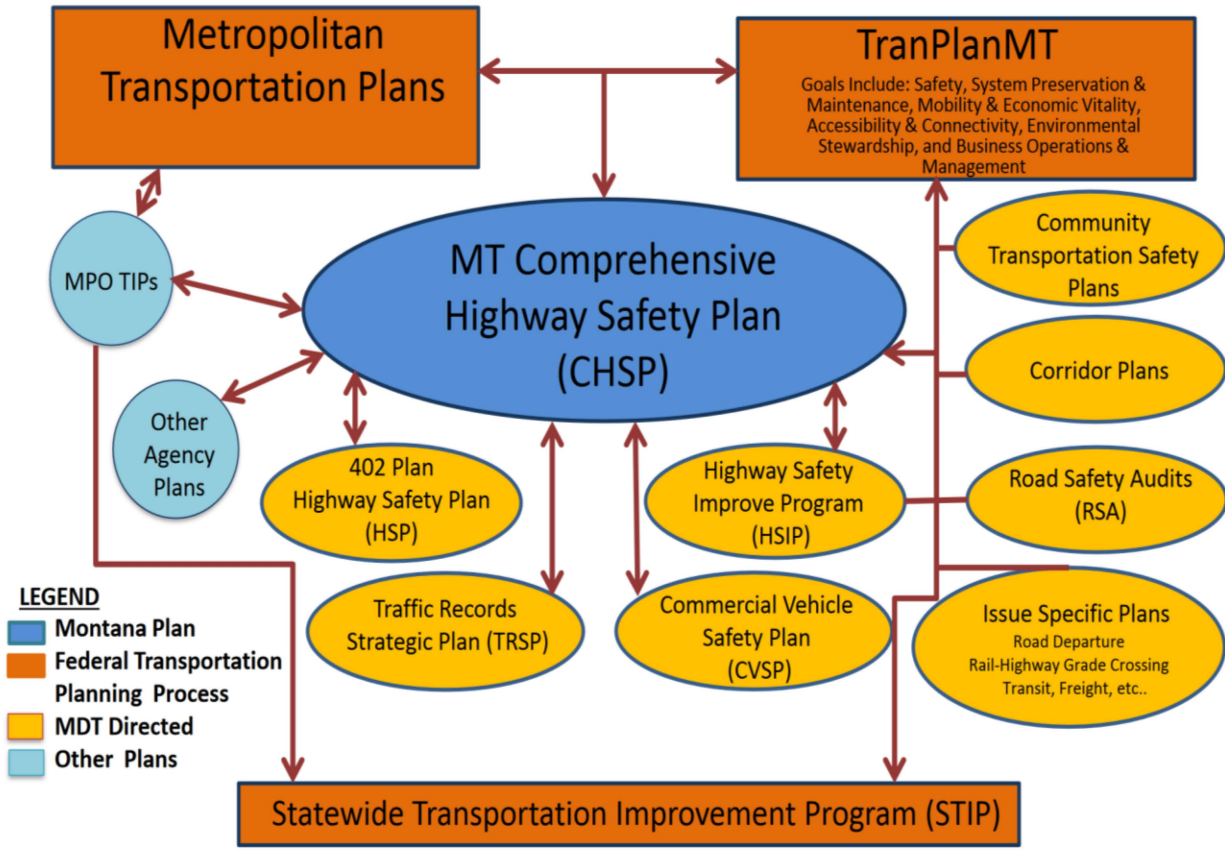
Science & Data



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



Funding



Mission mismatch





GROUND

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"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



Credit: Charles Curtain