



GLOSSARY OF RELEVANT TERMS

A

Activity 11 - Transportation Enhancements (TE) eligible activity, known in law as “Environmental Mitigation to address water pollution due to highway runoff or reduce vehicle-caused wildlife mortality while maintaining habitat connectivity,” which allows communities to decrease the negative impacts of roads on the natural environment, such as water pollution and wildlife habitat fragmentation. Projects funded in this category seek to reduce these environmental impacts by controlling surface runoff and improving wildlife habitat connectivity with wildlife passages. Since the TE program began in 1992, approximately 1 percent of available TE funds have been programmed for Activity 11 projects.

Air Quality Planning Agency - Develops regional emissions budget for each metropolitan area where air quality fails to meet national standards established to protect public health; determines emissions budgets for mobile sources that must be reflected in the Long Range Transportation Plan (LRTP) adopted by the Metropolitan Planning Organization (MPO)

American Association of State Highway Transportation Officials (AASHTO) - Serves as the professional association for state transportation agencies; sets standards and guidelines for building, maintaining and operating roads; lobbies state and federal legislature for more transportation funding and less environmental protection restrictions; operates in quasi-governmental fashion in that they set policy and practice standards that must be followed by any organization that provides transportation services

American Highway Users Alliance (AHUA) - Nonprofit advocacy organization representing automobile related businesses, including Ford Motors, AAA and Goodyear; lobbies Congress for additional road building and less environmental protection restrictions; tracks a list of the most congested roadways

American Planning Association (APA) - Serves as the professional association representing planners at the urban, suburban, regional and rural level and within all disciplines, including transportation planners. The American Institute of Certified Planners conducts research on advances in the art and science of planning; serves as a forum for exchange of information among planning professionals; lobbies for better planning in transportation, land use and smart growth

American Public Transportation Association (APTA) - Advocates for public transportation programs and initiatives; lobbies local, state and federal government in favor of increased funding for public transportation improvements and new systems

American Road & Transportation Builders Association (ARTBA) - Serves as the lobby arm of the transportation construction industry; lobbies for increased transportation funding and fewer environmental and other restrictions

American Society of Civil Engineers (ASCE) - Serves as the national professional association representing civil engineers; publishes the “Report Card for America’s Infrastructure”; lobbies for increased transportation funding

American Society of Landscape Architects (ASLA) - Serves as the national professional association representing landscape architects; lobbies for landscape planning, design and

preservation and improved water resources management; lobbies for sustainable, safe and multi-modal transportation choices as part of landscape design

Appropriations committees in the House and Senate - Annually appropriates transportation funding according to the authorization legislation (ISTEA, TEA-21, SAFETEA-LU)

Associated General Contractors of America (AGCA) - Serves as the lobby arm of the construction industry; lobbies for increased funding for construction and fewer environmental and other restrictions

Association of Metropolitan Planning Organizations - Serves as the professional association for all metropolitan planning organizations; lobbies state and federal legislature for a larger share of transportation funding and authority at the metropolitan level

B

Bridge - A structure including supports erected over a depression or an obstruction, such as water, highway, or railway, and having a track or passageway for carrying traffic or other moving loads, and having an opening measured along the center of the roadway of more than 20 feet between under copings of abutments or spring lines of arches, or extreme ends of openings for multiple boxes; it may also include multiple pipes, where the clear distance between openings is less than half of the smaller contiguous opening.

Bridge Structure - A two character code for recording the type of bridge structure. Code as follows: SS-simple span, CS-continuous span, SC-combination simple and cantilever, CC-combination continuous and cantilever, O-other.

C

Core Zone - Within a larger protected reserve or park, an area of critically important habitat in which development and other kinds of disruptive activities are prohibited.

Corridor - A broad geographic area, defined by logical, existing and forecasted travel patterns served by various modal transportation systems that provide important connections within and between regions of the state for people goods, and services. Travel within the corridor may include vehicular, rail, transit, water, air, or non-motorized.

Critical Habitat - The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 4 of this Act, on which are found those physical or biological features essential to the conservation of the species and which may require special management considerations or protection; and specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of this Act, upon a determination by the Secretary that such areas are essential for the conservation of the species.

D

E

Ecosystem - A three-dimensional volume of space, including all its physical and biological components, which are recognized to be interconnected. An ecosystem contains soil, air, and all organisms living in the soil or air. An ecosystem is more or less homogenous both as to the form and structure of the land and as to the vegetation supported thereon. The ecosystem concept is hierarchical. For instance, large ecosystems defined by a relatively homogenous microclimate and physiography may be subdivided into smaller ecosystems based on finer distinctions in physiography, soil, and vegetation.

Ecosystem Management - "Ecosystem management integrates scientific knowledge of ecological relationships within a complex sociopolitical and value framework toward the general goal of protecting native ecosystem integrity over the long term." (Edward Grumbine, What is Ecosystem Management? Conservation Biology 8:2:27-38.)

"Ecosystem management is a holistic approach to natural resource management, moving beyond a compartmentalized approach to natural resource management, moving beyond a compartmentalized approach focusing on the individual parts of the forest. It is an approach that steps back from the forest stand and focuses on the forest landscape and its position in the larger environment in order to integrate the human, biological and physical dimension of natural resource management. Its purpose is to achieve sustainability of all resources." (Jack Ward Thomas, Former Chief, Forest Service, USDA. February 3, 1994.)

Edge Effect - The negative influence of a habitat edge on interior conditions of a habitat, or on species that use interior habitat. The effect of adjoining habitat types on populations in the edge ecotone, often resulting in more species in the edge than in either habitat alone.

Effect or Impact - Under NEPA regulations, a direct result of an action that occurs at the same time and place; or an indirect result of an action which occurs later in time or in a different place and is reasonably foreseeable; or the cumulative results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Under ESA section 7 regulations, "effects of the action" means "the direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action that will be added to the environmental baseline.

Environmental impact statement (EIS) - A detailed written statement required by section 102(2)(C) of NEPA containing, among other things, an analyses of environmental impacts of a proposed action and alternative considered, adverse effects of the project that cannot be avoided, alternative courses of action, short-term uses of the environment versus the maintenance and enhancement of long-term productivity, and any irreversible and irretrievable commitment of resources.

Environmental Restoration - Restitution for the loss, damage, or destruction of natural resources arising out of the accidental discharge, dispersal, release or escape into or upon the land, atmosphere, watercourse, or body of water of any commodity transported by a motor carrier. This shall include the cost of removal and the cost of necessary measure taken to minimize or mitigate damage to human health, the natural environment, fish, shellfish, and wildlife.

Environmentally Sensitive Area - An area of environmental importance which is in or adjacent to navigable waters

F

Federal Highway Administration (FHWA) - Interprets transportation law, develops guidance, rules and regulations; manages several programs and provides technical assistance, training and research to state transportation agencies

Federal Lands Highway Program (FLHP) - Oversees all phases of highway policy, planning, research, design, operations, construction and maintenance in cooperation with federal land-managing agencies to provide access to federally owned lands

Federal Transit Administration (FTA) - Administers federal funding to support a variety of locally planned, constructed and operated public transportation systems throughout the country, including buses, subways, light rail, commuter rail, streetcars, monorail, passenger ferry boats, inclined railways and people movers

Federal Register - Daily publication which provides a uniform

system for making regulations and legal notices issued by the Executive Branch and various departments of the Federal government available to the public.

Federally Listed Species - Under the Endangered Species Act (ESA), the federal government, in particular the U.S. Fish and Wildlife Service, is required to list species that are considered threatened or endangered. Listed species are protected by the provisions of the ESA.

Fencerow Scale - With respect to corridors, the connection of habitat patches by narrow rows of habitat, usually effective only for small, edge-tolerant species.

Finding of no significant impact (FONSI) - A document prepared in compliance with NEPA, supported by an EA, which briefly presents why a Federal action will not have a significant effect on the human environment and for which an EIS, therefore, will not be prepared.

Fish or wildlife - Any member of the animal kingdom, including without limitation any mammal, fish, bird, amphibian, reptile, mollusk, crustacean, arthropod or other invertebrate, and includes any part, product, egg, or offspring thereof, or the dead body or parts thereof.

Fragmentation - The disruption of extensive habitats into isolated and small patches.

Fragmentation has at least two negative components for biota: loss of total habitat area, and smaller, more isolated remaining habitat patches.

Freeway - An expressway with full control of access.

G

Gap - Low point or opening between hills or mountains or in a ridge or mountain range.

Gap Analysis - the use of various remote sensing data sets to build overlaid sets of maps of various parameters (e.g., vegetation, soils, protected areas, species distributions) to identify spatial gaps in species protection and management programs.

Gene Flow - The uni- or bi-directional exchange of genes between populations due to migration of individuals and subsequent successful reproduction in the new population.

Gene Pool - The sum total of genes in a sexually reproducing population, or deme

Genetic Drift - Random gene frequency changes in a small population due to chance alone.

Genetically effective population size - The size of an idealized population that would have the same rate of increase in inbreeding, or decrease in genetic diversity through drift, as the population in question. The functional size of a population, in a genetic sense, based on numbers of actual breeding individuals and the distribution of offspring among families. Typically smaller than the census size of the population.

Geographical Information System (GIS) - A system of hardware, software, and data for collecting, storing, analyzing, and disseminating information about areas of the Earth. For Highway Performance Monitoring System (HPMS) purposes, GIS is defined as a highway network (spatial data which graphically represents the geometry of the highways, an electronic map) and its geographically referenced component attributes (HPMS section data, bridge data, and other data including socioeconomic data) that are integrated through GIS technology to perform analyses. From this, GIS can display attributes and analyze results electronically in map form.

Governor - Appoints the head of the state transportation agency and often members of a state transportation board; submits legislation to the state legislature; initiates the state budget process

H

Habitat - The location where a particular taxon of plant or animal lives and its surroundings, both living and non-living; the term includes the presence of a group of particular environmental conditions surrounding an organism including air, water, soil, mineral elements, moisture, temperature, and topography.

Habitat Connectivity - Maintaining biodiversity and ecosystem functions requires habitat connectivity. As connectivity between key habitat elements is lost, isolation deprives species of their daily, seasonal and lifetime needs. Loss of connectivity deprives animals of resources, prevents some animals from finding mates, reduces gene flow, prevents animals from re-colonizing areas where extirpations have occurred, and ultimately prevents animals from contributing to ecosystem functions such as pollination, seed dispersal, control of prey numbers, and resistance to invasive species.

Highway - Any road, street, parkway, or freeway/expressway that includes rights-of-way, bridges, railroad-highway crossings, tunnels, drainage structures, signs, guardrail, and protective structures in connection with highways. The highway further includes that portion of any interstate or international bridge or tunnel and the approaches thereto.

Highway Construction Project - A project financed in whole or in part with Federal-aid or Federal funds for the construction, reconstruction or improvement of a highway or portions thereof, including bridges and tunnels.

Highway Research Information Service (HRIS) - A computer-based information storage and retrieval system developed by the Transportation Research Board with financial support from the state highway and transportation departments and the Federal Highway Administration. It consists of summaries of research projects in progress and abstracts of published works.

Highway Trust Fund - The federal account established by law to hold receipts collected by the government and earmarked for highway programs and a portion of the federal mass transit program. It is supported by the federal gasoline tax and other user taxes.

Highway User Fee or Tax - A charge levied on persons or organizations based on the use of public roads. Funds collected are usually applied toward highway construction, reconstruction and maintenance. Examples include vehicle registration fees, fuel taxes, and weight-distance taxes.

House of Representatives Committee on Transportation and Infrastructure - Has jurisdiction over public infrastructure, including such major projects as highways, bridges, airports, locks and dams, and public transit systems

Hot spot - A geographic location characterized by unusually high species richness, often of endemic species.

I

Inbreeding depression - A reduction in fitness and vigor of individuals as a result of increased homozygosity through inbreeding in a normally outbreeding population.

Incident - Collisions, derailments, personal casualties, fires, and property damage in excess of \$1000, associated with transit agency revenue vehicles; all other facilities on the transit property; and service vehicles, maintenance areas and rights-of-way

Indicator Species - A species used as a gauge for the condition of a particular habitat, community, or ecosystem. A characteristic or surrogate species for a community or ecosystem.

Infrastructure - In transit systems, all the fixed components of the transit system, such as rights-of-way, tracks, signal equipment, stations, park-and-ride lots, but stops, maintenance facilities. In transportation planning, all the relevant elements of the environment in which a transportation system operates.

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) - Signed December 1991, ISTEA authorized highways, highway safety, and mass transit for the following six years. Total funding of about \$155 billion was available over fiscal years 1992-1997. The purpose of the Act was clearly enunciated in its statement of policy "to develop a National Intermodal Transportation System that is economically efficient, environmentally sound, provides the foundation for the

Nation to compete in the global economy and will move people and goods in an energy efficient manner."

Intermodalism - Most narrowly, it refers to containerization, piggyback service, or other technologies that provide the seamless movement of good and people by more than one mode of transport. More broadly, intermodalism refers to the provision of connections between different modes, such as adequate highways to ports or bus feeder services to rail transit. In its broadest interpretation, intermodalism refers to a holistic view of transportation in which individual modes work together or within their own niches to provide the user with the best choices of service, and in which the consequences on all modes of policies for a single mode are considered; this view has been called balanced, integrated, or comprehensive transportation in the past.

International Conference on Ecology and Transportation (ICOET) - Conducted every two years, ICOET is designed to address the broad range of ecological issues related to surface transportation development, providing the most current research information and best practices in the areas of wildlife, fisheries, wetlands, water quality, overall ecosystems management, and related policy issues. ICOET is a multi-disciplinary, inter-agency supported event, administered by the Center for Transportation and the Environment (CTE).

Interstate - Limited access divided facility of at least four lanes designated by the Federal Highway Administration as part of the Interstate System.

Interstate Highway - A divided arterial highway for through traffic with full or partial control of access and grade separations at major intersections.

Interstate Highway System - This system is part of the Federal Aid Primary system. It is a system of freeways connecting and serving the principal cities of the continental United States.

Intrinsic value - The worth of an entity independent from external circumstances or its value to humans; value judged on inherent qualities of an entity rather than value to other entities.

J

K

Keystone species - Species that have a disproportionately large effect on other species in a community.

L

Landscape mosaic scale - With respect to corridors, the connection of major landscape features using broad habitats, including representation of interior habitat, as corridors.

Line corridor - A simple, narrow corridor consisting of all edge habitat, usually connecting small habitat patches.

Linear Referencing System (LRS) - The total set of procedures for determining and retaining a record of specific points along a highway. Typical systems used are mile point, milepost, reference point, and link-node.

Listed species - Species, including subspecies and distinct vertebrate populations, of fish, wildlife, or plants listed as either endangered or threatened under section 4 of the ESA.

Local planning body - Develops local comprehensive land-use plan including elements for transportation that the MPO is supposed to consider in setting priorities

Local Transportation Agency / Public Works - Manages and operates local roads, streets, bridges, and a share of Federal-aid Highways (varies by state)

Long Range Transportation Plan (LRTP) - Twenty (or more) year strategy and capital improvement program developed to guide the effective investment of public funds in multi modal

transportation facilities. The plan is updated every 4 years, and may be amended as a result of changes in projected Federal, State and local funding, major improvement studies, Congestion Management Process plans, interchange justification studies, and environmental impact studies. The Plan provides the context from which the Statewide Transportation Improvement Program (STIP) is drawn.

M

Maintenance - Inspection, overhaul, repair, preservation, and the replacement of parts, but excludes preventive maintenance. All expenses, both direct and indirect, specifically identifiable with the repair and upkeep of property and equipment.

Mayor/City and County Council - Control local revenues but have little authority over federal highway dollars (except in California), even though their jurisdictions own and operate roads, streets, bridges and nearly one-half of all federal-aid highways (varies by state); serve on MPO Board with state transportation agency, regional transit agency and others appointed by the governor

Metapopulation - A network of semi-isolated populations with some level of regular or intermittent migration and gene flow among them, in which individual populations may be extinct by them be colonized from other populations.

Metropolitan Planning Organization (MPO) - Primarily a planning body; and usually does not control land use or operate transportation facilities; governed by a board of local elected officials, local and state transportation agency representatives and state representatives; prepares a Long Range Transportation Plan (LRTP) and a Transportation Improvement Program (TIP) that meet the air quality emission budget (in non-attainment areas); directly controls only a limited amount of federal funds for projects

Minimum viable population size - The smallest isolated population size that has a specified percent chance of remaining extant for a specified period of time in the face of foreseeable demographic, genetic, and environmental stochasticities, plus natural catastrophes.

Mitigation - Under NEPA regulations, to moderate, reduce or alleviate the impacts of a proposed activity, including: a) avoiding the impact by not taking a certain action or parts of an action; b) minimizing impacts by limiting the degree or magnitude of the action; c) rectifying the impact by repairing, rehabilitating or restoring the affected environment; d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; e) compensating for the impact by replacing or providing substitute resources or environments.

Mobile link species - Mobile keystone species that influence the survival or reproductive success of other species through their movement over a geographic area.

Monetizing - The process of placing monetary value on typically non-monetary goods and processes such as biological material or ecological processes.

Multimodal Transportation - Often used as a synonym for intermodalism. Congress and others frequently use the term intermodalism in its broadest interpretation as a synonym for multimodal transportation. Most precisely, multimodal transportation covers all modes without necessarily including a holistic or integrated approach.

Multiple use concept - Refers to the simultaneous and compatible use of public land and water resources by different interest groups. For example, U.S. public law requires that national forests be open to recreational use, timber extraction, mining or other concessions, and biodiversity protection.

Multiple Use Module (MUM) - Consisting of a central, protected core area surrounded by buffer zones of increasing human use further from the core.

N

National Association of Regional Councils - Serves as the professional association for regional councils and MPOs; lobbies state and federal legislatures for a larger share of transportation funding and authority at the regional council and MPO level

National Environmental Policy Act (NEPA) - Federal legislation establishing national policy that environmental impacts will be evaluated as an integral part of any major Federal action. Requires the preparation of an EIS for all major Federal actions significantly affecting the quality of the human environment.

National Highway System (NHS) - The Intermodal Surface Transportation Efficiency Act of 1991 directed the Secretary of Transportation to develop a proposed National Highway System (NHS) to be approved by Congress. All highways deemed to be of significant importance to the economic and security interests of our Nation are included in the NHS. "The purpose of the National Highway System is to provide an interconnected system of principal arterial routes which will serve major population centers, international border crossings, ports, airports, public transportation facilities and other intermodal transportation facilities and other major travel destinations; meet national defense requirements; and serve interstate and interregional travel." -- Title 23, United States Code, Section 103. The continued prosperity and growth of our country and the well being of its citizens largely depends on a strong intermodal transportation system. The Nation's highway, waterway, rail and air systems all provide critical services to meet the growing transportation needs of industry and commerce as well as individual citizens. The NHS links all modes of travel to provide a seamless transportation system in this country.

National Park Service (NPS) - Oversees a network of nearly 400 natural, cultural and recreational sites and helps communities preserve and enhance important local heritage and recreational opportunities; may be consulted during early long-range transportation planning at the state and metropolitan levels; may participate in the environmental review of highway projects, particularly those with potential impacts to national parks; jointly administers the Park Roads and Parkways program with FHWA; conducts park planning that includes transportation elements

National Society of Professional Engineers (NSPE) - Promotes engineering licensure and ethics, protects legal rights of engineers, provides continuing education and distributes industry news to the profession

National Stone, Sand and Gravel Association (NSSGA) - Serves as the lobby arm of the stone, sand and gravel industry that supplies the raw materials for road building and other development. Lobbies Congress for increased funding for construction and fewer environmental and other restrictions; member of the National Endangered Species Act Reform Coalition, seeking substantial weakening of the act Transportation Construction Coalition (TCC); group of 27 national associations and labor unions that make their living from federal transportation programs; formed during the reauthorization of TEA-21 to lobby for more funding and less restrictions on road building

National Transportation System (NTS) - An intermodal system consisting of all forms of transportation in a unified, interconnected manner to reduce energy consumption and air pollution while promoting economic development and supporting the Nation's preeminent position in international commerce. The NTS includes the National Highway System (NHS), public transportation and access to ports and airports.

Network - A reserve system connecting multiple nodes and corridors into a landscape that allows material and energy flow among the various components.

Node - An area with unusually high conservation value that may serve as one center of a regional conservation network.

O

P

Parkway - A highway that has full or partial access control, is usually located within a park or a ribbon of park-like developments, and prohibits commercial vehicles. Buses are not considered commercial vehicles in this case.

Pass-Through Funds - Operating financial assistance passed through to other transit agencies that have no relationship to the directly operated and/or purchased transportation services provided by the designated recipient.

Plans, Specifications and Estimates (PS&E) - The documentation submitted by the project sponsor that must receive State DOT approval before Federal funds can be obligated to proceed with contract letting and project construction.

Population viability analysis (PVA) - A comprehensive analysis of the many environmental and demographic factors that affect survival of a population, usually applied to small populations at risk of extinction.

Preliminary Engineering Phase - The project development phase that includes preparation of environmental, and construction documentation, such as plans, specifications, and cost estimate. Preliminary Right of Way work, appraisal maps and estimates may also be reimbursed with Federal-aid funding for the preliminary engineering phase.

Preservation - The act or process of applying measures to sustain the existing form, integrity, and material of a building or structure, and the existing form and vegetative cover of a site.

Proposed action - Under NEPA regulations, a plan that has a goal which contains sufficient details about the intended actions to be taken or that will result, to allow alternatives to be developed and its environmental impacts to be analyzed.

Proposed species - A species for which a proposed rule to add the species to the Federal list of threatened and endangered species has been published in the Federal Register.

Q

R

3R - Level of road improvement, including resurfacing, restoration and rehabilitation.

Record of Decision - Under NEPA regulations, a concise public record of decision prepared by the Federal agency, pursuant to NEPA, that contains a statement of the decision, identification and discussion of all factors used by the agency in making its decision, identification of all alternatives considered, identification of the environmentally preferred alternative, a statement as to whether all practical means to avoid or minimize environmental harm from the alternative selected have been adopted (and if not, why they were not), and a summary of monitoring and enforcement measures where applicable for any mitigation.

Regional Planning Organization (RPO) - Assists local planning organizations in developing and implementing transportation strategies and solutions for a given area; can encompass several local regions and sometimes multiple states

Regional Scale - With respect to corridors, the largest scale of activity, in which major swaths of habitat connect regional networks of reserves.

Regulation - Any agency statement of general or particular applicability designed to implement, interpret, or prescribe policy in order to carry out the purpose of a law. Synonymous with "rule" it has the force of law.

Rehabilitation - The act or process of returning a property to a state of utility through repair or alteration which makes possible an efficient contemporary use while preserving those portions or features of the property which are significant to its historical, architectural, and cultural values.

Restoration - The act or process of accurately recovering the form and details of a property and its setting as it appeared at a particular period of time by means of the removal of later work or by the replacement of missing earlier work.

Restoration Ecology - The process of using ecological principles and experience to return a degraded ecological system to its former or original state

Right of Way - The land (usually a strip) acquired for or devoted to highway transportation purposes.

Riparian - Pertaining to land adjacent to the water line.

Run Off - That portion of the precipitation that flows over the land surface and ultimately reaches streams to complete the water cycle. Melting snow is an important source of this water as well as all amounts of surface water that move to streams or rivers through any given area of a drainage basin.

Rural Area - Outside the limits of any incorporated or unincorporated city, town, village, or any other designated residential or commercial area such as a subdivision, a business or shopping center, or community development. Include all areas of a state outside of the Federal Highway Administration (FHWA) approved adjusted census boundaries of small urban and urbanized areas.

S

Scenic byway - America's Byways are designated by the U.S. Secretary of Transportation from nominations made by communities wishing to recognize and celebrate roads for their outstanding scenic, cultural, historic, natural, recreational and archeological qualities.

Section 6001 - Congress included this provision in the 2005 highway bill that requires transportation planners to consult with state, tribal and local agencies responsible for land use management, natural resources, environmental protection, conservation and historic preservation; the consultation must involve comparison of transportation plans to conservation plans or maps and comparison of transportation plans to inventories of natural or historic resources; and in consultation with federal, state and tribal land management, wildlife and regulatory agencies, each long range transportation plan shall include a discussion of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the long-range statewide transportation plan.

Section 4(f) of the U.S. Department of Transportation Act - Section 4(f) resources consist of publicly owned parks, recreation areas, wildlife and waterfowl refuges, and national, state, or local historic sites. FHWA cannot approve a project that uses land from a Section 4(f) resource unless it determines that no feasible and prudent alternative exists. If that finding is made, all efforts must be made to minimize harm. Courts have interpreted "use" to mean any substantial impairment of the significance even where there is no physical use.

Section 7 (ESA) - The section of the ESA which describes the responsibilities of Federal agencies in conserving threatened and endangered species. Section 7(a)(1) requires all Federal agencies "in consultation with and with the assistance of the Secretary [to] utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species." Section 7(a)(2) requires Federal agencies to "ensure that any action authorized, funded, or carried out by such agency...is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of..." designated critical habitat.

Section 9 (ESA) - The section of the ESA dealing with prohibited acts, including the "take" of any listed species without specific authorization of the Fish and Wildlife Service or the National Marine Fisheries Service for species under the jurisdiction of each agency.

Senate Environment and Public Works Committee - Has jurisdiction over all matters relating to environmental protection and resource utilization, including everything from air and water pollution to highways, bridges and dams

Sink - A habitat in which local mortality exceeds local reproductive success for a given species.

Source and sink dynamics - Spatial linkage of population dynamics such that high-quality habitats (sources) provide excess individuals that maintain population density, through migration, in low-quality habitats (sinks).

Species - Any subspecies of fish or wildlife or plants, and any distinct population segment of any species or vertebrate fish or wildlife which interbreeds when mature.

Stakeholders - Refers to groups or their representatives having an interest (stake) in the outcome of the project. Typical stakeholders for transportation projects include elected officials, planning and zoning commissioners, metropolitan planning organizations, sewer districts, utility companies, business interest, agencies, and neighborhood associations.

State Legislature - Enacts state transportation laws and annual transportation

Appropriations; approves funding levels for state programs; maintains oversight for implementation

State-Listed Species - In addition to the federal listing system under the Endangered Species Act, many states have enacted parallel legislation pertaining to the protection of threatened and endangered species in those states. Such species are not necessarily threatened or endangered in other state, nor are they necessarily listed as federal threatened or endangered species.

State Transportation Agencies - Largest units of government that develop transportation plans and projects; responsible for setting transportation goals for the state; responsible for planning safe and efficient transportation between cities and towns in state

State Transportation Board/Commission - Plans, designs, builds and maintains state highway systems; owns and operates other transportation facilities—ferries, airports, transit services, rail lines; develops statewide long-range transportation plan and transportation improvement program

Statewide Transportation Improvement Program (STIP) - The Transportation Equity Act for the 21st Century (TEA-21) requires each designated Metropolitan Planning Organizations (MPO) to develop a Transportation Improvement Program (TIP), and the state to develop a Statewide Transportation Improvement Program (STIP) as a condition to securing federal funds for transportation projects.

Stewardship - Management of natural resources that conserves them for future generations. Usually used to distinguish from short-term, utilitarian management objectives.

Stochastic - Any random process, such as mortality due to weather extremes

Strip corridor - A broad corridor consisting of some interior habitat and intact and functioning communities.

Succession - The natural, sequential change of species composition of a community in a given area

Surface Transportation Policy Partnership (STPP) - Nonprofit coalition striving for improved safety, more equitable distribution of funding and multi-modal solutions through better transportation policy and practice

Sustainability - Management practices that do not take more from an ecosystem than it can provide. Theoretically, sustainable management practices can continue in perpetuity, since they do not lead to exhaustion of natural resources.

Sustainable Development - Refers to attempts to meet economic objectives in ways that do not degrade the underlying environmental support system.

Human activities conducted in a manner that respects the intrinsic value of the natural world, the role of the natural world in human well-being, and the need for humans to live on the income from nature's capital rather than the capital itself.

T

Take - Under section 3(18) of the ESA, "...to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" with respect to federally listed endangered species of wildlife. Federal regulations provide the same taking prohibitions for threatened wildlife species. The term has since been interpreted to include significant habitat modification or destruction.

TEA-21 (The Transportation Equity Act for the 21st Century) - Enacted June 9, 1998 as Public Law 105-178. TEA-21 authorizes the Federal surface transportation programs for highways, highway safety, and transit for the 6-year period 1998-2003. The TEA 21 Restoration Act, enacted July 22, 1998, provided technical corrections to the original law.

Threatened species - any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Transit agencies - Public and private organizations that provide transportation for the public. Public transportation includes buses, subways, light rail, commuter rail, monorail, passenger ferryboats, trolleys, inclined railways and people movers.

Transportation bill - The bill refers to the market value of all purchases of transportation services and facilities; it includes all domestic expenditures made by an economy for transportation purposes. Although the transportation bill does not reflect several significant non-market costs, it is a useful indicator of a country's transportation expenditures, and transportation analysts closely follow changes in the bill and its components.

Transportation Enhancements (TE) - TE activities have been eligible for funding under the Surface Transportation Program (STP) since its inception under the Intermodal Surface Transportation Efficiency Act of 1991. In 1998, Congress amended the definition of TE activities by inserting the phrase "relates to surface transportation" as part of TEA-21. Congress also added two eligible categories (safety and educational activities for pedestrians and bicyclists, and transportation museums), and modified others (scenic or historic highway program tourist and welcome centers, and reduce wildlife mortality). TE activities benefit the traveling public and help communities to increase transportation choices and access, enhance the built and natural environment, and provide a sense of place. To be eligible for funding, a TE project must fit into one or more of the 12 eligible categories and relate to surface transportation. TE projects may be enhancements added to larger Federal-aid highway projects, or may be independent projects unrelated to highway projects.

Transportation Improvement Program - As stated in FHWA-UMTA joint regulations that govern transportation programming, a prioritized program of transportation projects to be implemented in appropriate stages over several years (i.e., 3-5 years). The projects are recommended from those in the transportation systems management element and the long-range element of the planning process. This program is required as a condition for a locality to receive federal transit and highway grants.

Transportation Research Information Services (TRIS) - The Transportation Research Board (TRB)-maintained computerized storage and retrieval system for abstracts of ongoing and completed research, development, and technology transfer (RD&T) activities, including abstracts of RD&T reports and articles.

Travel Surface - The type of material which forms the travel surface. Codes as follows: AG- aggregate, B-bituminous, C-concrete, CA-caliche, N-natural (graded and drained), NU- natural unimproved (wheel tracks, O.R.V.).

Trust Fund - Trust funds are funds that are designated by law as trust funds. They are usually financed by earmarked collections. A trust fund must use its income for the purposes designated by law, but it is not required to spend them all in the same period they are collected. The five transportation-related federal trust funds are highways, which includes highway and transit accounts; airports and airways; aquatic resource, which is of interest because of the boat safety account; harbor maintenance, and inland waterways. There is also a pipeline safety fund, however, it is not a trust fund.

U

Underpass - The grade separation where part or all of one feature instance is directly above part or all of another feature instance.

Urbanized Area Formula Program Funds - Financial assistance from the Urbanized Area Formula Program (formerly Section 9). This program governs the distribution of the public transit capital and operating block grant appropriations by urbanized area. For this form, it is the Federal capital assistance granted to public transit agency providers to designated recipients on behalf of transit providers.

U.S. Army Corps of Engineers (USACE) - Provides engineering services including planning, designing building and operating water management resources and other civil works projects; may be consulted during early long-range transportation planning at the state and metropolitan levels; participates in the environmental review of highway projects; issues permits under the Section 404 of the Clean Water Act

U.S. Conference of Mayors (USCM) - Serves as the official nonpartisan organization of cities with populations of 30,000 or more, each represented in the Conference by its chief elected official, the mayor. Lobbies state and federal legislature for a larger share of transportation funding and authority at the city level

U.S. Congress - Responsible for enacting national transportation laws and overseeing implementation; approves funding levels for transportation programs and enacts annual transportation appropriations

U.S. Department of Transportation (USDOT) - Oversees the transportation planning and project activities of the MPOs and state transportation agencies; provides advice and training on transportation topics, ranging from pavement technology to design to efficient operations of highway and transit systems; supplies critical funding needed for transportation planning and projects; approves a program of projects submitted by state transportation agencies that includes projects proposed for federal funds

U.S. Environmental Protection Agency (USEPA) - Develops and enforces regulations, offers financial assistance, performs environmental research and education; may be consulted during early long-range transportation planning at the state and metropolitan levels; reviews all environmental impact statements and posts information in the *Federal Register*

U.S. Fish and Wildlife Service (FWS) - Conserves, protects and enhances fish, wildlife and plant habitats; manages the refuge system; enforces the Endangered Species Act; may be consulted during early long-range transportation planning at the state and metropolitan levels; may participate in the environmental review of highway projects, as required if the project has potential impacts to threatened or endangered species; jointly administers Refuge Roads program with FHWA; conducts refuge planning that includes transportation elements

U.S. Forest Service (USFS) - Manages public lands in national forests and grasslands and provides technical and financial assistance to state and private forestry agencies; may be consulted during early long-range transportation planning at the state and metropolitan levels; may participate in the environmental review of highway projects, particularly those with potential impacts to national forests; jointly administers the Forest Highways program with FHWA; conducts forest planning that includes transportation elements

V

W

Watershed - An area that is drained by a particular stream system. For instance, the Mississippi watershed consists of the entire area drained by the Mississippi and its tributaries.

Wildlife Corridor - connection between fragmented habitats; these corridors allow wildlife to travel to seasonal habitats and maintain genetic diversity. A corridor can be large, undeveloped lands for migrating elk herds, or a narrow highway overpass linking grizzly bear habitat on two sides of an interstate highway.

Wildlife Crossing - safe passage for wildlife to cross over, under, or directly across linear infrastructure in order to continue movement within a wildlife corridor or a patch of viable habitat (e.g. ecopassages, ecoducts, overpasses, underpasses, culverts, land bridges)

Wildlife Linkage - connection between core habitat areas through which wildlife may travel to reach viable habitat

X

Y

Z

Zoning - An important component of reserve design which controls human activities within and adjacent to conservation reserves so that reserve function may be protected while some human activities, including economic benefit, may take place.