

Appendix J

Glossary

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Word, phrase or acronym	Definition
303(d), water quality limited waters	This is a Clean Water Act classification for waters where application of best management practices or technology-based controls are not sufficient to achieve designated water quality standards. Under Section 303(d) of the 1972 Clean Water Act, states, territories, and authorized tribes are required to develop a list of water quality limited segments. Waters on the 303(d) list do not meet water quality standards, even after the minimum required levels of pollution control technology have been installed at the point sources of pollution.
Abatement	Abatement is a reduction in degree or intensity. ODOT requires a minimum reduction of 5 dBA for a specific noise abatement treatment to be feasible.
Access management	Access management seeks to protect the function of a transportation facility by restricting access to it from private driveways and public approach roads.
Affordable housing	Affordable housing generally refers to housing that persons in the “low to moderate” income category can afford, meaning that they earn 80 percent or less of the area’s median family income.
All possible planning	All possible planning means that all reasonable measures identified in the Section 4(f) evaluation to minimize harm or mitigate for adverse impacts and effects must be included in the project. The full definition can be found in 23 CFR 774.17.
Archaeological site	<p>This term refers to those sites that are eligible for or are listed on the National Register of Historic Places (historic properties), as well as those that do not qualify for the National Register. The commonly used term, cultural resource, does not have a consistent or legal definition.</p> <p>The Oregon State Historic Preservation Office generally defines an archaeological site as:</p> <ul style="list-style-type: none"> a) Ten or more artifacts likely to have been generated by patterned cultural activity within a surface area reasonable to that activity; or b) The presence of any archaeological feature, with or without associated artifacts. <p>Examples of features include peeled trees, cache pits, hearths, housepits, rock shelters, cairns, historic mining ditches, petroglyphs, or dendroglyphs.</p>
Area of Potential Effect (APE)	The APE is the area within which an undertaking may cause direct or indirect effects to the character or use of historic properties.
Area of Potential Impact (API)	The API is the area within which potential direct effects from the proposed action may occur.
Artifact	An artifact is any object made or modified by a human. In archaeology, an artifact is an object recovered by some archaeological endeavor, which may have a cultural interest. Examples include stone tools such as projectile points, pottery vessels, metal objects such as guns, and items of personal adornment such as buttons, jewelry and clothing. Other examples include bone that show signs of human modification, fire cracked rocks from a hearth, or plant material used for food.
At capacity	This is the level of service standard as set by each agency; for ODOT facilities, when a state highway segment or intersection has a one-hour v/c ratio of 0.7 (rural segments), 0.8 (expressway segments), or 0.85 (US 20 in the Transportation API and at ramp terminals); for City of Bend facilities, v/c of 1.0; for Deschutes County, LOS D.
Attainment and maintenance areas	Attainment and maintenance areas refer to a region’s ability to meet National Ambient Air Quality Standards and to maintain them over time.
Auxiliary lane	An auxiliary lane is a lane along a highway that extends between an on-ramp and off-ramp. They are added to reduce heavy traffic merging associated with highway ramps.
Background	Background in the context of visual impact analysis is the area farthest from the viewer where distance effects are primarily explained by aerial perspective (i.e., emphasis is primarily on outlines or edges).
Bend Parkway	The Bend Parkway is a 6.9-mile long, four-lane limited access facility, with a raised median, bike lanes on the shoulders, sidewalks in some areas, and left-turn lanes at selected intersections. It includes signalized intersections and interchanges. It begins just north of the US 20/US 97 junction (approximately at Empire Avenue) and extends south to near Romaine Village Way.

Word, phrase or acronym	Definition
Best Management Practice(s) (BMPs)	BMPs, typically state-of-the-art technology, are designed to prevent or reduce impacts. They represent physical, institutional, or strategic approaches to environmental problems.
British thermal unit (Btu)	To compare energy use from different sources such as diesel, gasoline, and electricity, energy is often expressed in British thermal units (Btu) which assigns a common value to the energy used.
Bypass	Bypasses are highways designed to maintain or increase mobility for through traffic. Generally they relocate the highway alignment around a downtown, an urban or metropolitan area or an existing highway to provide an alternative route for through traffic using that highway.
Census block groups	Census block groups are a collection of census blocks within a census tract, sharing the same first digit of their four-digit identification numbers. A census block group is the smallest geographic unit for which the US Census Bureau tabulates sample data. Block groups average about 1,500 inhabitants.
Census tracts	Census tracts are small statistical subdivisions of counties, generally having stable boundaries and, when first established, were designed to have relatively homogeneous demographic characteristics.
Class I project	<p>Class I projects are those actions that significantly affect the environment and require preparation of an environmental impact statement (EIS). The following are examples of such actions that normally required an EIS:</p> <ul style="list-style-type: none"> ▪ A new controlled access freeway. ▪ A highway project of four or more lanes on a new location. ▪ New construction or extension of fixed rail transit facilities (e.g., rapid rail, light rail, commuter rail, automated guideway transit). ▪ New construction or extension of a separate roadway for buses or high occupancy vehicles not located within an existing highway facility.
Community cohesion	Community cohesion is the ability of people to communicate and interact with each other in ways that lead to a sense of community, as reflected in the neighborhood's ability to function and be recognized as a singular unit. There are several indicators of community cohesion including: long average residency tenures; households of two or more people; community activity and communication; and religious homogeneity.
Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)	The CERCLIS list is a database of known and potentially hazardous waste facilities reported to the Environmental Protection Agency by state and local agencies and the general public in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). It is one of the databases associated with identifying potential hazardous materials sites or risks.
Conflict point	Conflict points are commonly used to explain the accident potential of a roadway. A conflict point is a location where two traffic streams cross. This could occur when a vehicle crosses, merges with, or diverges from another vehicle traveling on public approach roads or private driveways.
Congestion	Congestion is travel time or delay in excess of what is normally incurred under light or free-flow conditions.
Construction impacts	Construction impacts are short-term temporary impacts that occur during the construction of a project, but which are not permanent effects of the project.
Constructive use	A constructive use occurs when the transportation project does not incorporate land from a Section 4(f) property, but the project's proximity impacts are so severe that the protected activities, features, or attributes that qualify the property for protection under Section 4(f) are substantially impaired. Substantial impairment occurs only when the protected activities, features, or attributes of the property are substantially diminished. (23 CFR 774.15)

Word, phrase or acronym	Definition
Criteria pollutants	Criteria pollutants regulated by the National Ambient Air Quality Standards include: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO ₂), ozone (O ₃); particulate matter less than 10 micrometers in size (PM ₁₀), particulate matter less than 2.5 micrometers in size (PM _{2.5}), sulfur dioxide (SO ₂)
Cumulative impacts	Cumulative impacts are the result of incremental impacts of an action, when added to other past, present, and reasonably foreseeable future actions, regardless of which agency (federal or nonfederal) or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.
dBA	The term dBA stands for A-weighted decibels. For comparative purposes, human breathing is approximately 10 dBA, a calm room ranges 40–50 dBA, normal talking ranges 40–60 dBA, typical television setting is about 60 dBA at 10 feet, and a passing car is 60–80 dBA at 50 feet.
Decibel (dB) and A-Weighted Decibel (dBA)	Decibel is a unit for relative sound intensity. For highway traffic noise, an adjustment, or weighting, of the high and low-pitched sounds is made to approximate the way that an average person hears sounds. The adjusted sounds are called “A-weighted levels” (dBA) For comparative purposes, human breathing is approximately 10 dBA, a calm room ranges 40-50 dBA, normal talking ranges 40-60 dBA, typical television setting is about 60 dBA at 10 feet, and a passing car is 60-80 dBA at 50 feet.
<i>de minimis</i> impact	<ol style="list-style-type: none"> 1) For historic sites, <i>de minimis</i> impact means that the FHWA has determined, in accordance with 36 CFR part 800 that no historic property is affected by the project or that the project will have “no adverse effect” on the historic property in question. 2) or parks, recreation areas, and wildlife and waterfowl refuges, a <i>de minimis</i> impact is one that will not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f). (23 CFR 774.17)
Delay	Delay results from slowed or stopped traffic, and is measured as the additional time spent traveling compared to normal travel times under light or free-flow travel conditions.
Design year (2035)	The design year is the year for which the project was designed to meet anticipated needs.
Detention	A water detention pond is designed to temporarily detain stormwater runoff from impervious surfaces and to release the runoff at a desired rate.
Diamond interchange	A diamond interchange is an interchange involving four ramps where they enter and leave the highway at a small angle and meet the non-highway at almost right angles. These ramps at the non-highway can be controlled through stop signs, traffic signals, or turn ramps. A partial diamond interchange is a diamond interchange with fewer than four ramps.
Direct impacts	Direct impacts are caused by an action and occur at the same time and place as the action.
Directional interchange	A directional interchange is an interchange between two major highway or freeway facilities where all of the movements are maintained without stopping or delays.
Disabled	Generally, the US Census defines a person with a disability as having a long lasting condition, such as severe vision or hearing impairments, or a condition that substantially limits basic physical activities. It may also include people with conditions that make other activities such as learning, getting around inside the home, working at a job, or going places outside the home difficult.
Dominance	Dominance of components or specific features in a scene may be dominant because of prominent positioning, contrast, extent, or importance of pattern elements.
Drainwell	A drainwell is similar to a drywell but a drainwell consists of a pit filled with gravel, riprap, rubble, or other stony debris.
Drywell	A drywell is an underground structure that disposes of stormwater runoff by dissipating it into the ground where it merges with the local groundwater. A drywell is typically constructed of a metal or concrete cylinder with perforated sides and bottom.
Easement	An easement is a legal right to use property owned by someone else for a designated purpose.

Word, phrase or acronym	Definition
Edges	Edges are the linear elements not used or considered as paths by the observer. They are the boundaries between two phases, linear breaks in continuity: shores, railroad cuts, edges of development, walls. They are lateral reference rather than coordinate axes. Such edges may be barriers, more or less penetrable, which close one region off from another; or they may be seams, lines along which two regions are related and joined together. These edge elements, although probably not as dominant as paths, are for many people important organizing features.
Elderly	Elderly populations are people aged 65 years and over.
Endangered Species Act (ESA)	The ESA provides for the protection of animal and plant species currently in danger of extinction (endangered) and those species that may become so in the near future (threatened).
Energy use	Energy use is calculated using the number of average daily vehicles, the average distance those vehicles travel, and fuel consumption rates.
Environmental Cleanup Site Information System (ESCI) & Confirmed Release List	The ECSI system includes facilities entered into the Oregon Department of Environmental Quality (DEQ) database pursuant to the site discovery requirements of Oregon Revised Statutes 466.560. The list includes facilities where there has been a confirmed release of hazardous substances, facilities where investigation or cleanup has been initiated, and facilities suspected of a release of hazardous substances. It is one of the databases associated with identifying potential hazardous materials sites or risks.
Environmental impact statement (EIS, DEIS, SDEIS, FEIS, SFEIS)	An EIS is a statement of the potential environmental impacts of a proposed action and alternatives to it. A Draft EIS (DEIS) is released to the public and other agencies for review and comment. A Final EIS (FEIS) is issued after consideration of public comments. Supplemental EISs (SEIS, SDEIS) are EISs issued after a DEIS has been published and address new aspects of a project, new regulations, or new impacts not previously addressed.
Existing Traffic Conditions Year	The year in which baseline traffic conditions for the project are established. The existing traffic conditions provide a comparative measure for future No Build and build alternatives projected traffic conditions.
Expressway	Expressways are generally high-speed, limited-access facilities whose function is to move inter- and intra-urban traffic. Expressways often serve as major freight corridors and may be located on a designated freight route.
Farmland of Statewide Importance	Farmland of Statewide Importance is a category of land recognized by the US Department of Agriculture's Natural Resource Conservation Service for land other than prime farmland which has a good combination of physical and chemical characteristics for the production of crops.
Farmland Protection Policy Act (FPPA)	The Farmland Protection Policy Act requires federal agencies to coordinate with the NRCS if their activities may irreversibly convert farmland to nonagricultural use.
Feasibility	An alternative is not feasible if it cannot be built as a matter of sound engineering judgment.
Feasible (noise)	Feasible refers to whether the noise barrier can provide a substantial (at least five decibels) reduction in noise and other constructability issues.
Foreground	Foreground in the context of visual impact analysis is the area closest to the viewer, which can be designated with clarity and simplicity because the observer is a direct participant.
Form	Form is one of the four basic elements of visual pattern (usually the strongest); the mass or shape of an object.
High probability area	High probability areas are areas where the landform, soil conditions, and in some cases, the presence of surface artifacts are considered to be likely locations to find intact subsurface archaeological deposits

Word, phrase or acronym	Definition
Historic resource	A historic property (or historic resource) is defined in the National Historic Preservation Act (NHPA) [16 U.S.C. 470w(5)] as any “prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion on, the National Register, including artifacts, records, and material remains related to such a property or resource.”
Historic site	Historic sites include any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization that are included in, or are eligible for inclusion in, the National Register. (23 CFR 774.17)
Historical significance	The significance of a property refers to its ability to meet one of the four National Register criteria for evaluation. Integrity is the ability of the property to convey this significance through location, design, setting, materials, workmanship, feeling, and association. Historic properties are significant because they meet these criteria and have integrity.
Holocene	Holocene refers to a geologic time period extending from the present to approximately 10,000 years ago.
Hydrologic soil group	Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms. Group B soils have a moderate infiltration rate when thoroughly wet and a moderate rate of water transmission. Group C soils have a slow infiltration rate when thoroughly wet and a slow rate of water transmission.
Impervious surface	Impervious surfaces are mainly constructed surfaces such as rooftops, sidewalks, roads, and parking lots, covered by impenetrable materials such as asphalt or concrete. These materials seal surfaces, repel water, and prevent precipitation from infiltrating soils. Soils compacted by urban development can also be highly impervious.
In attainment	An area that is in attainment is considered to have air quality as good as or better than the National Ambient Air Quality Standards for the criteria pollutants designated in the Clean Air Act.
Indirect impacts	Indirect impacts are impacts on the environment that are caused by the action and occur later in time or farther removed in distance but are still reasonably foreseeable.
Intactness	Intactness in the context of visual impact analysis looks at the integrity of visual order and how much the view is free from encroaching features.
Interchange	According to Oregon Administrative Rule (OAR) 734-0155, an “interchange” is defined as “a system of interconnecting roadways in conjunction with one or more grade separations that provides for the movement of traffic between two or more roadways or highways on different levels.” For the purposes of the proposed action, the US 97 at Empire Avenue junction which provides grade-separated ramp access in most directions is defined as an interchange, while the US 97/US 20 connection which is spread over a number of locations and has only one existing ramp connection (a northbound ramp between US 97 and US 20) is not be considered to be an interchange. This distinction will be important for the upcoming interchange area management plans to be prepared for the proposed action.
Interchange Area Management Plan	An interchange area management plan is a joint ODOT and local government long-term (20+ years) transportation and land use plan to balance and manage transportation and land use decisions in interchange areas, and is an important tool in protecting the function of state highway interchanges and the supporting local street network.
Intersegment	A segment of an intersection.
Invasive species	An invasive species is a species that is: 1) non-native (or alien) to the ecosystem under consideration and 2) whose introduction causes or is likely to cause economic or environmental harm or harm to human health (Executive Order 13112).

Word, phrase or acronym	Definition
Invasive species – population sizes	Small populations of invasive species are defined as less than 100 individuals. Large populations of invasive species are defined as more than 100 individuals. “Occasional” occurrence of an invasive plant species is defined as small populations widely spaced throughout the site. “Common” occurrence of an invasive plant species is defined as frequently observed.
Jurisdictional	Jurisdictional refers to the extent or range of a regulatory agency, such as the Oregon Department of State Lands (DSL) or the US Army Corps of Engineers.
Just compensation	Just compensation includes the estimated value of all the land and improvements within the needed area. If only a part of a property is to be acquired, just compensation would also include any measurable loss in value to the remaining property due to the partial acquisition. ODOT procedures, guided by federal regulations, have been designed to protect both owners of properties needed for public projects as well as other taxpayers.
Lahar	A lahar is a landslide or mudflow of volcanic material from an eruption.
Landscape	Landform and landcover forming a distance visual pattern. Landcover comprises water, vegetation, and built development, including cities.
Landscape unit	A landscape unit is generally an area of distinct landscape character (FHWA 1981). It can also be referred to as an outdoor room.
Lava tube	A lava tube is a hollow space below the surface of a solidified lava flow, formed by the withdrawal of molten lava after the formation of the surficial crust.
Lead agency	The lead agency is the agency or agencies that have the primary responsibility for preparing the environmental impact statement.
L_{eq}	L_{eq} represents the equivalent steady-state sound level that, in a stated period of time, contains the same acoustic energy as the time-varying sound level during the same period.
Level of service (LOS)	LOS is a qualitative measure to describe how a road is operating in terms of performance measures related to speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. The levels range from A (least congested) to F (most congested).
Limited access	Limited access generally means that access to, from, and across a highway is limited to intersections with public approach roads or interchanges.
Line	Geometrically, a line is a point that has been extended, or the intersection of two planes, e.g., a silhouette, or a boundary between patterns in the landscape. The second strongest of the four basic visual pattern elements.
Linear and lateral orientation	Linear orientation refers to the distance along a roadway which non-native plants may spread to. Lateral orientation refers to how far non-native plants may spread to the side of a roadway (perpendicular to the orientation of the roadway).
Linguistically isolated household	A linguistically isolated household is one in which no member 14 years old and over 1) speaks only English, or 2) speaks a non-English language and speaks English “very well.” In other words, all members 14 years old and over have at least some difficulty with English. (US Census Bureau 2000)
Liquefaction	Liquefaction describes the behavior of loose saturated sands, which go from a solid state to the consistency of a heavy liquid, or reach a liquefied state.
Local Trips	Local trips are those that have both an origin and destination within the Transportation API.
Low-income	Low-income persons are defined as residing in households with an income between the federal poverty guidelines and an amount two times greater than those guidelines.
Median barrier	A median barrier is typically a three-foot-high concrete barrier that separates and controls traffic movements.

Word, phrase or acronym	Definition
Median treatment	A median treatment is a structure in the center of a roadway that physically separates the two directions of travel. The primary purpose of a median treatment is to prevent vehicles from straying into opposing lanes. In addition, median treatments can prevent turns where they are undesirable from a traffic flow or safety standpoint.
Middleground	Middleground in the context of visual impact analysis is where parts of the landscape may be seen to join together (e.g., where trees become a forest) or revealed as either comfortable or conflicting with the landscape.
Minorities	Minorities are defined as Black (or African American, having origins in any of the black racial groups of Africa); Hispanic (of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race); Asian American (having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands); or American Indian and Alaskan Native.
Mitigation	Mitigation measures are designed to counteract environmental impacts or to make such impacts less severe.
Mobile source air toxics	Mobile source air toxics refers to several hazardous air pollutants that cause or may cause cancer or other serious health effects.
National Ambient Air Quality Standards (NAAQS)	The National Ambient Air Quality Standards (NAAQS) are used to measure air quality, expressed as concentrations of pollutants averaged over fixed time periods.
National Environmental Policy Act (NEPA)	The National Environmental Policy Act of 1969 (NEPA) is federal legislation that establishes environmental policy for the nation. It provides an interdisciplinary framework for federal agencies to prevent environmental damage and contains “action-forcing” procedures to ensure that federal agency decision-makers take environmental factors into account.
National Historic Preservation Act (NHPA)	In 1966, NHPA established a National Register of Historic Places and the Advisory Council on Historic Preservation.
National Register Criteria for Evaluation	<p>Criteria A-D area applied to evaluate a property’s eligibility for listing in the National Register of Historic Places. Historic districts, sites, buildings, structures, and objects that possess integrity must meet at least one of the qualifying criteria to be determined eligible for listing in the National Register of Historic Places:</p> <ul style="list-style-type: none"> a) It is associated with events that have made a significant contribution to the broad patterns of our history b) It is associated with the lives of persons significant in our past c) It embodies a distinctive characteristic of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction d) It has yielded, or may be likely to yield, information important in prehistory or history.
National Register of Historic Places (NRHP)	The National Register of Historic Places (NRHP) is the official list of sites, districts, buildings, structures, and objects significant in the nation’s history or whose artistic or architectural value is unique.
Needs for the project	Needs for the project establish “why” a problem exists or is expected to occur in the future.
No Build Alternative	The No Build Alternative represents the most likely condition expected to exist in the future if current policies, plans, and programs were to continue unchanged.
Network Travel Time	The network travel time is the total amount of time spent traveling the entire network of roads in the Transportation API.
Noise impacts	Noise impacts occur when traffic noise levels exceed the ODOT impact criteria or if levels increase by 10 dBA or more over existing levels.
Non-commercial agriculture	Non-commercial agriculture existing land use consists of land zoned by Deschutes County as Multiple Use Agriculture (MUA10) where the purpose of the zone is to preserve the rural character of the county while permitting development consistent with that character and the capacity of the natural resources of the area, and preserve agricultural lands not suited for full-time commercial farming.

Word, phrase or acronym	Definition
Non-threatened/ endangered species	Non-threatened or endangered species are those that are not listed under the State or Federal ESA.
Observer position	Observer position is a term employed to describe the observer's elevational relationship between himself and the landscape he sees. It is used to indicate if he is essentially below, essentially at the same level, or essentially above the visual objective. Three specific terms are used: 1) observer inferior (viewer below object), 2) observer normal (viewer on level of object), and 3) observer superior (viewer above object).
Official(s) with jurisdiction	Generally the official with jurisdiction over historic resources is the SHPO. Where projects may occur on tribal land, the official with jurisdiction is the Tribal Historic Preservation Officer. In the case of public parks, recreation areas, and wildlife and waterfowl refuges, the official(s) with jurisdiction are the official(s) of the agency or agencies that own or administer the property in question and who are empowered to represent the agency on matters related to the property. The full definition can be found in 23 CFR 774.17.
Oregon Statewide Planning Goals	The Oregon Statewide Planning Goals were established in 1973 and constitute the framework for the statewide land use planning program.
Over Capacity	A roadway segment is over capacity when the v/c ratio exceeds ODOT or City of Bend standards, or for Deschutes County, when a facility or intersection is at level of service E or F.
Overall Network Delay	Overall network delay is the additional amount of time spent traveling in slow or stopped conditions compared to normal travel times under light of free-flow travel conditions across the entire network of roads in the Transportation API.
Palustrine emergent (PEM)	Palustrine emergent wetlands are a subset of palustrine wetlands and are dominated by erect, rooted, herbaceous hydrophytic (i.e., water tolerant) vegetation, excluding mosses and lichens (Cowardin et al. 1979). This vegetation is present for most of the growing season in most years. These wetlands are often dominated by perennial plants.
Palustrine wetlands	Palustrine wetlands consist of vegetated wetlands traditionally called by such names as marsh, swamp, bog, fen, and prairie, which are found throughout the United States (Cowardin et al. 1979).The Palustrine wetland type is distinguished from other wetland types where areas of open water are typically greater than the area occupied by vegetation (i.e. riverine [river systems], lacustrine [lakes]).
Peak hour	A peak hour (or rush hour) is a part of the day with the highest traffic volume during which traffic congestion on roads is worst. Normally, the two peak hour periods (morning and evening) occur when people are traveling to or from work or school. The 2007 evening peak hour in the API is 4:00 to 5:00 pm. By 2035, the peak period will likely spread across multiple hours.
Peak hour speeds	Peak hour speeds affect fuel economy for that hour of vehicles using the roadway network.
Pleistocene	Pleistocene refers to a geologic time period beginning 2 to 3 million years ago and ending approximately 10,000 years ago.
Pliocene	Pliocene refers to a geologic time period beginning approximately 5 million years ago and ending 2 to 3 million years ago.
Prime farmland	Prime farmland is a category of protected and highly productive cropland that is recognized by the US Department of Agriculture's Natural Resource Conservation Service.
Private driveway	Private driveway is an approach that serves vehicular access to a roadway from one or more properties and that is not a public approach road.
Project management team	The project management team consists of engineers, scientists, planners and public involvement specialists who are implementing the project for ODOT.
Proposed action	The proposed action is a proposal developed to resolve the problem identified in the Purpose and Need Statement.

Word, phrase or acronym	Definition
Prudence	An alternative is not prudent if it does not meet the stated purpose and need of the project; it results in unacceptable safety or operational problems; it causes severe social, economic, or environmental impacts; it results in additional costs of an extraordinary magnitude; it causes other unique problems; or it involves multiple factors specified above that cumulatively cause impacts of extraordinary magnitude. The full definition can be found in 23 CFR 774.17.
Public approach road	Public approach road is an existing or planned city street or county road connection that provides vehicular access to and from a highway.
Purpose of the project	Purpose of the project asserts “what” the project is intended to address.
Queuing	Queuing is the amount of traffic stopped to proceed through an intersection. Small queues of a few vehicles are typically acceptable. However, when queues become long and extend through adjacent intersections or when vehicles must wait two or more signal cycles to pass through an intersection, drivers become frustrated and may attempt to bypass queues by changing their travel route or travel time, or cut through neighborhoods.
Reasonable (noise)	Reasonable refers to the maximum cost per residence benefiting from the noise abatement.
Regional trips	Regional trips are those that have one end of a trip within the Transportation API with the other end being outside of the Transportation API
Record of decision (ROD)	A public document that reflects the agency’s final decision, rationale behind that decision, and commitments to mitigation.
Remedial investigation	Remedial investigation is a term commonly associated with a US Environmental Protection Agency (EPA) or Oregon Department of Environmental Quality (DEQ) required site investigation to characterize contamination at a site. The original use of RI came through the EPA Superfund Program, where one was required to do a Remedial Investigation/ Feasibility Study for contaminated property. The DEQ also uses the term for state regulated cleanup sites that are managed under DEQ’s Voluntary Cleanup Program.
Remediation	Remediation is the act of containing or cleaning up a hazardous materials site.
Resource Conservation, and Recovery Act (RCRA)	The RCRA list identifies facilities that have obtained identification numbers from the Environmental Protection Agency (EPA), which designate these businesses as generators, transporters, or storers/disposers of hazardous waste. It is one of the databases associated with identifying potential hazardous materials sites or risks.
Right of way	Right of way is land acquired by reservation, dedication, prescription, or condemnation and intended to be occupied by a road, crosswalk, railroad, electric transmission line, oil or gas pipeline, water line, sanitary or storm sewer, or other similar use.
Riparian	Riparian areas have distinctive soil and vegetation between a stream or other body of water and the adjacent upland, including wetlands.
Safety Investment Program	ODOT also has developed the Safety Investment Program, which identifies higher severity highway segments by using a measure of fatalities and severe injuries per five-mile segment. The Safety Investment Program has 5 categories: Category 1 has the lowest severity rates, while Category 5 has the highest severity rates.
Safety Priority Index System	ODOT uses a Safety Priority Index System, which is a method to identify potential safety problems on state highways by identifying and evaluating state highway segments with higher than typical crash histories. Those state highway segments with the Safety Priority Index System values that rank in the top 5 percent, by ODOT region, are considered priorities for potential safety improvement projects.
Sagebrush shrublands/ shrub-steppe	Sagebrush shrublands are dominated by shrubs and may include various sagebrush species, bitterbrush, rabbitbrush, and western juniper. Shrub-steppe habitats are open grass-dominated communities and are usually found on loamy, wind-deposited (loess) soils.
Salmonid	A salmonid is a salmon and trout species that are born in freshwater streams, live in the ocean during maturity, and return to the streams of their birth to spawn and die.

Word, phrase or acronym	Definition
Scale	Visual scale is the apparent size relationships between landscape components or features and their surroundings.
Section 106	Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to “take into account” the effects of their undertakings on historic properties and to provide the Advisory Council on Historic Preservation a “reasonable” opportunity to comment.
Section 4(f) of the US Department of Transportation Act of 1966	Section 4(f) states that the Secretary of Transportation may approve a transportation program or project requiring the use of publicly owned land of a public park, recreation area, wildlife and waterfowl refuge of national, State, or local significance, land of an historic site of national, State, or local significance only if there is no “prudent and feasible alternative” to the use of that land, and the program or project includes all possible planning to minimize harm to the public land involved.
Section 4(f) property	Section 4(f) property refers to land that is subject to Section 4(f). This includes: publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance that is included in or is eligible for inclusion in the National Register of Historic Places.
Section 6(f)	Section 6(f) of the Land and Water Conservation Fund Act provides additional protection of recreational resources. Under this Act, any recreational lands that were purchased or improved with Land and Water Conservation funds are protected from conversion to nonpublic outdoor recreational uses. The Secretary of Interior’s approval is required to convert Land and Water Conservation funded lands from recreational uses. Conversions would be granted only if: <ol style="list-style-type: none"> 1) It complies with existing comprehensive statewide outdoor recreation plans, and 2) Substitution of other equivalent recreation properties is assured.
Seismic event	A seismic event is an earthquake or somewhat similar earth motion.
Slope	Slope is an area of landform surface differentiated from other areas by its degree of slope. It is a component of landforms but is not limited in place or extent (e.g. cliff, gentle slope, flat plain).
Species of concern	Species of concern are those that might be in need of conservation action, ranging from a need for periodic monitoring of populations and threats to the species and their habitat to the necessity for listing as threatened or endangered.
Strategy habitats	Strategy habitat is native vegetation assemblages identified by Oregon Department of Fish and Wildlife as needing conservation and restoration.
Strategy species	Strategy species are those species associated with strategy habitats that are at risk of population decline due to habitat loss and degradation.
Subsidized rental housing (Section 8)	Section 8, or the Housing Choice Voucher Program, is a federal housing program that provides housing assistance to low-income renters and home owners.
Temporary occupancy	Temporary occupancies of land are so minimal as to not constitute a use within the meaning of Section 4(f). The following conditions must be satisfied: <ol style="list-style-type: none"> 1) Duration must be temporary, i.e., less than the time needed for construction of the project, and there should be no change in ownership of the land; 2) Scope of the work must be minor, i.e., both the nature and the magnitude of the changes to the Section 4(f) property are minimal; 3) There are no anticipated permanent adverse physical impacts, nor will there be interference with the protected activities, features, or attributes of the property, on either a temporary or permanent basis; 4) The land being used must be fully restored, i.e., the property must be returned to a condition which is at least as good as that which existed prior to the project; and 5) There must be documented agreement of the official(s) with jurisdiction over the Section 4(f) resource regarding the above conditions. (23 CFR 774.13 (d))

Word, phrase or acronym	Definition
Tephra	Tephra is material that is ejected from a volcano through the air.
Texture	The visual or tactile surface characteristic of various elements in the landscape; often the least dominant of the four visual pattern elements.
Threatened/endangered species	Endangered – an animal or plant species in danger of extinction throughout all or a significant portion of its range. Threatened – an animal or plant species likely to become endangered within the foreseeable future.
Through trips	Through trips are those that are using the highways in the Transportation API, which have an origin outside of the Transportation API, to reach a destination outside of the Transportation API.
Total maximum daily load (TMDL)	A total maximum daily load (TMDL) is a calculation of the maximum amount of a pollutant that a waterbody can receive and still safely meet water quality standards.
Transit-dependent households	A transit-dependent households is an occupied housing unit that does not have a vehicle available.
Transportation system management	Transportation system management uses various actions that increase the efficiency of existing facilities. They are actions that increase the number of vehicle trips a facility can carry without increasing the number of through lanes.
Transportation demand management	Transportation demand management focuses on strategies for reducing the number of vehicle trips and vehicle-miles traveled as well as increasing vehicle occupancy. It facilitates higher vehicle occupancy or reduces traffic congestion by expanding the traveler's transportation choice in terms of travel method, travel time, travel route, travel costs, and the quality and convenience of the travel experience.
Tumuli	Tumuli are small mounds or domes that are created on the crest of a lave flow due to higher pressure lava below.
Underground storage tank (UST) and leaking underground storage tank (LUST)	An underground storage tank (UST) system is a tank and any underground piping connected to the tank that has at least ten percent of its combined volume underground. Federal UST regulations apply only to underground tanks and piping storing either petroleum or certain hazardous substances. A LUST is a leaking underground storage tank.
Unconstrained land	Unconstrained land is land with no development constraints (no public road access) or physical constraints over 50 percent of the parcel (which includes slopes greater than 25 percent, areas of special interest, and floodplains).
Unity	Unity in the context of visual impact analysis looks at the degree to which the visual resources of the landscape form a coherent, harmonious visual pattern and the compositional harmony or compatibility between landscape elements.
Urban area reserve lands	Urban area reserve lands are lands identified for future urban growth.
Use	Use of a Section 4(f) property occurs: <ol style="list-style-type: none"> 1) When land is permanently incorporated into a transportation facility; 2) When there is a temporary occupancy of land that is adverse in terms of the statute's preservation purpose as determined by the criteria in 23 CFR 774.13(d); or 3) When there is a constructive use of a Section 4(f) property as determined by the criteria in 23 CFR 774.15. (23 CFR 774.17)
Vehicle-miles traveled	Vehicle-miles traveled represents the number of vehicles using a roadway and the number of miles traveled by those vehicles.
Very-low-income	Very-low-income persons who are defined as people residing in households with income below the federal poverty guidelines. Poverty guidelines are determined for households by household size.
View	A view is a scene observed from a given viewpoint.

Word, phrase or acronym	Definition
Viewer activity	Viewer activity is the extent of a viewer's ability to perceive the landscape and its detail may be heightened or decreased by the visual requirements of his current activity and his past experience of the landscape.
Viewer exposure	Viewer exposure is the degree to which viewers are exposed to a view by their physical location, numbers viewing and duration of view.
Viewer sensitivity	Viewer sensitivity is the viewer's variable receptivity to the elements within the environment that he is viewing, affected by viewer activity and awareness. A person cannot readily notice every object and all the attributes of the objects that compose the total visual environment.
Visual character	The visual character of a landscape is formed by the order of the patterns composing it. The elements of these patterns are the form, line, color and texture of the landscape's visual resources. Their interrelationships can be objectively described in terms of dominance, diversity, continuity, and so on.
Visual quality	While many factors contribute to a landscape's visual quality, they can ultimate be grouped under three headings: vividness, intactness, and unity. A view's visual quality score is calculated in the following way: [vividness + intactness + unity] / 3 = visual quality
Vividness	Vividness in the context of visual impact analysis is the memorability of the visual impression received from contrasting landscape elements as they combine to form a striking and distinctive visual pattern and looks at: landform, vegetation, water, and man-made development.
Volume to capacity (v/c) ratio	The v/c ratio illustrates how many vehicles are using the roadway compared to the room available for them.
Weaving sections	Weaving sections are highway segments where the pattern of traffic entering and leaving at contiguous points of access results in vehicle paths crossing each other.
Wellhead protection area	A wellhead protection area is the area surrounding a drinking water well or well field which is protected to prevent contamination of the wells.
Western juniper woodlands	Western juniper woodlands consist of scattered, often large, juniper trees within shrub-steppe. Late successional juniper woodlands may have a higher density of trees, but are characterized by large-diameter trees.
Wetland	Wetlands for the purposes of the Clean Water Act, must meet a three-parameter approach that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils subject to saturation/inundation). All three parameters must be present, under normal circumstances, and the wetland must be connected to or have a significant nexus with one of the other waters of the US, for an area to be designated as a jurisdictional wetland under the Clean Water Act.
Wildlife linkage	A wildlife linkage provides a link for wildlife to travel between habitats.
Year of opening (2015)	The year of opening is the year in which construction of the build alternatives would be completed.

Appendix K

List of Technical Reports

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List of Technical Reports

This Draft EIS summarizes the technical documentation prepared for the US 97 Bend North Corridor Project. The complete technical documents are lengthier and more detailed than their representative sections in this Draft EIS.

These reports are available on request from:

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- Air Quality Technical Report
- Bicycle/Pedestrian Technical Report
- Business Survey Summary
- Energy Technical Report
- Geology Technical Report
- Hazardous Materials Corridor Study
- Hazardous Materials Technical Report
- Historic Resources Technical Report
- Land Use/Planning/Parks and Recreational Facilities Technical Report
- Mobile Home Park Survey Summary (July 2008)
- Mobile Home Park Survey Summary (April 2011)
- Natural Systems and Communities Technical Report
- Noise Technical Report
- Overview of Interchange Area Management Plans
- Right of Way Report
- Socioeconomic and Environmental Justice Technical Report
- Traffic Analysis Report
- US 97 Bend North Corridor EIS SAFETEA-LU 6002 Coordination Plan
- Utility Report
- Visual Quality Technical Report
- Water Resources Technical Report
- Wetlands and Water Resources Technical Report

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