

Appendix F – Glossary

404 Individual Permit: A United States Army Corps of Engineers' authorization for proposed discharge of dredged or fill material from a specific project into the waters of the United States.

404 Nationwide Permit: A general permit issued by the United States Army Corps of Engineers to regulate the discharge of dredged or fill material that has been determined to have minimal impact on the waters of the United States.

404 Pre-Construction Notification: A document, generally a completed 404 application, which must be submitted to the United States Army Corps of Engineers prior to commencing an activity authorized by a Section 404 nationwide permit.

4(f): Resources protected under Section 4(f) of the United States Department of Transportation Act. These resources include: parks and recreation areas that are publicly owned or open to the public, publicly owned wildlife or waterfowl refuges, and significant historic sites.

4(f) Determination: Administrative action by which the Federal Highway Administration confirms that, on the basis of extensive studies and analysis, there are no "prudent and feasible" alternatives to the taking of land from resources protected under Section 4(f) of the United States Department of Transportation Act.

6(f) (of the Federal Land and Water Conservation Fund Act): Provision that protects public recreational properties developed or enhanced using federal funding supplied to states or municipalities under the act by requiring replacement of lands converted to nonrecreational uses.

Access Management: A systematic process to manage the number, location and design of direct access points to the public road system in an effort to maintain traffic flow while providing adequate access to adjacent land.

ACCESS OHIO: Ohio's statewide long-range transportation plan.

Administrative Letting Report: Document, developed by the Office of Estimating that contains specific goals for plan package submission, Engineer's Estimate completion, plan package approval, bid dates, and award dates.

Aerial Mapping: Topographic mapping and digital terrain data produced from controlled aerial photographs using stereoanalytic plotters.

Agency Coordination: Consists seeking input from state and federal agencies on matters regarding the project development process for specific transportation projects.

Alignment: The horizontal or vertical ground plan of a roadway. Alignments are usually described by grades, coordinates, bearings, and curve lengths.

Alternative: One of a number of specific transportation improvement proposals, alignments, options, or design choices.

Assessment of Feasible Alternatives: Development and analysis of a limited number of feasible alternatives to decide which alternatives avoid or minimize impacts while meeting the project's purpose and need. There must be a reasonable range of alternatives considered for any given project and a discussion of why some were selected for detailed study and explain why other alternatives were eliminated.

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Average Daily Traffic: The average number of vehicles that pass a specified point during a 24-hour period.

Base Map: 1) A map of the project's study area showing topography, roads, streams, project limits, Red Flags, and other items of interest. 2) In CADD, a file containing information for the project area, which is referenced into sheet files showing specific portions of the project.

Biological Assessment: A report documenting whether federally-funded major construction activities are likely to adversely affect federally-listed species or designated critical habitat, jeopardize the continued existence of species proposed for federal listing, or adversely modify proposed critical habitat, with the outcome determining whether formal or informal consultation with the United States Fish and Wildlife Service is necessary. (50 CFR Sections 402.02 & 402.12)

Categorical Exclusion: A determination that an action does not have a significant effect on the environment and is exempt from requirements to prepare an Environmental Impact Statement.

Certified Traffic: Opening year and design year traffic projections with K, D, T24, and TD values provided or approved by the Office of Technical Services as the official traffic forecasts used for, but not limited to, geometric and pavement design.

Clean Air Act Amendments: Federal legislation mandating programs to curb acid rain, urban air pollution, and toxic air emissions. The Clean Air Act Amendments call for emission reduction measures in air quality non-attainment areas.

Clean Water Act: Federal law that protects our nation's waters, including lakes, rivers, aquifers, and coastal areas. Sections 401 and 404 of the Clean Water Act pertain to the discharge of materials into surface waters, including wetlands. Section 401 also mandates the National Pollutant Discharge Elimination System (NPDES), in which a permit is required to discharge pollutants from a point source into surface waters (including wetlands) for disposal purposes.

Clear Zone: The roadside border area, starting at the edge of the traveled way, available for safe use by errant vehicles. The desired width is dependant upon traffic volumes and speeds, and on the roadside geometry.

Conceptual Alternatives: Alternatives, including modal options, that are developed during the planning process based on a minimal level of design and environmental information. These alternatives are only defined to the level of design concept and design scope.

Conceptual Alternatives Study: Development and analysis of conceptual alternatives during Step 5 of the Major PDP to determine which alternatives can be eliminated from further study based on environmental or engineering concerns.

Conceptual Mitigation Plans: The early, generalized identification of design, operational, or construction measures that would minimize or avoid anticipated adverse environmental consequences.

Concurrence Point: Point(s) in the PDP where coordination with resource agencies, stakeholders, or the public occurs and consensus may be reached regarding recommendations for further project development.

Constructability Review: A review of the construction plans that focuses on construction means and methods; including: equipment access, construction timeframes, construction phasing, bid-ability, and build-ability.

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Construction Limits: Lines shown on a plan view which show the lateral extent of the work; including room for construction activities.

Contract Addenda: The official record of pre-bid questions and responses.

Contract Documents: Written material and engineering data required to put a highway construction project under contract; including: proposals, agreements, plans, specifications, estimates, and other information pertaining to the manner and method of furnishing materials.

Coordination: A process whereby ODOT contacts, consults, and maintains communication with regulatory agencies to facilitate project development.

Critical Path Method: A planning, scheduling and control technique that uses individual tasks, their durations and interrelationships to determine optimal sequencing of activities.

Cross Section: A vertical section of ground suitable for showing proposed grading and underground features.

Data Recovery: Mitigation of an adverse effect on a National Register of Historic Places eligible or listed archeological site by excavation.

Design Concept: A detailed description of the transportation alternative or strategy that best meets the identified need. This would include a definition of mode(s), general physical design characteristics, optional parameters, and required inter-modal linkages where applicable.

Design Criteria: Established state and national standards and procedures that guide the design of specified types of highways in certain defined conditions.

Design Exception: An approval issued by a state or federal agency to permit deviation from a specified, accepted design criteria granted on the basis of a report explaining the need for the exception and the consequences that will result from the action.

Design Reference Resource Center: ODOT website (<http://www.dot.state.oh.us/drrc/>) that provides links to reference materials such as manuals, specifications, and standard drawings.

Design Scope: The general location and logical termini or service area of the proposed project. (See also Scope of Services)

Easement: A right acquired by one party to use or control property belonging to another party for a designated purpose.

Ellis: ODOT's web-based project management system linking system forecasting, planning, financial management, and project delivery.

Eminent Domain: The power to take private property for public use without the owner's consent on payment of just compensation.

Endangered Species: Any species in danger of extinction throughout all or a significant portion of its range.

Environmental Assessment: A document prepared for an action where the significance of the environmental impact is not clearly established. The primary purpose of an Environmental Assessment is to help decide whether an Environmental Impact Statement is needed. After review, the Federal Highway Administration may determine that the proposed action has no significant impacts and a Finding of No Significant Impact will be issued.

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Environmental Commitments Summary: A document that summarizes commitments made in the environmental document. The summary is used to ensure that commitments are communicated to designers and are carried through the completion of the Project Development Process.

Environmental Consultation Form: This document, based on Stage 3 Detailed Design Plans, formalizes the determination that the plans conform to the environmental document and its associated project commitments.

Environmental Document: Written report that summarizes environmental studies, potential impacts, avoidance, mitigation and evaluation of alternatives. The significance of the impacts will determine the level of document (i.e., Environmental Impact Statement, Environmental Assessment or Categorical Exclusion) required.

Environmental Impact Statement: A detailed statement required by the National Environmental Policy Act of 1969 when an agency proposes a federal action that significantly affects the environment. A tool for decision making, it describes the positive and negative effects of the undertaking and cites alternative actions. This report contains a summary of all environmental and engineering studies, noting the impacts and mitigation. After review, the Federal Highway Administration will issue a Record of Decision.

Environmental Justice: A federal requirement, imposed by Executive Order 12898, that prohibits disproportionately high and adverse impacts on minority and low income populations with respect to human health and the environment, including the planning, programming, and implementation of transportation and projects.

Environmental Site Assessment: An environmental study conducted to assess the potential for contamination of a property or parcel with hazardous substances.

Fatal Flaws: A subset of the Red Flags for a project that ODOT has determined to be of such significance that they must be avoided.

Feasible Alternative: A conceptual alternative that has been selected for further investigation based on environmental and design studies.

Federal Action: Any activity involving federal funding, approvals, or permits.

Final Tracings: Completed construction plans plotted on reproducible material (usually Mylar).

Finding of No Significant Impact: A determination by a federal agency briefly presenting the reasons why an action/project will not have a significant effect on the human environment and for which an environment impact statement will not be prepared

Floodplain (100 Year): Area designated by the Federal Emergency Management Agency (FEMA) that has a one percent annual chance of flooding.

Functional Classification: The grouping of roads, streets, and highways in a hierarchy according to the type of service they provide. Higher classified roads primarily serve traffic through movements at higher speeds. Access to adjoining land is subordinate. The primary purpose of lower classified roads, on the other hand, is to provide access to land and neighborhoods where through traffic is discouraged. All other roadways within the hierarchy serve both of these functions to varying degrees.

Gantt Chart: A schedule showing individual tasks, their durations and interrelationships.

Geographic Information System: A computerized data management system designed to capture, store, retrieve, analyze, and report on geographic and demographic information.

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Geometric Design: Engineering activities involving standards and procedures for establishing alignments (horizontal and vertical) and cross section (number of lanes, lane width, shoulder width, cross slopes, and superelevation) of a highway.

Grade Separation: A crossing of two roadways, or a roadway and a railroad, or a roadway and a pedestrian walkway or bike path in such a way (by the provision of crossing structures) that neither facility interferes with the operation of the other.

Independent Utility: A project is considered to have independent utility if it could be constructed absent the construction of other projects in the area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility.

Intelligent Transportation System: Technological innovations that develop or apply electronics, communications, and information processing technologies to improve the efficiency and safety of surface transportation systems. Such technologies may be systems that alert authorities to emergency situations, on-board navigation systems for vehicles, electronic collection of tolls and transit fares, traffic management centers that can adjust speed limits, traffic signals and road access, and electronic monitoring of vehicles.

Level of Service: A measure describing operational conditions within a traffic stream. Level of service ranges from "A," which indicates unrestricted free flow conditions, to "F," which indicates high congestion and generally restricted operating speeds.

Local-Let Project: Project that is administered by a local public agency.

Local Public Agency: State agency, local political subdivision, board, commission, or other governmental entity identified in the Ohio Revised Code as being eligible for assuming the administrative responsibilities for ODOT improvement projects.

Logical Termini: Connecting points with known features (land uses, economic areas, population concentrations, cross route locations, etc.) at either end of a proposed transportation route that enhance good planning and which serve to make the route useable. Logical termini are considered rational end points for a transportation improvement.

Major Investment Study: Federally mandated corridor or subarea study conducted in MPO areas. Regional transportation stakeholders including the MPO, state DOT, public transit operators, resource and permit agency, U.S. DOT and local officials are required to be involved in the study and approval of its recommendations. The study must analyze a range of alternatives, including: modes; technologies (such as intelligent transportation systems); operational and demand management strategies (such as car pooling, ride sharing); general alignments, number of lanes, etc. The resulting document is to identify the optimal mix of modal and investment strategies for meeting the transportation system need identified by the study. MISs may be conducted independently by an MPO or as a sub-part within the first four steps of a Major PDP. However, the MIS alone does not fulfill all the requirements of Steps 1-4 of the PDP.

Major Project: A transportation improvement where the anticipated result of the improvement is expected to have a significant impact on the highway's public access, level of service, traffic flow, mobility patterns, or mode shares. They require substantial right of way acquisition or have a high degree of public controversy. Examples include new alignments (e.g., bypasses) and new interchanges.

Metropolitan Planning Organization (MPO): An organization formed by local elected officials and designated by the Governor that, in cooperation with the state, is responsible for transportation planning in urbanized areas. It serves as the forum for cooperative decisions making by principal elected officials of general local government.

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Minimal Project: Transportation improvements generated by the traditional maintenance and preventive maintenance program as they relate to the development of the District Work Plan. These projects do not alter the basic highway cross section or geometry. They require no right-of-way acquisition and have minimal impacts on existing utilities. They have no impacts to environmental resources and require no environmental agency coordination. Minimal projects are likely to require only minor public involvement.

Minor Project: Transportation improvements that generally are located on an existing alignment. Small adjustments to the existing alignment to improve geometric conditions may be involved. Substantial relocations of non-interstate roadways that do not result in significant environmental impacts also can qualify as Minor Projects. Minor projects and their associated impacts can be developed and approved through the Categorical Exclusion process. Examples include bridge replacement, culvert replacement, pavement widening, geometric realignment, and intersection upgrades including the addition of turn lanes.

National Register of Historic Places: The national list of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, or culture.

No-Build Alternative: An alternative in which no improvements are made to the existing system. Maintenance activities are performed.

Notice of Intent: Announcement in the Federal Register advising interested parties that an Environmental Impact Statement will be prepared and circulated for a given project.

ODOT-Let Project: Project administered by the Ohio Department of Transportation.

Owner's Manual: Manual maintained by the project manager which documents project responsibilities and commitments.

Planning Level Traffic Forecast: Traffic projections suitable for comparing or evaluating project alternatives, but not suitable for detailed design.

Planning Study Report: Document that includes the Strategic Plan plus documentation of all analysis, public involvement activities, findings and recommendations from the first four steps of the Project Development Process for Major Projects.

Preferred Alternative: The alternative that the federal agency believes would best fulfill the purpose and need of the proposed action.

Preferred Alternative Verification: A design submission that refines the construction limits on the apparent preferred alternative.

Project Manager: Individual assigned to manage overall project development. Addresses project scope, schedule, and budget issues. Ensures that all involved parties fulfill their commitments.

Purpose and Need Statement: A document that qualitatively and quantitatively defines the transportation problems and establishes the need for the potential project.

Record of Decision: A document prepared by the Federal Highway Administration that presents the basis for selecting and approving a specific transportation proposal that has been evaluated by an Environmental Impact Statement.

Red Flag: Locations of concern, including environmental and engineering issues, within the study area. Red Flags do not necessarily identify locations that must be avoided, but rather identify locations that will entail additional study coordination, creative management or design approaches, or increased right-of-way or construction costs.

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Red Flag Summary: A document that identifies areas of concern that may entail additional study coordination, creative management or design approaches or could cause revisions to the anticipated scope of work, the proposed project development schedule, the estimated project budget, or the potential impacts of the project on the surrounding area.

Regulatory Agency: An agency empowered to issue permits or recommend approval or denial of a permit or action.

Resource Agency: Federal, state or local agency involved with review of environmental technical documents/reports generated for proposed development projects. These agencies include the Ohio Environmental Protection Agency, United States Environmental Protection Agency, United States Fish and Wildlife Service, United States Army Corps of Engineers and Ohio Department of Natural Resources.

Right of Way: A strip of land occupied or intended to be occupied by transportation and public use facilities, such as roadways, railroads, and utility lines. The land is either owned outright or controlled by easement by the public agency.

Scope of Services: Document that details specific project requirements and responsibilities. Used for both consultant and in-house planning, environmental, design, and construction services.

Section 106: Refers to Section 106 of the National Historic Preservation Act of 1966. This section requires federal agencies to take into account the effect of their undertakings on properties included in, or eligible for inclusion in, the National Register of Historic Places.

Section 401 Water Quality Certification: Document which demonstrates that the project will comply with water quality standards and other provisions of federal and state law and regulations regarding conventional and non-conventional pollutants, new source performance standards, and toxic pollutants. Required by Section 401 of the Federal Clean Water Act for projects involving the discharge of materials into surface waters; including wetlands.

Selected Alternative: The alternative which is approved for construction by FHWA or their designee.

Significant Impact: Any number of social, environmental, or economic effects or influences that may result from the implementation of a transportation improvement which significantly affect the human environment. Both context and intensity are important when determining significance.

Stakeholders: Individuals or organizations that have a personal, professional, or regulatory interest in a project. The amount and type of stakeholder involvement will vary throughout the steps of the Project Development Process.

State Implementation Plan: A plan mandated by the Clean Air Act that contains procedures to monitor, control, maintain, and enforce compliance with National Ambient Air Quality Standards.

Statewide Transportation Improvement Program (STIP): A staged, fiscally constrained, multimodal statewide program that lists all transportation projects and activities to be undertaken and funded during a specified period. In Ohio, the Statewide Transportation Improvement Program covers four years and includes the 17 Metropolitan Planning Organization Transportation Improvement Programs by reference.

Strategic Plan: Document that presents the recommended planning level solution(s); only defined to the level of detail of design concept and design scope. The document must contain adequate information for the MPOs, ODOT, NEPA agencies and other local entities to reach concurrence on move ahead with the recommended solution(s). It should include a brief project history, draft Purpose and Need Statement(s) that includes a discussion of the decision making process of alternatives considered and dismissed,

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phasing and funding considerations and a project delivery strategy for the next steps of the PDP. The detailed analysis should be only referenced, not included.

Study Area: A geographic area that is of sufficient size to include all areas that contribute to the transportation problem and encompass the range of alternative solutions to the problem.

Subsurface Utility Engineering: Provides data on existing utilities through four progressive quality levels. Quality Level D gathers information from a review of existing records. Quality Level C gathers information from a visual survey of existing features. Quality Level B gathers horizontal mapping based on field markings, surveying, and surface geophysical methods. Quality Level A gathers three-dimensional mapping using vacuum excavation of test holes.

Topography Integrated Geographic Encoded Referencing Files: A set of files developed by the U.S. Census which describes the features of the United States including: roads, railroads, geopolitical boundaries, rivers and streams.

Transportation Demand Management: Strategies that encourage alternatives to driving alone or which change the time of day of trips to less congested time periods. These strategies include rideshare, park-and-ride facilities, financial incentives and disincentives, nontraditional transportation modes, and compressed workweeks, flexible and staggered hours, and telecommuting.

Transportation Improvement Program: A prioritized program of transportation projects in Metropolitan Planning Organization areas to be implemented in appropriate stages over several years and funded with Federal Highway Administration or Federal Transit Administration funds.

Transportation Review Advisory Council (TRAC): Permanent body to oversee the major/new project selection process at ODOT. The TRAC has the authority to select new construction projects, modify the selection process, and hear appeals from the public concerning major/new projects and the project selection process. The TRAC consists of nine members. Six are appointed by the governor, one appointed by the speaker of the Ohio House of Representatives, and one appointed by the president of the Ohio Senate. The final member and TRAC chair is the director of ODOT.

Typical Section: A portion of a highway plan showing proposed cross-sectional views of the pavement and roadway.

Value Engineering: An analysis of materials, processes, and products in which functions are related to costs and from which a selection may be made for the purpose of achieving the required function(s) at the lowest overall cost consistent with the requirements for performance and maintainability.

Value Engineering Change Proposals: Contractor's proposal during construction to reduce project costs or offer a time saving without altering the essential functions and characteristics of the project.

Value Engineering Study: A systematic analysis by a multi-discipline team which identifies the functions of a project, establishes the worth of that function, generates alternatives through the use of creative thinking, and identifies ways to provide the needed functions at the lowest overall cost.

Wetland: Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence or vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands are categorized into three quality levels.