

Appendix A Glossary

access	The ability to enter or approach a facility or to make use of a facility.
adverse effects	<p>The totality of significant individual or cumulative human health or environmental effects, including interrelated social and economic effects, which may include, but are not limited to:</p> <ul style="list-style-type: none">▪ bodily impairment, infirmity, illness or death▪ air, noise, and water pollution and soil contamination▪ destruction or disruption of human-made natural resources▪ destruction or diminution of aesthetic values▪ destruction or disruption of community cohesion or a community's economic vitality▪ destruction or disruption of the availability of public and private facilities and services▪ vibration▪ adverse employment effects▪ displacement of persons, businesses, farms, or nonprofit organizations▪ Increased traffic congestion, isolation, exclusion or separation of minority or low-income individuals within a given community or from the broader community▪ denial of, reduction in, or significant delay in the receipt of benefits of DOT programs, policies, or activities
air pollutant	<p>Any substance in air that could, in high enough concentration, harm people, other animals, vegetation, or material. Pollutants may include almost any natural or artificial composition of matter capable of being airborne. Matter may be in the form of solid particles, liquid droplets, gases, or a combination thereof. Generally, substances fall into two main groups:</p> <ul style="list-style-type: none">▪ those emitted directly from identifiable sources▪ those produced in the air by interaction between two or more primary pollutants, or by reaction with normal atmospheric constituents, with or without sunlight.
air quality standards	The level of pollutants prescribed by regulations that may not be exceeded during a given time in a defined area.
ambient	Surrounding atmosphere
aquifer	A water-bearing layer of permeable rock, sand, or gravel.
artesian aquifer	An aquifer where the water is under pressure.
area of potential effect	This is the area in which historic and cultural properties, if they are present, could be affected by the project either directly or indirectly.

arterial	A major street that primarily serves through traffic, but also provides access to abutting properties. Arterials are often divided into principal and minor classifications depending on the number of lanes, connections made, volume of traffic, nature of traffic, speeds, interruptions (access functions), and length.
basin	The area of land that drains to a specific body of water.
best management practices (BMPs)	BMPs are generally accepted techniques that, when used alone or in combination, prevent or reduce adverse effects of a project. Examples include erosion control measures and construction management to minimize traffic disruption.
capacity	The maximum sustained traffic flow of a transportation facility under prevailing traffic and roadway conditions in a specified direction.
carbon monoxide (CO)	A colorless, odorless, poisonous gas produced by incomplete combustion of fossil fuel.
CO	Carbon monoxide, a colorless, odorless, and poisonous gas generated by automobiles that reduces the oxygen-carrying capability of the blood.
Code of Federal Regulations (CFR)	The code of Federal Regulations is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government. It is divided into 50 titles that represent broad areas subject to federal regulation. Each volume of the CFR is updated once each calendar year and is issued on a quarterly basis.
congestion	A condition characterized by unstable traffic flows that prohibit movement on a transportation facility at optimal legal speeds. Recurring congestion is caused by regularly occurring excess traffic volume compared with capacity. Nonrecurring congestion is caused by unusual or unpredictable events such as traffic accidents.
constructive use	A type of indirect use in which a transportation project's proximity impacts (as opposed to direct impacts) are so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired. Examples include excessive noise level increases, diminished aesthetic features, ecological intrusions, and other indirect impacts to the resources' environment or utility.
cultural resources	Any historic (or prehistoric) district, site, building, structure, or object that is either listed or eligible for listing on the National register of Historic Places. Examples include items as artifacts, records, structures, and remains.
cumulative effect	Effect on the environment which results from the incremental effect of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such actions. Cumulative effects can result from individually minor but collectively noticeable actions taking place over a period of time.
delay	Increased travel time experienced by a person or a vehicle because of circumstances that impede the desirable movement of traffic.
direct effect	Effect caused by the proposed action and occurring at the same time and place.
discharge	Runoff leaving a new development or redevelopment via overland flow, built conveyance systems, or infiltration facilities.
displacement	The act of removing a business, residence or public facility from its existing location. In the context of transportation improvements, displacement is generally the result of: <ul style="list-style-type: none"> ▪ Property acquisition for right-of-way expansion or ▪ Elimination of access to a property due to traffic revisions.

effect	Includes ecological effects (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health effects, whether direct, indirect, or cumulative. Effects may include those resulting from actions that may have both beneficial and detrimental effects, even if on balance the agency believes the effect will be beneficial.
endangered species	Any species that is in danger of extinction throughout all or a substantial portion of its range.
equivalent sound level (L_{eq})	The equivalent sound level is widely used to describe environmental noise. It is a measure of the average sound energy during a specified period of time.
feasible and prudent	<p>A term that is integral to the Section 4(f) process, feasible and prudent refers to the viability of an alternative that avoids the use of a Section 4(f) resource. The term “Feasible” refers to the constructability of a project—whether or not it can be built using current construction methods, technologies, and practices. The term “Prudent” refers to how reasonable the alternative is—in essence, whether or not it makes sense. Given a range of options, a transportation agency must select an avoidance alternative rather than adversely impact Section 4(f) resources if it is feasible and prudent. By contrast, an alternative may be rejected if it is not feasible and prudent. An alternative may be considered not feasible and prudent for any of the following reasons:</p> <ul style="list-style-type: none"> ▪ Does not meet project purpose and need ▪ Excessive cost of construction ▪ Severe operational or safety problems ▪ Unacceptable impacts (social, economic or environmental) ▪ Serious community disruption ▪ A combination of any of the above
fill	Soil placed by humans, such as for roads or building foundations.
groundwater	Water that resides and/or flows through the openings in rock and soils below the visible surface of the ground.
habitat	The native environment or specific surroundings where a plant or animal naturally grows or lives. The surroundings include physical factors such as temperature, moisture, and light, together with biological factors such as the presence of food or predator organisms.
hazardous materials	Hazardous materials include any material that, because of its quantity, concentration, or physical or chemical characteristics, may pose a threat to human health or the environment.
impervious surface area	Area that is not permeable to infiltration of precipitation or runoff to groundwater (water will run off this type of surface, but not soak in). A high proportion of precipitation that falls onto impervious surfaces drains from the area as stormwater runoff. In contrast, vegetated areas are permeable, and a large proportion of precipitation that falls on vegetated areas is either intercepted by vegetation or infiltrates into the soil.
infiltration	The downward movement of water from the surface to the subsoil.
intertidal	The shoreline zone above the low-tide mark.
listed species	Any species of fish, wildlife, or plant that has been determined to be endangered or threatened under Section 4 of the Endangered Species Act (ESA).
low-income	A person whose median household income is at or below the Department of Health and Human Services poverty guidelines.

mitigation	<p>Defined in WAC 197-11-766 as:</p> <ul style="list-style-type: none"> ▪ avoiding the impact altogether by not taking a certain action or parts of an action; ▪ minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts; ▪ rectifying the impact by repairing, rehabilitating, or restoring the affected environment; ▪ reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; ▪ compensating for the impact by replacing, enhancing or providing substitute resources or environments; and/or ▪ monitoring the impact and taking appropriate corrective measures
modeling	Use of statistics and mathematical equations to simulate and predict real events and processes.
National Ambient Air Quality Standards (NAAQS)	Standards established by the EPA for pollutant concentrations in outside air throughout the country.
National Register of Historic Places (NRHP)	The Nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archaeological resources. Properties listed in the register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture. The National Park Service administers the National Register, which is part of the U.S. Department of the Interior.
noise abatement criteria (NAC)	Noise regulations and guidelines are the basis for evaluating potential noise effects. For state and federally funded highway projects, traffic noise effects occur when predicted noise levels approach or exceed the NAC established by the FHWA.
NOx	Nitrogen oxides, the result of nitrogen combining with oxygen in the atmosphere and a primary emission from combustion. A major component of smog.
outfall	Point of discharge for stormwater runoff; also the end of a culvert or pipe that discharges stormwater runoff.
ozone	Ozone is a natural form of oxygen that provides a protective layer shielding the earth from ultraviolet radiation. Ozone in the troposphere is produced through complex chemical reactions of NOx, hydrocarbons, and sunlight. Ozone is a chemical oxidant and major component of smog. It can seriously impair the respiratory system and is one of the most widespread of all the Clean Air Act pollutants with standards set by the EPA.
particulate	A very small solid, suspended in air or water, which can vary widely in size, shape, density, and electrical charge.
peak hour	The hour in the morning and in the afternoon when the maximum demand occurs on a given transportation facility or corridor
peak period	The period of the day during which the maximum amount of travel occurs. It may be specified as the morning (AM), or the afternoon or evening (PM) peak.
public services	Public services include fire and police protection, schools, parks and recreational facilities, places of worship, and cemeteries.

publicly owned	Property that is owned and/or operated by a public entity. If a governmental body has a proprietary interest in the land (such as fee ownership, drainage easements or wetland easements), it can be considered publicly owned. Land subject to a public easement in perpetuity can also be considered to be publicly owned land for the purpose for which the easement exists.
Puget Sound Regional Council (PSRC)	The Metropolitan Planning Organization (MPO) and Regional Transportation Planning Organization (RTPO) for the Central Puget Sound region, which comprises Snohomish, King, Pierce, and Kitsap counties. The MPO and RTPO is the legally mandated forum for cooperative transportation decision-making in a metropolitan planning area.
right-of-way	Land purchased prior to the construction of new highway improvements along with land for retaining walls and other project features.
runoff	Rainwater or snowmelt that directly leaves an area as surface drainage.
salmonid	Fish that are members of the family Salmonidae, which includes salmon, trout, char, and whitefish.
secondary effect	Effect caused by the proposed action that is later in time or farther removed in distance, but still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.
Section 106	Under Section 106 of the National Historic Preservation Act of 1966, as amended, federal agencies must identify and evaluate cultural resources and consider how an undertaking they fund, license, permit, or assist affect historic properties eligible for inclusion in the National Register of Historic Places. The federal agencies must afford the State Historic Preservation Officer and the Advisory Council on Historic Preservation the opportunity to comment on these undertakings.
Section 4(f)	Section 4(f) of the Department of Transportation Act of 1966 prohibits FHWA from approving the use of land from a significant publicly owned park, recreation area, or wildlife and waterfowl refuge, or any significant historic site unless a determination is made that: <ul style="list-style-type: none"> ▪ There is no feasible and prudent alternative to the use of land from the property; and ▪ The proposed action includes all possible planning to minimize harm to the property resulting from such use.
smog	Dust, smoke, or chemical fumes that pollute the air and make hazy, unhealthy conditions. Automobile, truck, bus, and other vehicle exhausts and particulates are usually trapped close to the ground, obscuring visibility and contributing to a number of respiratory problems.
spill prevention control and countermeasures (SPCC) plan	An SPCC plan is implemented to minimize effects to soil, surface water, and groundwater. The SPCC plan addresses procedures, equipment, and materials used in the event of a spill of contaminated soil, petroleum products, contaminated water or other hazardous substances.
stormwater	The portion of precipitation that does not naturally percolate into the ground or evaporate, but flows overland into pipes and other features of a drainage system into a defined body of water or treatment facility.
study area	The area specifically identified for analysis. Study areas vary among individual resources as scientific convention and practice dictate.
threatened species	Any species that is likely to become endangered within the foreseeable future throughout all or a substantial portion of its range.
upland vegetation	Vegetation associated with dry areas away from water or wetlands; vegetation that is not located within the area influenced by a body of water.

use	<p>Generally, “use” occurs with a DOT-approved project or program</p> <ul style="list-style-type: none"> ▪ When land from a Section 4(f) site is acquired for a transportation project, ▪ When there is an occupancy of land that is adverse in terms of the statute’s preservationist purposes, or ▪ When the proximity impact of the transportation project on the Section 4(f) site, without acquisition of land, are so great that the purposes for which the Section 4(f) site exists are substantially impaired.
utilities	<p>Utilities include electricity, natural gas, water, wastewater and stormwater collection, and telecommunications.</p>
vehicle	<p>Any car, truck, van, motorcycle, or bus designed to carry passengers or goods.</p>
vibration	<p>An oscillatory motion, which can be described in terms of displacement, velocity, or acceleration.</p>
view	<p>Aspects of the environment that a viewer can see from the study area and what the viewer can see of the project from nearby surroundings.</p>
water table	<p>The upper limit of the layer of ground that is saturated with water.</p>
wetland	<p>Areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions.</p>