Wildlife Crossing

HB 2834 Legislative Report

September 2024

Oregon Department of Transportation

Photos in this report were obtained from trail cameras at wildlife crossing sites in Oregon.

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Executive Summary

The Oregon Department of Transportation (ODOT) developed an unfunded and informal Wildlife Passage Program years ago as the public expectation grew in several western states to address wildlife-vehicle collisions. Between the beginning of the program in 2012 and passage of House Bill 2834 (HB 2834) in 2019, ODOT constructed three wildlife passage projects resulting in five wildlife undercrossings designed for deer and elk. Since passage of HB 5202 (2022), which allocated $7 million for wildlife crossings, ODOT has completed two wildlife undercrossing projects resulting in three wildlife undercrossings designed for mule deer and elk. An additional four projects are in the planning and development stage.

The realized effect of completed wildlife passage projects, following five years of monitoring of the Lava Butte structures in 2018, was an 85 percent reduction in the number of wildlife vehicle collisions in the fenced areas of projects. Oregon State University (OSU) Cascades recently completed one year of monitoring all US 97 wildlife crossing structures and it shows improvements are needed at fence ends to further reduce wildlife vehicle collisions in the project area.

In addition to constructed projects, ODOT designed an overcrossing of southern I-5 at the Cascade Siskiyou Monument; partnered with the Burns-Paiute tribe on the Governor's regional solutions team creating a partnership with private landowners, state agencies and the tribe for wildlife passage; began a phased plan for the Highway 20 Harper to Juntura Corridor; and plan to submit a resiliency grant to accommodate wildlife passage within the Juntura Corridor. Other accomplishments include creating an ODOT Wildlife Passage Plan; funding a research project to prioritize safety corridors on state highways; coordinating with the Oregon Department of Fish and Wildlife (ODFW) on a Memorandum of Understanding for increased partnership on wildlife passage issues; working with counties to include wildlife passage in their Transportation System Plans; and working with non-profit organizations to bring in multiple private, state and federal grants for wildlife passage projects.

Initial monitoring suggests a greater than 70 percent passage rate for all wildlife passage structures and a decline in collisions in fenced areas. Additional work is needed to reduce collisions at fence ends. Of the $7 million appropriated by HB 5202, Oregon has spent:

- $571,502 completing the Gilchrist fencing along US 97, in addition to placing large boulders to prevent vehicular and ATV traffic and broaden the entrances of the undercrossing to make it more appealing to elk.
- $1.5 million designing and permitting an overcrossing of I-5 at the Cascade-Siskiyou Monument.
- $1 million planning a phased project with the Burns-Paiute tribe along Highway 20 in Eastern Oregon.

Remaining funds were used as state match for two construction projects (the I-5 overcrossing and the US 97 Newberry undercrossing and overcrossing). ODOT identified additional projects for US 97 and Hwy 20 from Bend to Suttle Lake as future project locations.

Background

HB 2834 (2019) required ODOT to establish a program by Dec. 31, 2023, to reduce wildlife-vehicle collisions in areas where wildlife corridors identified in ODFW's Corridor Action Plan (Plan) intersect with public roads. After implementation of the Plan, ORS 366.162 required ODOT to report to the legislature every two years on the number and types of wildlife passage projects and their effect on wildlife-vehicle collisions. ODOT is required to coordinate with ODFW during plan development and updates, during engagement with stakeholders, and when reporting to the legislature.

Until the finalized plan was available, HB 2834 directed ODOT and ODFW to coordinate efforts to reduce wildlife-vehicle collisions based on available data. HB 2834 stated that the Department of Transportation shall consider the benefit of including a wildlife crossing as part of a project if the data suggests that such a crossing could significantly reduce wildlife-vehicle collisions. At this time, there is no funding provided to state agencies to implement the Plan.

Two reporting requirements are laid out in ORS 192.245:

- Information concerning the number and types of wildlife corridor infrastructure projects established or planned
- The realized or expected effect of established or planned wildlife corridor infrastructure projects on the number of wildlife vehicle collisions

In 2022, the Oregon Legislature passed HB 5202 which allocated $7 million out of the General Fund for deposit into an ODOT subaccount of the Oregon Transportation Infrastructure Fund (OTIF) established under ORS 367.015 for the purpose of funding projects that reduce the number of wildlife-vehicle collisions and improve habitat connectivity for wildlife. A description of how those funds have been spent to date is included later in this report.

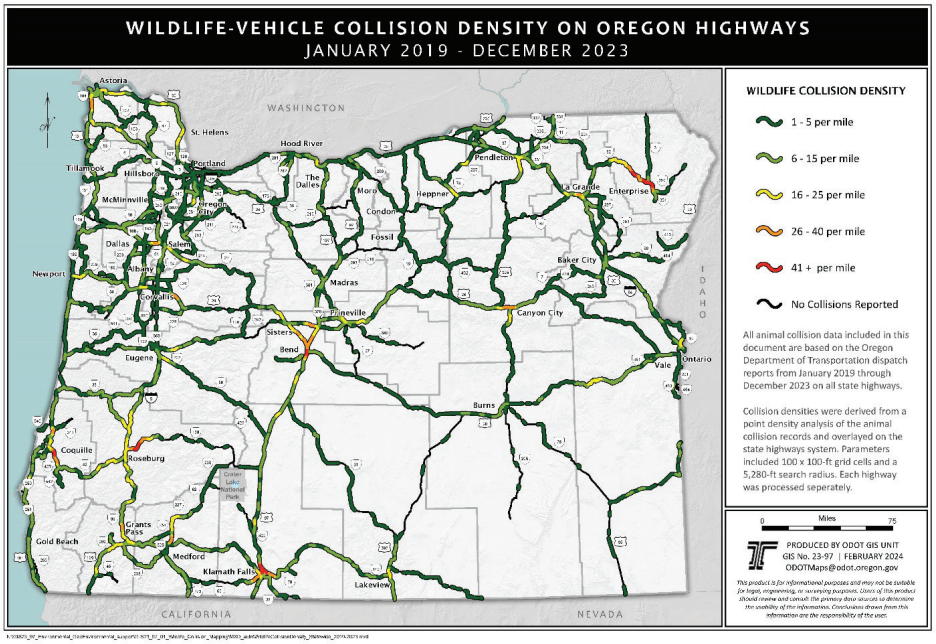

Figure 1. Statewide five-year average wildlife-vehicle collisions on Oregon Highways.

Completed Wildlife Passage Projects

US 97

ODOT completed construction of its first two wildlife underpasses on US 97 at Mile Post (MP) 149.5 and 152 with corresponding fencing and deer guards in fall 2012 as part of the US 97 highway widening project between MP 149 and 153. A 5-year monitoring effort which followed construction of these initial crossing structures determined that they were successful in allowing safe passage for many species and reducing wildlife-vehicle collisions within the fenced area.

In 2020, as part of a passing lane project near Gilchrist, ODOT completed construction of an additional wildlife undercrossing at MP 180 that tied into an existing bridge large enough to pass deer and elk at MP 183. In 2022, ODOT completed one additional wildlife undercrossing south of Lava Butte at MP 154.4 as part of a continuing highway widening of US 97. In total, three new undercrossings were established and seven miles of wildlife fencing installed to protect the traveling public (Figure 2).

OSU Cascades began monitoring all five undercrossings in May 2022. Initial findings indicate that the combined passage rate was >70 percent for both mule deer and elk. However, issues remain at wildlife fence ends to reduce overall wildlife-vehicle collision rates. OSU Cascades plans to continue monitoring the five undercrossings at least until 2025.

In 2023, $571,502 of the $7 million allocated by HB 5202 was used to complete fencing north of the new Gilchrist wildlife undercrossing at US 97, MP 180 and modify the wildlife undercrossing to prevent vehicular and ATV traffic and broaden the entrances of the undercrossing to make it more appealing to elk.

ODOT completed design for one wildlife overcrossing and one wildlife undercrossing between Vandevert Drive to the U.S. Forest Service (USFS) Boundary as part of the highway expansion south of Lava Butte. ODOT applied for construction funds for the wildlife passage crossing structures under the Bipartisan Infrastructure Law (BIL) Wildlife Crossing Pilot Program (WCPP). $2 million of the funds allocated by HB 5202 were used as the match requirement for this application.

US 20 - Newport

As part of a new alignment constructed in 2016 between Pioneer Mountain and Eddyville near Newport, a large wildlife undercrossing culvert and one mile of wildlife fencing was installed. There is no pre-construction data available on wildlife-vehicle collisions because this was a new section of highway, but ongoing monitoring by ODOT revealed over 30 species using the crossing structure as well as continued use by elk and deer.

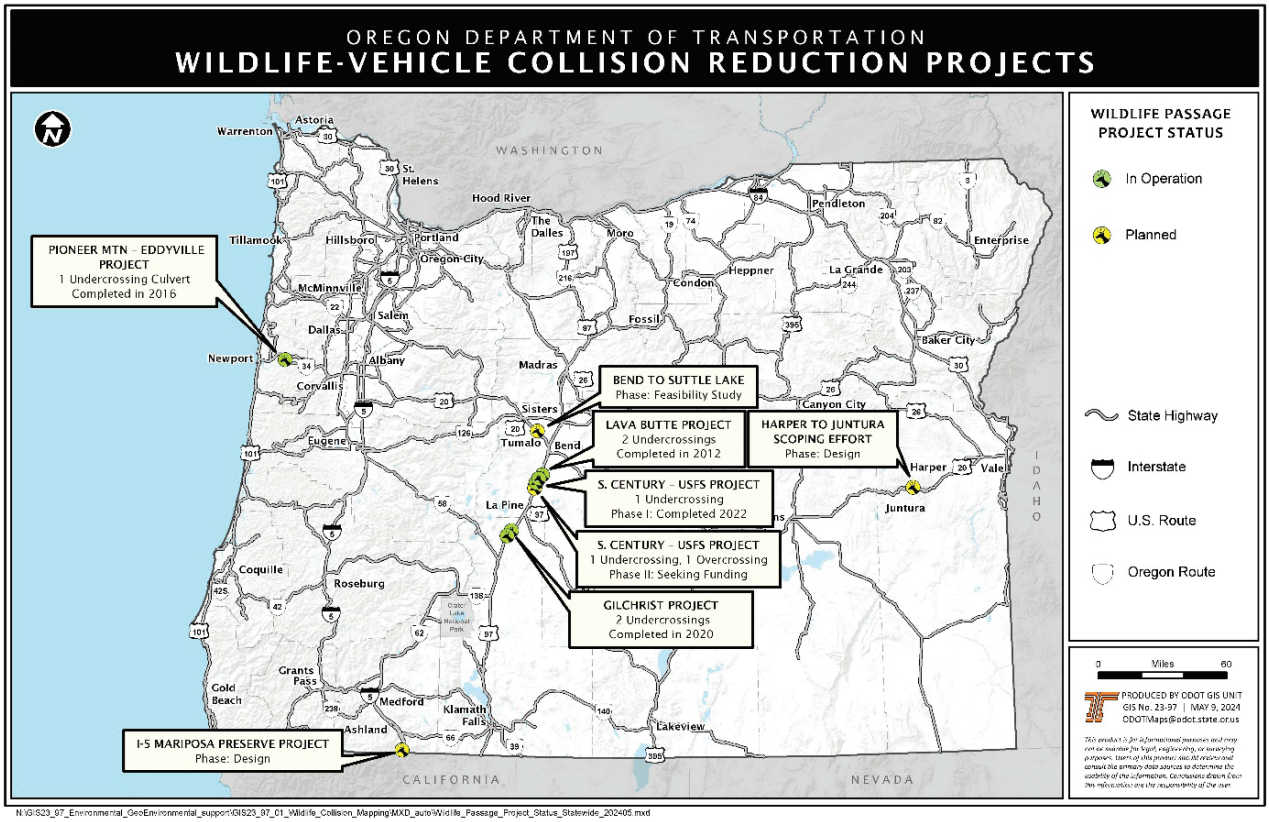

Figure 2. Statewide map depicting completed and planned wildlife passage projects on Oregon highways.

Planned Wildlife Passage Projects

Hwy 20 - Juntura

The Burns-Paiute tribe funded a feasibility study between Harper and Juntura in 2021 that identified a series of bridges for retrofit and new construction to accommodate wildlife use. In 2023, ODOT allocated $1 million of the funds allocated by HB 5202 for development of a corridor project. In spring 2024, ODOT project teams scoped the corridor for wildlife crossings every mile and is currently preparing cost estimates and phasing for a long-term corridor plan.

A resiliency project being jointly applied for by ODOT and the Burns Paiute tribe is planned east of Juntura between MP 200.5 and 202 adjacent to Jonesboro ranch. The proposed work includes building resilience to ongoing and future debris flow and flood risk near MP 201. Proposed work includes culvert repositioning and expansion to accommodate larger and more frequent flows and creating wildlife crossing access, wildlife fencing, and hydraulic enhancements.

I-5 - Ashland

The Southern Oregon Wildlife Crossing Coalition raised funds to complete a feasibility study south of Ashland to the California border in 2022. As an outcome of this study, a wildlife overcrossing location was selected at MP 1.6. In 2023, $1.5 million of the funds allocated by HB 5202 were transferred to ODOT Region 3 to complete project design and permitting for this project.

ODOT applied in 2023 for BIL WCPP federal grant construction funds for this project but was not successful. ODOT applied again in 2024. HB 5202 funds were used for the match requirement for both grant applications.

Hwy 20 - Bend to Suttle Lake

A new coalition of partners formed in 2023 to create the Bend to Suttle Lake Initiative. The group funded a feasibility study for the corridor and identified ten high priority locations for wildlife passage. The coalition is currently fundraising for project design of four wildlife crossing locations between Sisters and Black Butte. ODOT, USFS and the Federal Highway Administration (FHWA) have started the NEPA process for these projects.

Project Data

Crash Data Completed Projects	Gilchrist Project	S. Century -USFS Boundary, Phase I	Lava Butte Project	Pioneer Mountain-Eddyville Project
Signed Route	US 97	US 97	US 97	US 20
Begin MP	171.8	154.35	149	18.05
End MP	183.1	156	153	19.05
Fencing Length	4.9910	1.6658	3.9732	0.9976
Years of Data	13	12	13	7
Total Carcasses	255	39	64	6
Large Wildlife Collision Density (Collisions per Mile per Year from 2010-2023)	3.9	1.9	1.2	0.9
Project Completion Year	2020	2022	2012	2016
Before Fencing - # Years of Data	10	11	2	
Before Fencing - Total Carcasses	199	37	14	
Before Fencing - Annual Average Density per Mile	4	2	1.8	
After Fencing - # Years of Data	3	1	11	7
After Fencing - Total Carcasses	39	2	42	5
After Fencing - Annual Average Density per Mile	2.6	1.2	1	0.7
Percentage Change in Annual Average -35%	-35%	-40%	-44%	

Project Data

Crash Data Planned Projects	Harper to Juntura	Mariposa Preserve	Sisters to Suttle Lake	Phase II: Century - USFS Undercrossing	Bend to Sisters
Signed Route	US 20	I-5	US 20	US 97	US 20
ODOT LRM	00700I00	00100D00	01600I00	00400I00	01700I00
Begin MP	190	0	83	156	0
End MP	217	3.6	10	157.55	18
Fencing Length (mi.)	26.6	3.6	17	1.5	18
First Year Data	2010	2010	2010	2010	2010
Last Year Data	2022	2022	2022	2022	2022
Record Duration (yrs)	13	13	13	13	13
# Fatal Crashes	0	0	1	0	0
# Crashes	45	44	105	24	157
# Non-Fatal Injuries	10	13	38	13	1.9
Density (# per mile per year)	0.16	1.22	0.65	1.9	0.82

Funding

Sources of Funding for Wildlife Passage:

State: Oregon Watershed Enhancement Board, Oregon Conservation & Recreation Fund, legislative appropriation or general fund, bonds, lottery dollars, State Highway Fund.

Federal: Federal Highway Formula Funds, National Fish and Wildlife Foundation (SO 3362) Funds, ODFW Pittman-Robertson Funds, USFS Federal Land Access Program, America the Beautiful, BIL Wildlife Crossings Pilot Program.

Private: Oregon Wildlife Foundation, Oregon Hunters Association, Rocky Mountain Elk Foundation, Mule Deer Foundation, private foundations.

Strategy for Permanent Funding:

State Representative Ken Helm hosted a working group to examine other states for how funding is allocated for wildlife passage. A funding needs analysis determined a need of $5 million per year over 30 years for this program.

Other ODOT Actions to Establish its Wildlife Passage Program

- Updated an ODOT/ODFW Memorandum of Understanding for coordination
- Bi-monthly meetings with ODFW to discuss project priorities and funding
- Developed ODOT Wildlife Passage Plan
- Developed standard drawings and specifications for wildlife fence, deer guards and jumpouts
- Incorporated ODFW Primary Wildlife Connectivity Areas into ODOT's TransGIS and FacSTIP
- Training for PWCAs at Environmental Unit Meetings
- ODOT Research on identifying high priority risk areas for wildlife-vehicle collisions
- ODOT Research for computer learning for use in camera monitoring
- Updating ODOT's wildlife passage web page