

# 10 GLOSSARY

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## A

**Access:** A means of entering or leaving a public road, street, or highway with respect to abutting property or another public road, street, or highway.

**Accessibility:** The ease with which a site or facility may be reached by passengers and others necessary to the facility's intended function. Also, the extent to which a facility is usable by persons with disabilities, including wheelchair users.

**Access Point:** Any point from inside or outside the limited access hachures that allows entrance to or exit from the traveled way of a limited access freeway, including "locked gate" access and temporary construction access.

**Adverse:** Negative or detrimental.

**Adverse Effect:** (1) National Environmental Policy Act of 1969 (NEPA)—an effect that may cause unfavorable or undesirable outcomes to the natural or human environment. (2) National Historic Preservation Act of 1966 (NHPA)—the diminishment of a historic property's integrity, with respect to its location, design, setting, materials, workmanship, feeling, or association. The term is applied by federal agency officials, in consultation with the State (or Tribal) Historic Preservation Office, as part of the Section 106 process. See also Historic Property.

**Affected Environment:** The existing environment, resource conditions, and trends that may be affected by the Action Alternatives. Can include the physical, biological, social, and economic setting potentially affected by one or more of the alternatives under consideration. Alignment: The horizontal and vertical route of a transportation corridor or path.

**Alternatives:** Possible solutions to accomplish a defined purpose and need. These include local and state transportation system design options, locations, and travel demand management and transportation system management type improvements, such as ramp metering, mass transit, and high occupancy vehicle (HOV) facilities.

**Archaeological Site:** A place (or group of physical sites) in which physical remains of past human activity that are at least 50 years old are preserved, and which has been, or may be, investigated using the discipline of archaeology and represents a part of the archaeological record. The archaeological record consists of artifacts, features, and ecological evidence along with their preserved positions in or on the earth.

**Area of Influence:** The area that will be directly impacted by the proposed action: freeway main line, ramps, crossroads, immediate off-system intersections, and local roadway system.

**Area of Potential Effects (APE):** The geographic area or areas within which the project may directly or indirectly cause alterations in the character or use of historic properties, if any such

properties exist. See also Historic Property. **At-Grade:** At ground surface level; used to describe roadways, track alignments, and road-track intersections.

## B

**Baseline:** The existing transportation system configuration and traffic volumes for a specific year against which to compare possible alternative solutions.

**Beneficial effect:** Potential to cause positive outcomes to the natural or human environment.

**Best Management Practices (BMPs):** Methods designed to minimize adverse effects to the environment. Examples of BMPs include practices for erosion and sedimentation controls, watering for dust control, perimeter silt fences, rice straw bales, and sediment basins.

**Biological Resources:** Plant and wildlife species, terrestrial and aquatic habitats (including jurisdictional waters), and habitats of concern (including sensitive plant communities, critical habitat, core recovery areas, mitigation banks, and wildlife corridors).

**Bottleneck:** A section of roadway where traffic flow is constricted, for example, at ramp merges/diverges, weaving areas, lane drops, and incidents.

**Build Alternative:** Final set of build alternatives which best meet the project's purpose and need and are evaluated in detail in the NEPA document.

## C

**Capacity:** The maximum rate of flow at which persons or vehicles can be reasonably expected to traverse a point or uniform segment of a lane or roadway during a specified time period under prevailing roadway, traffic, and control conditions. Expressed as vehicles per hour or persons per hour.

**Capital Cost:** The total cost of acquiring an asset or constructing a project.

**Categorical Exclusion:** A categorical exclusion (CE) is an environmental document and a class of actions that a Federal agency has determined do not individually or cumulatively have a significant effect on the human environment and for which, therefore, neither an environmental assessment nor an environmental impact statement is normally required.

**Census Block:** A subdivision of a census block group (or, prior to 2000, a block numbering area); a block is the smallest geographic unit for which the U.S. Census Bureau tabulates 100-percent data (data collected from all houses, rather than sample houses). In urban areas, many census blocks correspond to individual city blocks bounded by streets.

**Clean Air Act of 1970 (CAA):** The Federal law that defines the United States Environmental Protection Agency's (EPA's) responsibilities for protecting and improving the nation's air quality and the stratospheric ozone layer. The CAA protects the public from exposure to airborne contaminants that are known to be hazardous to human health and requires that the EPA rate Environmental Impact Statements (EISs). Codified at 42 USC 7401 et seq.

**Clean Water Act of 1972 (CWA):** The primary Federal law protecting the quality of the nation's surface waters, including wetlands. The CWA regulates discharges and spills of pollutants,

including hazardous materials, to surface waters and groundwater. Codified at 33 USC 1251 et seq.

**Code of Federal Regulations (CFR):** A compilation of the general and permanent rules of the executive departments and agencies of the federal government as published in the Federal Register. The code is divided into 50 titles that represent broad areas subject to federal regulation.

**Concept:** General term that refers to possible approaches to meeting the transportation deficiencies identified in the purpose and need statement.

**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 resource's environment or utility.

**Consulting Party:** Parties that have a consultative role in the Section 106 process. These may include the State Historic Preservation Office (SHPO); Indian tribes and Native Hawaiian organizations; representatives of local governments; applicants for Federal assistance, permits, licenses, and other approvals; and individuals and organizations with a demonstrated interest in the undertaking.

**Cooperating Agency:** Any agency invited by the lead Federal agency that has agreed to participate in the National Environmental Policy Act of 1969 (NEPA) process, and has legal jurisdiction over, or technical expertise regarding, environmental impacts associated with a proposed action.

**Critical Habitat:** Designated areas that provide suitable habitat for Federally listed threatened or endangered species, and in which are the geographical locations and physical features essential to the conservation of a particular species.

**Cross Section:** Cross section elements are those features of a roadway which forms its effective width.

**Cultural Resources:** Resources related to the tangible and intangible aspects of cultural systems, living and dead, that are valued by a given culture or contain information about the culture. Cultural resources include, but are not limited to, sites, structures, buildings, districts, and objects associated with or representative of people, cultures, and human activities and events.

**Cumulative Impact:** (1) Council on Environmental Quality (CEQ)—the result of two or more individual impacts that, when considered together, are considerable or that compound or increase other environmental impacts; (2) National Environmental Policy Act of 1969 (NEPA)—an impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions; (3) National Historic Preservation Act of 1966 (NHPA)—the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.

## D

**Decibel (dB):** A logarithmic measurement of noise intensity.

**Delay:** Additional travel time experienced by a person or vehicle beyond what would be reasonable for a given trip.

**Demand:** The traffic volume expected to desire service past a point or segment of the highway system, or the traffic currently arriving or desiring service past such a point, usually expressed as vehicles per hour.

**De Minimis Impact:** When conducting Section 4(f) analysis of historic sites, de minimis impact means that FRA 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 site in question. For parks, recreation areas, and wildlife and waterfowl refuges, a de minimis impact is one that will not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f).

**Demographics:** Quantifiable statistics of a given population such as race, age, sex, income, etc.

**Design Year:** 20 years from the beginning of construction or as defined by the MPO.

**Direct Effect:** A consequence to the environment caused by a proposed project that occurs at the same time and place.

**Disproportionately High Adverse Effects:** An Environmental Justice term used to describe the unequal treatment to low-income and minority populations because of a proposed project or action. Executive Order 12898 directs each Federal agency to identify and address disproportionately high and adverse human health or environmental effects of its projects and actions. See also Environmental Justice.

**Disturbance:** A discrete natural or human-induced event that causes a change in the condition of an ecological system.

**Downstream:** Direction from which traffic is leaving a location. When a vehicle is downstream of an intersection, it means that the vehicle is traveling away the intersection and has already passed through it.

**Duration of Effects:** Minor, temporary effects are those that may occur only during a specific phase of the project, such as during construction or commissioning activities. Permanent effects are those that would occur over a longer duration, such as the lifetime of the project's operation.

## E

**Effect:** A change in the condition or function of an environmental resource or environmental value due to human activity. Synonym to Impact.

**Encroachment:** An encroachment is the gradual advance of the physical limits, typically of new infrastructure or development, beyond previous limits.

**Endangered Species:** Any species listed under the Endangered Species Act of 1973 (ESA) as being in danger of or threatened with extinction throughout all or most of its range. See Endangered Species Act 159 of 1973.

**Endangered Species Act of 1973 (ESA):** The ESA and subsequent amendments (Sections 7, 9, and 10) provide guidance for conserving Federally listed species and the ecosystems upon which they depend. Codified at 16 USC 1531 et seq.

**Environmental Assessment (EA):** Documentation required by the National Environmental Policy Act of 1969 (NEPA), an environmental assessment is a study required to establish all the impacts either positive or negative about one particular project.” An EA is a decision-making tool that presents detailed analysis of a proposed action and alternatives to the proposed action. It will consist of technical evaluation, economic impact and social results that the project will bring.

**Environmental Justice:** The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

**Essential Fish Habitat:** Includes all types of aquatic habitat—wetlands, coral reefs, seagrasses, rivers— where fish spawn, breed, feed, or grow to maturity.

**Ethnographic resources:** Defined in the National Park Service Director’s Order 28 as any “site, structure, object, landscape or natural resource feature assigned traditional legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it.”

## F

**Feasible:** Capable of being implemented.

**Feasible and Prudent:** A feasible and prudent avoidance alternative avoids using Section 4(f) property and does not cause other severe problems of a magnitude that substantially outweighs the importance of protecting the Section 4(f) property. An alternative is not feasible if it cannot be built as a matter of sound engineering judgment. An alternative is not prudent if it compromises the project to a degree that it is unreasonable to proceed with the project in light of its stated purpose and need; it results in unacceptable safety or operational problems; or, after reasonable mitigation, it still causes:

- Severe social, economic, or environmental impacts;
- Severe disruption to established communities;
- Severe disproportionate impacts to minority or low-income populations; or
- Severe impacts to environmental resources protected under other Federal statutes.

An alternative is also not prudent if it results in additional construction, maintenance, or operational costs of an extraordinary magnitude; it causes other unique problems or unusual factors; or it involves multiple factors previously described in this definition, that while

individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

**Free-flow:** Traffic flow which is unaffected by upstream or downstream conditions.

**Freeway:** A divided highway that has a minimum of two lanes in each direction, for the exclusive use of traffic, and with full access control.

**Footprint:** The area covered by a facility or affected by construction activities.

## G

**General Conformity Rule:** The requirement that Federal, state, tribal, and local governments in air quality nonattainment or maintenance areas ensure that Federal actions conform to the initiatives established in the applicable state implementation plan or tribal implementation plan.

**Geographic Information System (GIS):** An information management system designed to store and analyze data referenced by spatial or geographic coordinates.

**Grade-Separated:** At different elevations; on separate levels.

**Greenhouse Gases (GHGs):** A class of air pollutants believed to contribute to the greenhouse global warming effect, including nitrogen oxides (NO<sub>x</sub>), hydrocarbons (HC), and carbon dioxide (CO<sub>2</sub>).

**Groundwater:** Water contained and transmitted through open spaces within rock and sediment below the ground surface.

## H

**Habitat:** An environment where plants or animals naturally occur; an ecological setting used by animals for a particular purpose (for example, roosting habitat, or breeding habitat).

**Hazardous Materials:** Any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety, or the environment, if released.

**Hazardous Waste:** A hazardous material that is no longer of use and will be disposed of. Hazardous waste is regulated by the United States Environmental Protection Agency (EPA) under the Resource Conservation and Recovery Act of 1976 (RCRA).

**Historic Property:** Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP). The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria.

## I

**Impact:** A change in the condition or function of an environmental resource or environmental value due to human activity. Synonym to Effect.

**Impervious Surface:** Surface covered by impenetrable materials, such as parking lots and buildings that increases the potential for water runoff and reduces the potential for groundwater recharge.

**Indirect Impact:** Reasonably foreseeable indirect consequences to the environment caused by a proposed project that would occur either in the future or near to, but not the same location as, the direct impacts associated with the project.

**Induced Growth:** An indirect impact of a project triggering community growth (increases in population, development, etc.) that is influenced and stimulated by the Proposed Action.  
**Infrastructure:** The facilities required for a societal function or service (such as transportation and utility infrastructure—roads, bridges, railroads, pipelines, power lines, etc.).

**Infrastructure:** The facilities required for a societal function or service (such as transportation and utility infrastructure—roads, bridges, railroads, pipelines, power lines, etc.).

**Intelligent Transportation Systems (ITS):** The application of advanced technologies to improve the efficiency and safety of transportation systems.

**Invasive Species:** A species that is non-native to the ecosystem and whose introduction causes or is likely to cause economic or environmental harm or harm to human health.

## J

**Joint Lead Agency:** Project Sponsor that is a state or local government entity receiving funds from the United States Department of Transportation (USDOT) serves as a Joint Lead Agency for preparation of any environmental document in accordance with the National Environmental Policy Act of 1969 (NEPA). Other Federal agencies may also serve as Joint Lead Agencies.

## K

## L

**Lane Configuration:** Layout of lanes, including the number of lanes and type of traffic allowed to use each lane.

**Lead Agency:** The Federal agency that has the principal responsibility for carrying out or approving a project or action and is responsible for preparing environmental review documents in compliance with the National Environmental Policy Act of 1969 (NEPA) and the National Historic Preservation Act of 1966 (NHPA).

**Leq:** A measure of the average noise level during a specified period of time.

**Leq(h), dBA:** Equivalent or average noise level for the noisiest hour, expressed in A-weighted decibels.

**Level of Service (LOS):** A rating using qualitative measures to characterize operational conditions within a traffic stream and their perception by motorists and passengers. Operating conditions within a stream of traffic describing safety, traffic interruptions, speed, freedom to maneuver, comfort and convenience. Six levels of service are defined, designated A through F, with A representing the best conditions and F the worst.

**Limits of Disturbance (LOD):** The geographic area within which ground disturbance is anticipated to occur for the project.

**Listed Species:** A species, subspecies, or distinct vertebrate population segment that has been added to the Federal lists of Endangered and Threatened Wildlife and Plants as they appear in 50 CFR 17.11 and 289 17.12.

**Logical Termini:** Rational endpoints for consideration of transportation improvements and for review of environmental impacts.

**Long Range Transportation Plan (LRTP):** A document resulting from regional or statewide collaboration and consensus on a region or state's transportation system, and serving as the defining vision for the region's or state's transportation systems and services. In metropolitan areas, the plan indicates all of the transportation improvements scheduled for funding over the next 20 years.

## M

**Maintenance:** 1) the process of maintaining or preserving something to keep it in safe and operable condition; 2) Clean Air Act of 1970 (CAA) – an air basin that was formerly in nonattainment, but now meets the established standards for that pollutant.

**Maintenance of Traffic (MOT):** Maintenance of traffic, also known as temporary traffic control, is a process of establishing of a work zone, providing related transportation management and temporary traffic control on streets and highways right-of-way.

**Measure of Effectiveness (MOE):** Parameters describing the quality of service provided by a traffic facility, for example speed and delay.

**Memorandum of Agreement (MOA):** An agreement between agencies that specifies the terms of the project, documents the requirements for responsible party participation, and establishes the specific authority that each responsible party has for making decisions.

**Minimization:** Measures developed during the planning and project development phase of a project to reduce proposed impacts to a resource. Minimization measures could include alignment shifts, a commitment to off-season construction, replacement of land or facilities, restoration, or landscaping.

**Mitigation:** Action or measure undertaken to minimize, reduce, eliminate, or rectify the adverse impacts of a project, practice, action, or activity.

**Mitigation Bank:** A large block of land that is preserved, restored, and enhanced for mitigating projects that impact special-status species, wetlands, or otherwise vegetated biological communities.

**Mobility:** Movement of people across areas.

**Multimodal:** Transportation that involves more than one mode (for example, walking, biking, auto, transit, taxi, train, bus, and air) during a single journey.

**MWCOG:** The Metropolitan Washington County of Governments (MWCOG) is an independent, nonprofit association, with a membership of 300 elected officials from 24 local governments, the Maryland and Virginia state legislatures, and U.S. Congress. MWCOG is also home to the region's metropolitan planning organization, the National Capital Region Transportation Planning Board (TPB), which prepares programs and plans the federal government must approve for the region to receive federal funds.

## N

**National Ambient Air Quality Standards (NAAQS):** Federal standards stipulating the allowable ambient concentrations of specific criteria pollutants.

**National Environmental Policy Act of 1969 (NEPA):** Federal law that establishes national policies and goals for the protection of the environment and requires Federal agencies to consider the environmental impacts of major Federal projects or decisions; share information with the public; identify and assess reasonable alternatives; identify appropriate measures to mitigate potential impacts; and coordinate efforts with other planning and environmental reviews taking place. Codified at 42 USC 4331 et seq.

**National Historic Preservation Act of 1966 (NHPA):** Federal law intended to preserve the nation's historic properties. The act created the National Register of Historic Places (NHRP), the list of National Historic Landmarks (NHL), and the State Historic Preservation Offices (SHPO). Codified at 54 USC 300101 et seq.

**National Register of Historic Places (NRHP):** The official list of the Nation's historic places worthy of preservation, maintained and approved by the National Park Service (NPS). Codified at 54 USC 302101 et seq. For a property to be eligible for listing in the NRHP, it must meet the NPS National Register Criteria for Evaluation.

**Navigable Waters:** Those waters that are subject to the ebb and flow of the tide or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. A determination of navigability, once made, applies laterally over the entire surface of the waterbody, and is not extinguished by later actions or events which impede or destroy navigable capacity.

**Need:** A statement which identifies the transportation problem(s) that the proposal is designed to address and explains how the problem will be resolved. An existing or anticipated travel demand that has been documented through the study process to require a change in access to the state's limited access freeway system.

**No Action Alternative/ No Build Alternative:** Refers to an alternative under which no action would be taken (for example, the proposed project would not be built). Evaluation of a No Action Alternative is required under the National Environmental Policy Act of 1969 (NEPA). This analysis provides a benchmark, enabling decisionmakers to compare the magnitude of environmental effects of the Action Alternatives. It is also an example of a reasonable alternative outside the jurisdiction of the agency which must be analyzed.

**Nonattainment:** An air basin that exceeds Federal or state standards for a criteria pollutant. See also Attainment and Maintenance.

**Nonpoint Source Pollution:** Pollution that collects from a wide area and cannot be traced to a single source. Examples include pesticides or fertilizers that wash into rivers or percolate through the soil into groundwater.

**Notice of Availability (NOA):** Formal notice published in the Federal Register by the Federal lead agency that announces the issuance and public availability of an environmental document.

**Notice of Intent (NOI):** The CEQ regulations and Title 23, Code of Federal Regulations, Part 771, Environmental Impact and Related Procedures, require the sponsoring agency to publish a notice of intent in the Federal Register as soon as practicable after the decision is made to prepare an environmental impact statement and before the scoping process for a proposed action.

## O

**Official with Jurisdiction:** The legal representative of the agency owning or administering a Section 4(f) resource, unless the agency has delegated or relinquished this authority via formal agreement. For historic properties, the Official with Jurisdiction is the State or Tribal Historic Preservation Office. Some Section 4(f) properties, such as an historic park, may have multiple Officials with Jurisdiction.

## P

**Paleontological resources:** Include casts, molds, and trace fossils such as burrows and tracks.

**Participating Agency:** Any Federal agency that is invited by the lead agency to participate in the environmental review process for a project.

**Particulate Pollution:** Air pollution such as dust, soot, and smoke that is irritating but usually not poisonous. Particulate pollution can also include bits of highly toxic solid or liquid substances. Of particular concern are particulate matter smaller than, or equal to, 10 micrometers (PM10) or 2.5 micrometers (PM2.5) in size.

**Point Source Pollution:** Pollution that can be traced to a single source (for example, a smokestack at a factory).

**Practicable:** Available and capable of being done after taking into consideration cost, existing technology, and logistics considering overall project purposes.

**Preferred Alternative:** The alternative identified as preferred by the lead agency or project proponent (the applicant's preferred alternative).

**Programmatic Agreement (PA):** An agreement between agencies that specifies the terms of compliance with one or more Federal laws. A project-specific PA describes the actions that will be taken by the parties to meet their environmental compliance responsibilities for a specific project. A procedural PA establishes a process through which the parties will meet their compliance responsibilities for an agency program, a category of projects, or a particular type of resource.

**Project Development:** Phase after the project planning and Scoping phase during which the alternatives are identified and developed and the environmental consequences of the alternatives are analyzed in the environmental document.

**Project Sponsor:** The entity that would advance the project through final design and construction, including compliance with mitigation measures.

**Proposed Action:** A proposal for a Federal agency to authorize, recommend, or implement an action that addresses a Purpose and Need.

**Public Easement:** Any interest in land that is not possessory and that may be owned by another person, is reserved by the department or granted to the state for use by or the benefit of the public, including an access easement, survey easement, and utility easement.

**Publicly Owned:** Property that is owned by a government authority via either fee simple ownership or permanent easement. In some cases, private lands that are leased by government authorities may also be considered publicly owned for the purpose of Section 4(f) depending upon the terms of the lease (length, cancellation clauses, etc.).

**Public Transportation:** Includes bus, trolley bus, streetcar or trolley car, trams or light rail, transit, passenger railroad, ferryboat, and taxicab service.

**Purpose and Need:** The reason(s) why a project or action is undertaken and the need(s) it is intended to meet or fulfill.

## Q

## R

**Real Property:** Land and any improvements thereto, including but not limited to, fee interests, easements, air or access rights, and the rights to control use, leasehold and leased fee interests.

**Reasonably Foreseeable Future Action:** Those future actions that are likely to occur or probable, rather than those that are merely possible. Used in determining indirect and cumulative impacts for a Proposed Action.

**Record of Decision (ROD):** The final step in the Environmental Impact Statement (EIS) process under the National Environmental Policy Act of 1969 (NEPA). The ROD explains the agency's decision, describes the alternatives the agency considered, and discusses the agency's plans for mitigation and monitoring, if necessary. An EA does not require a ROD.

**Reconstruct:** Rebuild a structure after being altered, damaged or destroyed.

**Rehabilitation:** Restoration of a damaged or deteriorated facility (e.g., roadway and appurtenances) to an improved condition

**Resource Conservation and Recovery Act of 1976 (RCRA):** Federal law that creates the framework for the proper management of hazardous and non-hazardous solid waste. The law describes the waste management program mandated by Congress that gave the United States Environmental Protection Agency (EPA) authority to develop the RCRA program. Codified at 42 USC 6901 et seq.

**Ridership:** The number of people who ride a transportation system.

**Right-of-Way:** A legal right of passage over a defined area of real property. In transit usage, the corridor along a roadway or railway that is controlled by a transit or transportation agency or authority.

**Riparian:** Relating to, living, or located on the bank of a natural water course, lake, or tidewater.  
**Runoff:** The draining away of water and substances carried in it from the surface of an area of land, a building, or structure.

## S

**Scoping:** A process used under the National Environmental Policy Act of 1969 (NEPA) to determine the range of issues to be addressed and for identifying the significant issues related to the proposed action or project to be addressed in an Environmental Impact Statement (EIS).

**Screenline:** A line drawn to cross two or more parallel roadways to determine the total traffic that is traveling in a specific direction. For example, a horizontal line may be drawn to cross two or more north-south roadways to determine the volume of traffic traveling northbound or southbound in that corridor.

**Secondary Impact:** Reasonably foreseeable indirect consequences to the environment caused by a proposed project that would occur either in the future or near, but not the same location as, the direct impacts associated with the project. Synonym to Indirect Impact.

**Section 4(f) of the United States Department of Transportation Act of 1966:** Provisions codified in 49 USC Subtitle I, Section 303(c). Section 4(f) addresses the potential for conflicts between transportation needs and the protection of land for recreational use and resource conservation by providing protection for publicly owned parkland, recreation areas, and historic sites from use. Specifically, the provisions prohibit the Secretary of Transportation from approving any program or project that would require the use of any publicly owned land from a public park, recreation area, wildlife or waterfowl refuge, or land of an historic site of national significance as determined by the Official with Jurisdiction over these lands unless there are no feasible and prudent alternatives to the use of these lands.

**Section 6(f) of the Land and Water Conservation Fund Act of 1964:** Prohibits the conversion of property acquired or developed with funds granted through the act to a nonrecreational purpose without the approval of the National Park Service. Section 6(f) directs the United States Department of the Interior to ensure that replacement lands of equal value (monetary), location, and usefulness are provided as conditions to such conversions.

**Section 106 of the National Historic Preservation Act of 1966 (NHPA):** The section of the NHPA that requires Federal agencies to account for the effects of their undertakings on historic properties and to provide the Advisory Council on Historic Preservation (ACHP) with a reasonable opportunity to comment. In addition, Federal agencies are required to consult on the Section 106 process with State Historic Preservation Offices (SHPOs), Tribal Historic Preservation Offices (THPOs), Indian Tribes, and Native Hawaiian Organizations (NHOs). The

Section 106 process is defined in 36 CFR 800, Protection of Historic Properties. Codified at 54 USC 306108.

***Sensitive Receiver:*** Noise-sensitive locations where increased annoyance can occur, such as residences, schools, hotels/motels, medical facilities, or other vibration-sensitive receivers.

***Sensitive Receptors:*** Locations considered more sensitive to adverse effects from air pollution (for example, residences; preschools and kindergarten through grade 12 schools; daycare centers; healthcare facilities such as hospitals, retirement homes, and nursing homes; and parks and/or playgrounds).

***Special Waters of the District of Columbia (SWDC):*** Waters designated as SWDC have quality better than needed for their current use or have scenic or aesthetic importance and shall be maintained at or above the existing level.

***Significant:*** In Council on Environmental Quality (CEQ) usage, describes an impact that is sufficiently adverse, intense, or prolonged to require mitigation. In National Environmental Policy Act of 1969 (NEPA) usage, to determine an impact is significant the context and intensity (the degree to which the effects on quality of human environment are controversial, whether the action threatens a violation of Federal, state, or local law, and others) of the action must be considered.

***State Implementation Plan (SIP):*** Statewide plan for complying with the Clean Air Act of 1970 (CAA). The SIP consists of guidance, rules, and agreements that the state will use to clean up polluted areas.

***Stormwater Pollution Prevention Plan (SWPPP):*** A plan that specifies site management activities to be implemented during site development, including construction stormwater best management practices, erosion and sedimentation controls, dewatering (nuisance water removal), runoff controls, and construction equipment maintenance.

***Study Area:*** A defined area or distance that is established to determine potential effects associated with the proposed action. Study areas vary in size and distance depending on the type of effects being considered.

## T

***Take:*** To harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct (as defined in Section 3 of the Endangered Species Act of 1973). See Endangered Species Act of 1973.

***Threatened and Endangered Species:*** Any species listed under the Endangered Species Act of 1973 as being in danger of or threatened with extinction throughout all or most of its range.

***Throughput:*** The number of vehicles or persons that traverse past a point or uniform segment of a lane or roadway during a specified time period, usually expressed as vehicles or persons per hour.

***Through trip:*** A trip which has an origin and destination outside of a specified area.

***Traditional Cultural Properties and Resources (TCPs):*** Places associated with the cultural practices or beliefs of a living community that are rooted in that community's history. Examples of TCPs include, but are not limited to, any place where people practice a ritual activity or festival; any place of an event that is of significance to a group or community and is referred to in stories; and any place that is a vital and beloved part of the community and that may give the community a special identity or defining character.

***Transportation Demand Management (TDM):*** Programs designed to reduce demand for transportation through various means, such as the use of transit and alternative work hours.

***Transportation Improvement Program (TIP):*** A document prepared by a metropolitan planning organization that lists projects to be funded with FHWA/FTA funds for the next one- to three-year period.

***Transportation System Management (TSM):*** Programs and actions designed to improve efficiency of the existing transportation system without construction of additional lanes of roadway, e.g. adjust signalization of intersections, access management, improvements to other modes.

***Travel Demand Forecast:*** A forecast for travel demand on future or modified transportation system alternatives using existing or projected land use, socioeconomic, and transportation services data.

***Travel Lane:*** The lane(s) on a roadway for moving vehicular traffic.

***Travel Time:*** The time spent traveling from a place of origin to a place of destination. Total travel time includes the time required to reach a station or an airport, time spent waiting for the next scheduled train or flight, time spent getting to the boarding area, time spent checking and retrieving luggage, and time spent getting a rental car or taxi, as well as time spent to reach the final destination.

***Treatment Train:*** A treatment train is a sequence of multiple stormwater measures (or treatments) which are designed to meet the needs of a particular environment, in order to minimize the detrimental effects of high energy stormwater flows on receiving waters. In the case of this project, the incorporation of rain gardens and bio-swales will intercept runoff and increase infiltration before stormwaters enter the open or closed drainage system. Within the open or closed system, the energy of stormwater flow can be dissipated by the increased resistance of such elements as rough pipe surfaces, broken slope flow lines and tumbling flow dissipators within the pipes themselves. And finally, at the system's exit, energy is further dissipated by outfall elements such as baffled-exit aprons and riprap aprons. Any combination of these treatments can be implemented solely or in combination depending on the projected stormwater flow predictions.

***Trips:*** Short trips are normally intracity. Long trips are normally interstate, regional, or interregional.

***Typical Section:*** Typical sections are a graphical representation of existing conditions or work to be performed within the limits of a project. A typical cross section represents the predominant section of roadway and shows the major elements.

**U**

**Upstream:** Direction from which traffic is arriving at a location. When a vehicle is upstream of an intersection, it means that the vehicle is traveling toward the intersection and has yet to reach it.

**Undertaking:** A project, activity, or program funded in whole or in part by a Federal agency, including those carried out by or on behalf of a Federal agency, those carried out with Federal financial assistance, and those requiring a Federal permit, license, or approval.

**V**

**Vertical Curve:** A vertical curve is a civil engineering term used to describe the smooth curve that is inserted between two sections of a road that are at different slopes in order to avoid an abrupt transition for traveling vehicles in passing from one to the other.

**Volume to capacity ratio (v/c):** Volume to capacity ratio; describes the relationship between the amount of traffic a roadway was designed to carry and the amount of traffic it actually carries. Related to Level of Service (LOS).

**Vibration:** A rapid linear motion of a particle or of an elastic solid about an equilibrium position.

**Vibration decibels (VdB):** A logarithmic measurement of vibration intensity.

**Viewshed:** The total area visible from a single observer position, or the total area visible from multiple observer positions. Viewsheds include scenes from highways, trails, campgrounds, towns, cities, or other viewer locations.

**Visual Character:** The physical attributes of the landscape.

**Visual Quality:** The character or inherent features of a viewshed.

**Visual Resources:** The natural and artificial features of a landscape that characterize its form, line, texture, and color.

**W**

**Waters of the United States (WOUS):** The Clean Water Act of 1972 (CWA) defines waters of the United States as (1) all waters that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide; (2) all interstate waters including interstate wetlands; and (3) all other waters, such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce (33 CFR 328.3[a]).

**Watershed:** The area that contributes water to a drainage system or stream.

**Wetland:** An area of land with soil that is saturated with moisture, either permanently or seasonally. According to the United States Army Corps of Engineers Wetland Delineation Manual, three criteria must be satisfied to classify an area as a jurisdictional wetland: (1) a

predominance of plant life that is adapted to life in wet conditions (hydrophytic vegetation); (2) soils that saturate, flood, or pond long enough during the growing season to develop anaerobic conditions in the upper part (hydric soils); and (3) permanent or periodic inundation or soils saturation, at least seasonally (wetland hydrology).

**Wildlife Corridor:** A belt of habitat that is essentially free of physical barriers such as fences, walls, and development, and connects two or more larger areas of habitat, allowing wildlife to move between physically separate areas.

X

Y

Z