

US-191/MT-64 Wildlife & Transportation Assessment

Exploring options to improve traveler safety and maintain wildlife movement in a gateway to Yellowstone

Southwest Montana's Gallatin County is one of the fastest-growing regions in the United States. In recent years, this part of the Greater Yellowstone Ecosystem—a richly biodiverse patchwork of public and private lands—has seen a drastic increase in traffic volume. At the same time, the landscape provides important habitat for a wide range of wildlife, from elk and deer to bighorn sheep and grizzly bears, which need to move across highways to meet their daily and seasonal needs. This reality poses an increasing threat to both drivers and wildlife.

Making US-191 and MT-64 safer for travelers and wildlife is a multi-year, multi-site proposition that will take collective action to bring about. In the end, a variety of measures enacted over time will improve driver safety and maintain wildlife movement.

What is the assessment?

The US-191/MT-64 Wildlife & Transportation Assessment combines local and expert knowledge, public data, citizen science, and engineering expertise to identify important areas where wildlife accommodation measures—such as culverts, bridges, underpasses, overpasses, animal detection systems, and fencing—can improve the safety of travelers and wildlife.

How were priority locations determined?

Through data analysis and site visits, the Assessment identified eleven priority locations that are barriers to wildlife use of habitat and pose elevated risks to human and wildlife safety. The analysis integrated data on safety (crashes with wildlife and animal carcasses) and ecological connectivity (wildlife movement, wildlife observation, and habitat suitability). An interdisciplinary team of independent researchers and representatives of federal, state, and county agencies with expertise in wildlife biology, road ecology, engineering, and planning examined most locations in the field to consider additional factors, such as surrounding land use and topography.

Is the assessment encompassing of all areas?

No. While the Assessment identifies priority locations to consider for wildlife accommodation measures, other areas still warrant further examination. In the future, there may be opportunities to study other sites along these highways where more data is needed to evaluate seasonal wildlife movement or the impact of increasing traffic.



Thank you to the Assessment's generous supporters: Big Sky Resort Area District, Moonlight Community Foundation, Yellowstone Club Community Foundation, and The Volgenau Foundation.



Why do we need an assessment?

The Center for Large Landscape Conservation and Montana State University's Western Transportation Institute have developed a Wildlife and Transportation Assessment to provide area communities and decision-makers with robust information on opportunities to improve highway safety and maintain habitat connectivity for terrestrial and aquatic species.

Residents, Commuters, and Visitors Depend on these Roads:



- Traffic volume along US-191* increased by 38% from 2010-2018.ª
- 83% of Big Sky workers regularly commute along US-191 and MT-64 (Lone Mountain Trail), which provide access to the communities of West Yellowstone, Big Sky, and Gallatin Gateway.^b
- Visitation to Yellowstone National Park increased by 20% from 2014-2017 and over 1 million trips on US-191 are made to enter the park. The town of West Yellowstone hosts more than 4 million visitors per year.^c





- sensitive to traffic, losing road crossing opportunities as levels increase.^d
- Traffic volumes measured on US-191 and MT-64 are already at a level that has been shown to reduce deer crossing safety.^e

The Status Quo is **Risky and Expensive:**



- Collisions involving wildlife make up 24% of all reported crashes on US-191 and over 13% on MT-64.^{a,b} Across Montana, the statewide average is 10%, while the national average is 5%.^{f,g}
- The average cost of a collision is \$14,000 (deer) or \$45,000 (elk) in personal injury and property damage, even without accounting for first responder and accident investigation costs or lost hunting revenue.^h

* From Four Corners (about 8 miles west of Bozeman) to Beaver Creek (just south of Big Sky).

MDT. 2020. US-191 Corridor Study.

- ^b Gallatin County. 2017. TIGER Proposal.
- ^c National Park Service. 2022. NPS Statistics (IRMA).
- ^a Waller, J. & C. Miller. 2015. *Decadal Growth of Traffic Volume on US-2 in NW MT*, Intermtn. Jl. of Sciences 21 (1–4): 29–37 ^e Riginos, C., C. Smith, E. Fairbank, E. Hansen, & P. Hallsten: 2018. *Traffic Thresholds in Deer Road-Crossing Behavior*. WYDC
- MSU-WTI. 2023. Unpublished.

NHTSA-NCSA. 2022. Traffic Safety Facts 2020. huijser, M., J. Duffield, C. Neher, A. Clevenger & T. McGuire (eds). 2022. Update and Expansion of the WVC Mitigation Measures. PP-5 (358). NVDOT.

Photo by Holly Pippe

What happens next?

The Center for Large Landscape Conservation will share the results with Gallatin County communities. Together with elected officials and public agencies, area communities will determine how to move the Assessment's findings forward.

A reasonable effort has been undertaken to make this document compliant with largelandscapes.org/191

What more can area residents do?

- Record your sightings of live wildlife and roadkill. Citizen science informs actions to reduce wildlife-vehicle conflict. The easy-touse ROaDS Tool, a smartphone app, can be used by any traveler, even out of service range.
- Stay engaged. The Assessment is a way to begin a conversation based on robust understanding.

Get more information and view the full report:

CENTER LARGE LANDSCAPE CONSERVATION



If you would like assista please contact: info@ argelandscapes.org

hoto of vehicle by Holly Pippel

Section 508 of the

Rehabilitation Act

