

GLOSSARY

Acidity	The capacity to buffer natural waters from caustic wastes; consists of hydrolyzing salts such as iron sulfate
Accelerometer	Instrument used to measure acceleration
ADA	(Americans with Disabilities Act)- Federal legislation prohibiting discrimination on the basis of disability, requiring accessible transportation service and that public documents be made available in accessible
ADT	(Average Daily Traffic)- The average number of vehicles traveling a road during a 24-hour period, based on actual traffic counts and factor to account for seasonal and daily variations
Agricultural District	An area of agricultural uses recognized under a governmental authority for the protection of agricultural resources. The qualifications and protections of districts may vary from county to county and state to state. Generally, agricultural districts seek to protect agricultural properties from zoning and annexation by cities
Alignment	The proposed corridor of a proposed alternative being considered as part of the EIS
Alfisols	A well developed soil under deciduous forest
Alkalinity	The amount of acid absorbing capacity, the buffering capacity; consists of carbonates and other weak acids
Alluvium	Material deposited by rivers
Amphipods	A group of somewhat pollution tolerant detritivores; small aquatic invertebrates, commonly known as scuds
Amplitude	The level or value of a waveform or vibration
Angiospermae	Botanical name for all flowering plants
Annelids	Scientific name for earthworms



Backwater	Difference between the maximum water surface elevation upstream of the encroachment and the water surface elevation at the same location without encroachment
Benthic	Bottom dwelling organisms
Bioaccumulation	The physical/chemical accumulation in organic materials, especially in fatty tissues
Bioconcentration	The biological concentration of a pollutant, through respiration adsorption, eating, etc.
Biomagnification	Tendency of a pollutant to become more concentrated as the pollutant moves up the food chain
Bradyctitic	Type of mussel that holds eggs in pouch for more than one season
Brail	Technique for finding mussels, involving careful removal of sediment along with buried mussels
Bucket Auger	Sampling method for archaeology; used for deep-testing; allows layers of up to 10 cm to be removed at a time
CAAA	(Clean Air Act Amendments of 1990)- Federal legislation that establishes maximum allowable levels for various pollutants. Where these standards are not attained, officials must take specified actions within a set time-frame or face sanctions, such as the loss of federal highway funds.
Calcareous	Soils that have free carbonates
Chironomids	Commonly known as midges; very pollution tolerant; especially fond of nutrient and organic enrichment
Chloride	Concentration of Cl ⁻ ion (not diatomic Chlorine) given in terms of mg/L
Carbon Monoxide	(CO)- A colorless, tasteless gas produced primarily by inefficient combustion of organic fuels in transportation and industrial activities. Overly high levels of CO reduce oxygen in the bloodstream, preventing normal respiration. CO emissions are regulated by the CAAA.
Coleoptera	Scientific name for the family Alderflies

Color	The units are given as PtCo; Platinum Cobalt color
Community cohesion	A social or psychological characteristic that defines the degree to which residents have a sense of belonging to their neighborhood or community, including commitment to the community or a strong attachment to neighbors, institutions in the community, or particular group. The level of community cohesion is often evidenced by the degree of interaction or commonality among individuals, groups, and institutions within a community. Strong community cohesion may form in long-established neighborhoods, neighborhoods with an established core group possessing a common ethnic background or religion, or neighborhoods with physical characteristics that promote a high level of community interaction such as grid street patterns or local parks.
Community Facility	A facility which provides support serves to a neighborhood or community, i.e., fire stations, hospitals, schools, and churches.
Community Resource	A resource which provides support services or is an integral component of a community, i.e., community facilities, neighborhoods, neighborhood associations, recreational parks, an industrial parks.
Conductivity	The electrical conductivity of water due to dissolved salts; measured as the inverse of resistance (ohms); the units are called siemens
Conformity Determination	Requirement that the state or metropolitan transportation plan, programs, and projects be consistent with the purpose of the SIP. The CAAA prohibits federal funding approval of any project that does no meet this test
Cowardin Classification	The listing of delineated jurisdictional wetlands by The National Wetlands Inventory
dBA	(decibel, A-weighted) A unit for describing the sound pressure level, weighted to approximate the range of response to the human ear
Deciduous	Shedding or losing foliage at the end of the growing season
Delineation	A visual, graphical or verbal description of boundaries
Devonian	Refers to age which bedrock was formed; 405 million years before present

Dicotyledoneae	(Dicot) A flowering plant with two seed leaves and branched veining within the leaves; most trees are dicots.
Diptera	Scientific name for the family of flies and mosquitoes
Discharge	The flow rate of a stream or river
Displacement	The relocation of a private residence or commercial property due to the need for right-of-way acquisition
Dissolved oxygen	Amount of oxygen in the water; important for higher life forms to live in the water
EIS	(Environmental Impact Statement)- The National Environmental Policy Act (NEPA) requires an assessment of any adverse economic, social, and environmental effects of a proposed transportation project for which federal funding is being sought
Elderly	Persons 65 and over
Encroachment	The gradual or silent movement of one land use upon another
Entisol	Young soil with no apparent development, characteristic of newly formed floodplains, or actively eroding hillsides
Eolian sand	Wind blown sands
Ephemeroptera	Scientific name for the family Mayflies
Evapotranspiration	The combination of evaporation and transpiration, the loss of water by respiring plants
Exfoliated bark	Loose or missing bark on the tree; important bat habitat
Facultative plant species	FAC , found in wetland 33-67% of the time
Facultative upland plant species	FACU, found in wetland 1-33% of the time
Facultative wetland plant species	FACW, found in a wetland, 67-99 % of the time

FHWA	(Federal Highway Administration)- A division of the U.S. Department of Transportation, responsible for funding highway planning and programs
Floodplain	Area near a stream or river that is periodically subject to flooding
Fragipan	A natural subsurface layer of soil with very low organic matter, high bulk density and/or mechanical strength relative to overlying and underlying layers
Free product	A liquid that has not dissolved into the soil or groundwater; often refer to oil or gasoline which form pools when released from LUSTs; this refers to those pools
FTA	(Federal Transit Administration)- A division of the U.S. Department of Transportation, responsible for transit planning and programs
Gastropoda	Scientific name for the family of snails
Geomorphic	Referring to the form or shape of the surface of the earth
Geomorphic zone	A zone that is similar in soil, and soil development due to similar geologic history and landscape position
Glacial outwash	Gravel to boulder size material, left from rapidly wasting glaciers
Glacial till	Sand and gravel deposited by glaciers
Gleying	The gray or slightly green/blue soils caused by extremely reduced situation
Glochidia	Larval mussels
Gymnospermae	Botanical name for the family that includes conifers and the ginkgo tree
Hardness	Amount of calcium, magnesium and iron in the water
Hemiptera	Scientific name for true bugs
Holocene	Refers to age which bedrock was formed or alluvial deposits were made; 12,000 years before present to present day

Hydric soil	A soil having a high concentration of water, due in part by flooding and/or ponding
Hydrology	The science of water, its properties, phenomena and distribution over the earth's surface
Hydrophytic	A plant growing in water or on a substrate that is at least periodically, oxygen deficient as a result of excessive water content
Illinoian Age	A previous glacial advance; the second glacial advance of the Pleistocene; this occurred between 130,000 and 300,000 years before present
INDOT	(Indiana Department of Transportation)- Agency responsible for the design construction, and maintenance of Indiana state highways and bridges
Inceptisol	A recent soil with initial signs of horizon/layer development
Insertion Loss	The difference (reduction) in the sound level after the installation of a noise abatement measure such as a barrier or earthen berm.
Invasive Species	A species that invades a natural community and displaces one or more species; usually refers to plant species
Invertebrates	Animal lacking a backbone or spinal column
Isopoda	A somewhat pollution tolerant aquatic invertebrate
Jurisdictional wetland	An area that exhibits hydric soils, hydrophytic vegetation and a source of hydrology in which the USACE exercises their regulatory jurisdiction per Section 404 of the CWA
Kansan Age	A previous glacial advance; the third glacial advance of the pleistocene, now referred to as pre-Illinoian advance, occurred between 500,000 and 2 million years before present
Karst	Limestone that dissolves easily, characterized by sinkholes and caves

KYTC	(Kentucky Transportation Cabinet)- Agency responsible for the design, construction and maintenance of Kentucky state highways and bridges
Lacustrine	Situated in a depression or a dammed river channel, lacking trees, shrubs, and any other emergent vegetation.
Leq	The equivalent steady-state sound level which in one hour contains the same acoustic energy as the time varying sound level during one hour
Lithic	Consisting of or relating to stone or rock
Loam	An even mixture of sand, silt and clay; refers to soil texture
Loess	Wind blown silt
Longitudinal Encroachment	A highway improvement that crosses longitudinally to the regulatory floodplain
LOS	(Level of Service) A qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety
Macroinvertebrates	The larger invertebrates that are visible by the unaided eye
Marsupia	Pouch for carrying larvae in freshwater mussels
Matrix chroma	The background color of the soil, as opposed to the color of the mottles
Megaloptera	Scientific name for the family Dobsonflies
Minority	A minority individual is classified as belonging to one of the following groups: American Indian or Alaskan Native, Asian American, Black, or Hispanic
Mississippian age	Refers to age which bedrock was formed; 345 million years before present

Mitigation	Steps taken to avoid or minimize negative environmental impacts. Mitigation can include: avoiding the impact by not taking a certain action; minimizing impacts by limiting the degree or magnitude of the action; rectifying the impact by repairing or restoring the affected environment; reducing the impact by protective steps required with the action; and compensating for the impact by replacing or providing substitute resources.
Mollisol	Well developed prairie soil, thick and dark
Monitoring wells	These wells are drilled only for the purpose of water quality sampling and measure water levels; not normally used as a source of water
Monocotyledoneae	(Monocot) A flowering plant that is characterized by parallel veins and a single seed leaf; this family includes grasses, orchids and lilies
Mottles	Different colored soils inclusions (usually oxidized iron) than the matrix color this is caused by fluctuations in hydrology
MPO	(Metropolitan Planning Organization)- Organization responsible for comprehensive transportation planning and programming for urbanized areas
NAAQS	(National Ambient Air Quality Standards)- Federal standards that establish allowable concentrations and exposure limits for ozone, CO, and PM ₁₀
Nitrate-nitrogen	The weight of the nitrogen of nitrates in the water
Nitrogen, ammonia-	The weight of the nitrogen of ammonia in the water
Non-attainment area	A geographic region that the U.S. EPA has designated as not meeting the NAAQS. The Louisville area (Clark, Floyd, Jefferson and portions of Oldham and Bullitt) has been designated as being moderate Non attainment for ozone and attainment for CO.
Nitrogen Oxides	(NO _x)- precursor emission that forms from high-temperature combustion processes. React with VOCs in the presence of heat and sunlight to form ozone

Obligate upland plant species	UPL, found in uplands, found in wetlands < 1% of the time
Obligate wetland plant species	OBL, found in a wetland >99% of the time
Odonata	Scientific name for the family Dragonflies
Organic wastes	Sewage wastes mainly human and animal origin
Oscillation (Oscillatory)	Swinging or back and forth motion between to points
Ozone	(O ₃)- A colorless gas with a sweet odor that is not a direct emission form transportation sources, but is formed when VOCs and NO _x from car exhausts and certain industrial emissions combine in the presence of sunlight. Ground-level ozone is associated with smog conditions and initiates damage to lungs, trees, crops, and materials.
Palustrine	Pertaining to, or living in a marsh or swamp
Pedestrian Survey	A site assessment technique that involves closely examining the relevant resources in the area either by foot or by vehicle
Pennsylvanian age	Refers to age which bedrock was formed; 310 million years before present
Persistent emergent	Vegetation that is rooted underwater, but extends above the water, and is present for more than one growing season
pH	The Negative logarithm of hydrogen ion concentration, a measure of acidity
Phase I	Environmental site assessment; consists of records check and at minimum a pedestrian survey
Phase II	Environmental site assessment; consists minimally of field verification and sampling
Phase III	Environmental site assessment; consists minimally of site characterization and remedial activities
Physiography	The study of natural features of the earth's surface and the distribution of flora and fauna

Plecoptera	The scientific name for the family Stoneflies
Pleistocene	Refers to age which bedrock was formed; 600,000 years ago until 12,000 years ago
Potentiometric surface	Level to which water would rise in if not contained by bedrock
PPV	(Peak Particle Velocity) Maximum instantaneous positive or negative peak of vibratory motion
Reactive phosphorus	Amount of measurable phosphorus; this is roughly a measure of the amount available for plant uptake
Redoxomorphic features	Root channels (with rust stains) or mottles
Riparian	Adjacent to a stream or river
Right of Way	(ROW)- Priority path for construction and operation of highways, rail, etc. The ROW phase occurs at the time in which the land within the ROW is purchased
Riverine	Wetlands and deep-water habitats contained within a channel. Often named rivers, streams and creeks
Scatters	To distribute loosely by or as if by sprinkling
Sanborn maps	Fire insurance maps of previous land use
Section 4(f)	Refers to legal requirements concerning the use of public parks, nature preserves, recreational areas or historical and archaeological resources in the Department of Transportation Act
Section 106	Refers to legal requirement concerning the use of historical and archaeological resources in the National Historic Preservation Act
Section 401	Refers to legal requirements concerning the use of wetlands that are considered a “water of the state” and/or a “water of the United States” in the Clean Water Act.
Section 404	Refers to legal requirements concerning the use of wetlands that are considered a “water of the United States” in the Clean Water Act. Regulated by the U.S. Army Corps of Engineers.
Shovel testing	Probing the soil in an archaeological survey and sifting the soil through a 9.8mm (1/4") mesh

Silurian age	Refers to age which bedrock was formed; 425 million years before present
Sinkholes	A natural depression in a land surface communicating with a subsurface passage, generally occurring in limestone regions and formed by solution or by collapse of a cavern roof
SIP	(State Implementation Plan)- A document that contains procedures to comply with the NAAQS, as specified in the CAAA. Prepared by states and submitted to the U.S. EPA for approval
Spaghetti Junction	Kennedy Interchange, I-71, I-64, I-65 junction
Stratigraphy	The layers of material in a given area of land
Sulfates	Concentration of SO_4^{-2} ions
Tachytictic	Type of mussel which eggs are held in pouch for only one season
Talus	A sloping mass of rocks at the base of a cliff
TDM	(Transportation Demand Management) This is the use of techniques to control demand on roadways, such as incentives for transit use and increase parking costs in the central business district.
Terrace	Old floodplain
TIP	(Transportation Improvement Program)- A program of transportation projects consistent with the Transportation Plan. Shows projects to be funded under federal programs for a four-year period
Topography	Elevation and spatial relationships of the land
Transverse Encroachment	A highway improvement that crosses perpendicular to the regulatory floodplain
Trichoptera	The scientific name for the family Caddisflies

TSM	(Transportation System Management)- This is the use of techniques to improve the level of efficiency at which the existing transportation system works, by implementing methods uses as synchronization of traffic signals.
Turbidity	Refers to amount of suspended solids in the stream or river; In turbid water conditions light is scattered and absorbed rather than transmitted in a straight line
Urban tolerant	Plants or animals able to adapt to frequent disturbance and human activities and developments
Viewshed	The surface area visible to and from a given point or collection of points
Vibration Propagation	Test designed to measure soil response in the presence of various vibration inputs
Vertebrates	Animals having a backbone or spinal column
VOC	(Volatile Organic Compounds)- A group of chemicals that react in the atmosphere with NO _x in the presence of heat and sunlight to form ozone, such as gasoline fumes and oil-based paints
Windshield survey	Visual inspection of project area by vehicle from the public right-of-way
Wisconsin age	Refers to the most recent glacial advance; ending approximately 12,000 years before present