

ODOT Transportation Funding Needs Analysis

Programmatic and Systemic Safety Investments

Total Annual Funding Gap: \$145 million

Fatalities and serious injuries are on the rise in Oregon and throughout the U.S. In 2023, 586 people died on Oregon’s roads. Safety is foundational to ODOT, but current funding levels are insufficient to combat the issues that make Oregon’s roads less safe for people walking, biking, and driving (such as impaired driving, speeding, and distracted driving). ODOT focuses on eliminating fatalities and serious injuries through a “Safe System” approach; implementing this Safe System framework moves us closer to increasing road safety, by creating safer roads, safer people, and safer speeds.

With additional investments to existing, dedicated, proven programs, Oregon’s roads can become safer for everyone.

Safety Additional Need per year:	\$145,000,000
Address Locations with High Traffic Deaths	\$100,000,000
Reducing Vehicle-Wildlife Collisions	\$5,000,000
Critical Crosswalk Upgrades	\$9,000,000
Road Safety Audits	\$30,000,000
Speed Limit Setting	\$1,000,000

Address Locations with High Traffic Deaths (\$100 million annually)

The All Roads Transportation Safety (ARTS) program, which is currently funded at \$30 million a year with federal Highway Safety Improvement Program dollars, addresses high-fatality sites on roadways across the state. ARTS supports improvements on state highways, county roads, and city streets through data-informed project selection, focusing on the highest priority and most unsafe locations regardless of jurisdictional ownership. Needs total about 300% of available funding annually. An additional \$60 million in dedicated funding for high-fatality locations will enable safety investments at triple the most risky and high-crash sites, including roadway departure, intersections, and protecting vulnerable road users (bicyclists and pedestrians). Based on past investments in this program, this additional infusion has the potential to prevent up to 16 more fatalities and 60 more injuries annually. An additional \$40 million would target small enhancements and maintenance, as well as larger investments in proven safety countermeasures (e.g. roundabouts) statewide. Countermeasures like roundabouts are known to reduce crashes by 78% and rumble strips by 45%.

An additional annual investment of \$100 million would enable:

- Nearly triple the amount of high-crash sites to be addressed annually, including project delivery staff to deliver the increased volume of projects (\$60 million)
- Re-establish the State Safety Priority Fund for maintenance and small enhancements (\$10 million)
- Dedicated funding for specific Proven Safety Countermeasures statewide (e.g., roundabouts estimated at \$5m each) (\$30 million)

Reducing Vehicle-Wildlife Collisions (\$5 million annually)

There are over 7,000 wildlife-vehicle collisions in Oregon annually, resulting in an average of four people killed and 521 people injured. There are a number of options to help reduce animal-to-vehicle collisions, including protected wildlife crossings, fencing, and other features. While vehicle-wildlife collisions can occur in any area, wildlife passage investments are needed where they occur most frequently and represent a higher safety risk (e.g. along large wildlife migratory routes, in more rural areas, on high-speed roads where vehicle-wildlife collisions are more likely to be fatal). While there is not currently an inventory of statewide passage needs, an annual investment of \$5 million (\$150 million over the next 30 years) would enable the construction of an additional 20 wildlife fencing and structure projects focused in the highest need areas.

Costs will vary depending on highway width and location (project planning and design costs \$1.5million to \$2.5 million; construction of wildlife under-crossings range \$1.3 million to \$2.5 million per structure, and overcrossings \$7.5 million to \$20 million per structure; and other wildlife passage features (e.g. gates, jump-outs) range from as low as \$2,500 to \$25,000, and fencing costs around \$100K,000 per mile for each side of the highway).

Critical Crosswalk Upgrades (\$9 million annually)

Oregon ranked 15th highest amongst all states for pedestrian fatalities in 2022. Pedestrian crashes are most common where pedestrians and vehicles are occupying the same space, such as when pedestrians are crossing the street. Improving crosswalks to conform with current national guidelines would help address this trend – eliminating up to 50% of pedestrian crashes, according to national research. While newly installed crosswalks conform to the current national standard, most crosswalks were installed before this standard was in place. Needs for critical crosswalk upgrades have been identified using asset inventory and risk factors such as posted speed, number of lanes, and traffic volume to identify deficiencies. Initial analysis show a need of 36 crosswalks a year with an average improvement cost of around \$250,000, resulting in an annual funding need of at least \$9 million.

The overall need for safe crossings on state-owned roads in urban areas is very high and therefore is not fully included in the annual need of \$9 million. ODOT's highway design manual recommends a safe crossing every 750ft. ODOT data tools identify 1,193 miles of state roadways in urban areas

which means 8,400 safe crossings are needed. Data shows that 4,100 crossings already exist, so the needed gap is 4,300 crossings. The average cost of a crosswalk is currently estimated at \$800,000. Therefore building 4,300 crosswalks would cost \$3.44 billion or \$115 million annually spread out over 30 years.

Road Safety Audits (\$30 million annually)

Road Safety Audits (RSAs) are assessments performed by multidisciplinary teams to identify the most effective safety elements to add to a roadway; these assessments consider all road users, account for human factors and road user capabilities, and are considered a proven safety countermeasure. Massachusetts DOT has incorporated RSAs into its safety programs, requiring an RSA for any roadway or signal project located within a “high crash cluster” or a project receiving federal Highway Safety Improvement Program funds. By contrast, ODOT’s RSA program is currently limited to one-time audits or narrow geographic areas.

An expanded safety program enabled through additional dedicated funding could support addition of RSA-determined safety elements into more projects, as well as additional safety elements to ARTS projects that may not be otherwise competitive for ARTS program selection. Having a mechanism to include valuable safety elements on any kind of project where we have significant need, will help us drive down our high fatal and serious injury crash rates across the system.

This additional funding need (\$30 million annually) assumes that all ARTS projects and 20% of all federal Fix-It projects qualify for a Road Safety Audit. The 20% is based on the approximate percentage of highway locations that are a top SPIS site, are on one of ODOT’s Safety Implementation plans, or are a Priority Pedestrian Corridor. It is assumed that RSAs would result in \$3M added for safety improvements per Fix-It project, totaling \$84 million over the three years of the Statewide Transportation Improvement Program or STIP (federal investment plan). Converting that to annual costs and adding the expense of the RSA itself (\$2.4M) the total need comes to \$28.8 million (rounded to \$30M) a year.

Speed Limit Setting (\$1 million annually)

Almost one quarter of all crashes in Oregon are speed-related. Humans outside of the protection of vehicles are unlikely to survive high speed crashes, and many inside vehicles do not survive. Reducing speeds can accommodate human injury tolerances, resulting in better survival rates when a crash happens, as well as reducing the chance that the crash will happen at all because drivers have more time to react and avoid collision. ODOT recently updated Oregon’s speed zone rules to consider context in urban areas, allowing for lower speed limits where appropriate. Funding for additional staff is needed to enable analysis of more corridors and the local system, lowering speed limits as appropriate. An additional \$780,000 annually (rounded to \$1 million) would fund the needed 6 FTE (AE-2 positions), with one position at headquarters and five

distributed to regions based on workload. This additional long-term funding for the speed zoning program, which supports speed zoning on all roads in Oregon, will help ensure safe speed limits on all urban streets.