

Glossary

A

Abutment: A substructure supporting the ends of a single span or the extreme ends of a multi-span superstructure and, in general, retaining or supporting the approach embankment.

Accidental discovery: Archaeological deposits encountered during an undertaking, generally through means of earth-moving equipment. Accidental discoveries could include, but are not limited to, artifact concentrations and human remains. If such deposits are encountered at anytime during the undertaking, construction must cease until archaeologists at the Indiana Department of Natural Resource, Division of Historic Preservation and Archaeology are notified and the nature of the archeological deposits are assessed.

Adverse Effect: In 36 CFR Part 800, this is one of the determinations that can be made through consultation with the State Historic Preservation Office (SHPO). This finding means that an undertaking has an effect on a historic property that alters the characteristics of the property that qualify it for inclusion in or eligibility for the NRHP (NRHP). Mitigation is required to resolve the undertaking's effect on the property.

Advisory Council on Historic Preservation (ACHP): An independent federal agency responsible for overseeing the Section 106 process to ensure that cultural resources are considered during federal project planning and implementation. ACHP regulations implementing the Section 106 process are found in 36 CFR 800.

Alluvial deposition: Soils or sediments formed in material deposited by the action of running water, such as a floodplain or delta.

Alternative: One of a number of specific transportation improvement proposals, alignments, options, design choices, etc. in a study. Following detailed analysis, one improvement alternative is chosen for implementation.

Archaeological investigation: Study of prehistoric and historic locales which provide understanding of past human behavior, cultural change, and related topics through scientific and scholarly techniques such as literature research, excavation, analysis, and interpretation.

Archaeological report: Any document that describes archaeological activities and presents conclusions and interpretations drawn from these activities. Archaeological reports often describe fieldwork and the results of this work and must be prepared by or under the supervision of qualified archaeologists. There are various kinds of archaeological reports, including cultural resource management studies.

Archaeological resource: The location of a building, structure, district, site, or objects constructed or deposited at least 50 years ago where the location itself possesses archaeological research value.

Archaeological technician: A person, usually with a B.A. degree in anthropology, or equivalent experience, who does archaeological field and laboratory work.

Architectural historian: An individual with a degree in the history of architecture capable of identifying the age, style, and social context of historic buildings.

Area of Potential Effects (APE): 36 CFR Section 800.16(d) defines the APE as “the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.”

Assemblage: a group of artifacts related by provenience and date of excavation.

Avoidance: active attempts to avoid threatened resources by partial or complete project redesign or relocation.

B

Boundary description: A precise description of the lines that bound a historic property.

Boundary justification: An explanation of the reasons for selecting the boundaries of a historic property.

Bridge: A structure, including supports, erected over a depression or an obstruction such as water, highway, or a railway having a track or passageway for carrying traffic or other moving loads, and having a length measured along the center of the roadway of more than 20 ft (6.1 m) between undercopings of abutments or extreme ends of openings for multiple boxes.

Building: A resource created principally to shelter any form of human activity, such as a house.

C

Categorical Exclusion (CE): Categorical exclusions (CEs) are actions that meet the definition contained in 40 CFR 1508.4, and, based on past experience with similar actions, do not involve significant environmental impacts. They are actions that: **1)** Do not induce significant impacts to planned growth or land use for the area; **2)** Do not require the relocation of significant numbers of people; **3)** Do not have a significant impact on any natural, cultural, recreational, historic or other resource; do not involve significant air, noise, or water quality impacts; **4)** Do not have significant impacts on travel patterns; and do not otherwise-- either individually or cumulatively--have any significant environmental impacts.

Cemetery Development Plan: IC 14-21-1-26.5 mandates that a development plan is needed for most projects that will disturb the ground within 100 feet of a cemetery or burial ground for the purpose of erecting, altering, or repairing any structure.

Certificate of Approval (COA): IC 14-21-1-18 (a) and (b) require that a certificate of approval be obtained before using state funds to alter, demolish, or remove an historic site or historic structure, if it is owned by the state or if it is listed in either the Indiana Register of Historic Sites and Structures or the NRHP. The application must be submitted to the Division of Historic Preservation and Archaeology (DHPA), and heard by the Indiana Historic Preservation Review Board (Review Board).

Certified Local Government (CLG): A local government officially certified to carry out some of the purposes of the National Historic Preservation Act, as amended.

Chert: An isotopic form of cryptocrystalline or microcrystalline quartz that Native American peoples used to manufacture stone tools.

Colluvial deposition: A deposit of sediments accumulated through the action of gravity at the base of a cliff or slope.

Consultant: An individual, partnership or firm with qualified expertise in engineering, environmental, cultural resource, or public involvement disciplines who is contracted by the originating office to provide technical services.

Consultation: Process of seeking, discussing, and considering the views of other participants, and where feasible, seeking agreement with them regarding matters arising in the Section 106 process.

Consulting Party: Individual or entity, identified as a result of the NEPA and/or Section 106 public involvement activities, that has expressed an interest in the effects of the undertaking on historic resources. Consulting parties are invited to participate in the consultation process.

Context: An artifact's or a site's setting in time and place, its association to others of similar form, and its general relationship to other artifacts or sites in the archaeological record.

Contributing Resource - Indiana Historic Sites and Structures Inventory: Any property meeting the basic inventory criterion of being at least 40 years old, but not important enough to stand on its own individually. Such resources are important to the density or continuity of an area's historic fabric. Such properties can be listed in the NRHP if they are part of a historic district, but they would not usually qualify individually.

Contributing Resource - National Register of Historic Places: A building, site, structure, or object adding to the historic significance of a property or district.

Controlled Surface Collection: Systematic walkover of the site area at close intervals (5 m or less) and an intensive collection of all artifacts. This procedure relies on adequate surface

visibility (i.e., at least 30%). The site should be plowed, disked and rain-washed to maximize surface visibility. Controlled surface collection is appropriate only if it is certain that the topsoil has been disturbed by previous plowing or other action.

Criteria-National Register of Historic Places: The criteria used to evaluate the eligibility of properties for listing in the National Register of Historic Places. The quality of significance in American history, architecture, archaeology, engineering and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association, and:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded, or may be likely to yield, information important in prehistory or history.

Cultural affiliations: The known, projected, or hypothesized cultural, ethnic, or tribal group (e.g., Hopewellian, Mississippian, Miami, historic Irish or German, etc.) with which archaeological remains may be identified on the basis of careful scientific study.

Cultural period: A period of time that has similar artifacts, social organization, and other factors, and is located within a defined geographic area. The major Cultural Periods of the Midwestern United States are the Paleo-Indian, the Archaic, the Woodland, the Mississippian (or Late Prehistoric), Proto-historic, and the Historic.

Cultural resource: Archaeology and history/architecture resources (building, object, structure, or site).

Cultural resource investigation: A study concerning the identification, evaluation, and/or mitigation of archaeological and history/architecture resources.

Cultural Resource Management (CRM): The development and maintenance of programs designed to investigate, manage, and/or preserve cultural resources (including evidences of prehistoric and historic) that are threatened by modern development. These resources do not exist in a vacuum; instead, they are situated in an environment where people live, work, build new buildings and new roads, require sanitary landfills and parks, need safe and protected environments. On frequent occasions, the expansion or modification of cities and towns and rural areas impact or threaten to impact the cultural resources. In these circumstances, decisions must be made to strike a balance between the various interests: practical growth with an eye toward the protection of the cultural resources.

Culture history: the chronological and spatial framework for describing the development of human societies and cultures, and the documented process of change involved in this development. Studies in culture history are primarily concerned with defining the geographic extent, relative age, and course of development of cultures. All archaeological reports are expected to contain a relevant cultural history.

Culvert: A structure not classified as a bridge that provides an opening under the roadway (INDOT definition).

Cumulative Impact: Impact on the environment which 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. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Curation: The storing of archaeological material, including objects, photographs, illustrations, and the physical information regarding the discovery, in a facility equipped to safeguard and preserve the material for future generations.

D

Data recovery: Investigations generally involving large-scale excavation of archaeological material from a site, commonly referred to as a Phase III investigation. Individual investigations are designed to recover information related to the significance of the site, that is, the investigations will be problem-oriented and designed to answer specific questions.

Designation Number (Des. No.): Unique 7-digit number assigned to an INDOT or LPA project when programmed.

Determination of Effect: A finding made by FHWA of federal actions, in conjunction with the State Historic Preservation Office and the Advisory Council on Historic Preservation, which determines whether a proposed project affects a property included on or eligible for the NRHP.

Determination of Eligibility: A finding based on the process of assembling documentation to render professional evaluation of the historical significance of a property. The INDOT acting on behalf of the FHWA applies the NRHP criteria when deciding matters of historical significance.

Diagnostic artifact: An artifact that informs as to time, cultural affiliation, manufacturing process, function, etc.

Direct Effects: Effects that are caused by a given action and occurring at the same time as the action. Changes in noise levels, traffic volumes or visual conditions are some examples of direct effects generated by transportation improvements.

District: An area that possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan of physical development.

District office: One of six INDOT offices throughout Indiana responsible for administering project development, design, construction and maintenance activities within their geographic regions.

Division of Historic Preservation and Archaeology (DHPA): In 1981, the General Assembly established the Division of Historic Preservation and Archaeology within the Indiana Department of Natural Resources (DNR) to carry out the federal-state partnership of the 1966 National Historic Preservation Act. The Director of the DNR is designated as the State Historic Preservation Officer (SHPO) for Indiana. The Director of the DHPA is Deputy SHPO and is charged with the daily oversight of the state's preservation programs and policies.

Documentation for Consultation: Refers to documentation used to comply with 36 CFR Section 800.6(a)(1). Standards for documentation are described by 36 CFR Section 800.11(e).

E

Effect: Alteration to the characteristics of a historic property qualifying it for inclusion in or eligible for the National Register.

Eligible for Inclusion on the NRHP: Includes both properties formally determined as such in accordance with the regulations of the Secretary of the Interior and all other properties that meet the National Register criteria.

Eligibility: Ability of a property to meet the National Register criteria.

Environmental: In a scientific context, a combination of external or extrinsic conditions present in nature. In a planning context, a category of analytical studies of aesthetic values, ecological resources, cultural resources, sociological and economic conditions, etc.

Environmental Assessment (EA): An Environmental Assessment means a concise public document--for which a Federal agency is responsible--that serves to:

1. Briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a "Finding Of No Significant Impact" (FONSI).
2. Aid an agency's compliance with the Act when no environmental impact statement is necessary.
3. Facilitate preparation of a statement when one is necessary.

And shall include brief discussions of the need for the proposal, of alternatives as required by section 102(2)(E), of the environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted.

Environmental Document: When all studies have been completed, potential impacts documented, avoidance alternatives have been evaluated and mitigation is planned, this information is compiled into a written report. The significance of the impacts will determine what level of document is produced. These documents are titled EIS, EA or CE.

Environmental Impact Statement (EIS) - The detailed statement required by the National Environmental Policy Act of 1969 when an agency proposes a federal action that significantly affects the environment. This report contains a summary of all environmental and engineering studies, noting the impacts and mitigation. After review, the FHWA will issue a Record of Decision (ROD).

Environmental Scoping Manager - A professional in each of the Department's six district offices involved in overseeing and coordinating district efforts related to environmental issues, operations and evaluations.

Evaluation: Process by which the significance and integrity of a historic property are judged and eligibility for National Register listing is determined.

Excavation: The scientifically controlled recovery of subsurface materials and information from an archaeological site. Recovery techniques are designed to produce maximum knowledge about the utilization of the site, and its relation to other sites and the natural environment. Recovery techniques may include the use of heavy equipment (e.g., backhoe, etc.), specialized instruments (pollen coring tools, etc.), and hand tools.

Excavation block: Term meaning a large square or rectangular area of ground, usually excavated by hand in smaller sections, or squares, called units.

F

Faunal or Zooarchaeological Analysis: The study of non-human bones and animal remains from archaeological sites.

Feasible and Prudent: A term used in the Section 4(f) process, which refers to the viability of an alternative that avoids the use of a Section 4(f) resource. The term "feasible" refers to an alternative that is possible to engineer, design and build. The term "prudent" means there are unique problems or unusual factors involved with the use of such alternatives. This means that the cost, social, economic and environmental impacts, and/or community disruption resulting from such alternatives reach extraordinary magnitudes. One can use a totality of these circumstances to establish that these unique problems, unusual factors or other impacts reach extraordinary magnitudes. A transportation agency must select an avoidance alternative if it is feasible and prudent. By contrast, an alternative may be rejected if it is not feasible and prudent. An alternative may be considered not feasible and prudent for any of the following reasons:

- Does not meet project purpose and need
- Excessive cost of construction

- Severe operational or safety problems
- Unacceptable impacts (social, economic or environmental)
- Serious community disruption
- A combination of any of the above

Feature: A localized area of human use or modification. Sometimes part of an activity area (e.g., hearth of a cooking area), cluster of artifacts (e.g., flint chips), and/or structures in the ground (e.g., fireplace, drain, post-holes).

Federal Action: A highway or transit project proposed for FHWA or FTA funding. It also includes actions such as joint and multiple-use permits, other federal permit and approvals, changes in access control, etc., that may or may not involve a commitment of federal funds.

Federal Highway Administration (FHWA): An agency of the U.S. Department of Transportation responsible for carrying out federal highway and transportation mandates through a network of several regional offices and a Division Office in each state.

Field director/supervisor: Individual, usually with a M.A. degree in anthropology or equivalent experience, who is capable of the day-to-day supervision of an archaeological project under the overall direction of a Principal Investigator.

Field investigation: A survey that describes the type, location and condition of properties in a specific geographic area combined with background research.

Field Review: A site visit conducted by INDOT, a LPA, and/or consultants to gather or verify cultural resources or other data, define a scope of work, analyze, and make decisions for specific projects.

Finding of No Significant Impact (FONSI) - 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. It shall include the Environmental Assessment, or a summary of it, and shall note any other environmental documents related to it (CFR 1501.7(a)(5)). If the assessment is included, the finding need not repeat any of the discussion in the assessment but may incorporate it by reference (40 CFR - 1508.3).

Fire-cracked rock (FCR): Stones fractured prehistorically during cooking or heating. The presence of FCR on a site's surface is indicative of subsurface features, and is often used in a site's determination of potential eligibility or significance.

Floral or Ethnobotanical Analysis: The study of seeds, and sometimes pollen (palynology) and larger plant remains.

Flotation analysis: The process of soaking and screening soil samples in water to collect very small artifacts and organic material, such as seeds, nutshell, bone fragments, and charcoal, that

float to the top. A soil sample to be “floated” generally consists of one gallon (4L) of soil per 10-cm level of a unit or feature.

G

Geographic Information System (GIS): A system for capturing, storing, analyzing and managing data and associated attributes that are spatially referenced to the earth. In the strictest sense, it is a computer system capable of integrating, storing, editing, analyzing, sharing, and displaying geographically-referenced information. In a more generic sense, GIS is a tool that allows users to create interactive queries (user-created searches), analyze the spatial information, and edit data.

Geometric Design: Pertains to those engineering activities involving standards and procedures for establishing the horizontal and vertical alignment and dimensions of slopes of a highway. It includes engineering work involved with proportioning the visible elements of a facility, tailoring the highway to the terrain, the controls of environmental and land space usage, and the requirements of the highway user, individually and collectively.

Geophysics: Ground-based measurement techniques that are non-invasive means of identifying archaeological sites and features. They may include (but are not limited to) metal-detecting, magnetometry, electrical resistivity, electromagnetic conductivity, and ground-penetrating radar.

H

Historic bridge: Bridges included in or eligible for inclusion in the NRHP.

Historic Bridge Inventory (HBI): A statewide survey of bridges on public roads and on public right-of-way that were built in or before 1965. It includes a historic context for bridges in Indiana, NRHP eligibility determinations, and Select and Non-Select status determinations.

Historic context: An organizing structure for interpreting history that groups information about historic properties that share a common theme, common geographic location, and common time period. The development of historic contexts is a foundation for decisions about planning, identification, evaluation, registration, and treatment of historic properties, based upon comparative significance.

Historic district: A significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.

Historic Property: Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in the NRHP (NRHP)--maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance that meet the National Register criteria.

History/Architecture resource: A building, structure, district, site, or object constructed at least 50 years ago. For definitions of these kinds of history/architecture resources, see the National Register Bulletin *How to Apply the National Register Criteria for Evaluation* (1998).

Historical significance: Importance for which a property has been evaluated and found to meet the National Register criteria.

I

Identification: Process through which information is gathered about historic properties.

Identification of alternatives: INDOT's engineering and environmental evaluations, in which the INDOT identifies and chooses an initial set of study alternatives that address the stated program objectives and the project need, and which are sensitive to the resources and land uses of a study area. The process involves a wide variety of possible options, assessing the merits and drawbacks, and choosing those that should be carried forward. Alternatives to be studied normally include the No-Build or no-action alternative, an upgrading of the existing roadway alternative, new transportation routes and locations, transportation systems management strategies, multimodal alternatives if warranted, and any combination of the above.

Impact: Positive or negative effects on the natural or human environment resulting from transportation projects.

In situ: A term that refers to an artifact that is still in the location where it was discarded or left by an occupant of a site.

Indian tribe: Means an Indian tribe, band, nation, or other organized group or community, Federally recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

Indiana Historic Preservation Review Board (Review Board): Nine member committee that makes decisions on a number of preservation-related issues and provides public oversight to the programmatic and regulatory activities of the DHPA. The Board officially nominates Indiana properties to the NRHP, approves funding recommendations for the DHPA federal matching grant program, and considers applications for certificates of approval for state-funded projects that will alter, demolish, or remove historic properties.

Indiana Historic Sites and Structures Inventory (IHSSI): A comprehensive, statewide inventory of Indiana's historic properties. The inventory is maintained by the SHPO for the purpose of locating, identifying, and evaluating cultural resources and to ensure that historic properties are taken into consideration in planning and development through the environmental review process.

Indiana State Historic Architectural and Archaeological Research Database (SHAARD): A database managed by DHPA that allows users to search cultural resource information on known

historic and archaeological resources throughout Indiana. Data was collected from cultural resource inventories, the National Register, and CRM projects.

Available at: <https://secure.in.gov/apps/dnr/shaard/welcome.html>

Indirect (or Secondary) Effects – Impacts that are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern or land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Integrity: Authenticity of a property's historic identity, evidenced by the survival of physical characteristics that existed during the property's historic or prehistoric period. The seven aspects of integrity are design, location, setting, materials, workmanship, feeling, and association. In the NRHP criteria for eligibility, the concept of integrity is central to resource eligibility. A resource can be significant, but unless it has certain amount of integrity, it cannot be eligible.

K

Keeper of the National Register (Keeper): The official responsible for the administration of the National Register within the National Park Service. One duty of the Keeper is to provide a formal determination of eligibility on cultural resources when there is a disagreement submitted on eligibility issues. The disagreement could occur between the federal agency and the State Historic Preservation Officer or between the agency and a private entity. The Keeper is the ultimate authority on issues of National Register eligibility and a formal determination resolves any such issues with finality.

L

Lead agency: A federal agency or designee taking primary responsibility for preparing an engineering or environmental document.

Legal notice - A formal announcement published according to legal requirements by INDOT or a Local Project Sponsor Agency in a periodical or newspaper to provide official public notice of an action or approval of interest to the public.

Level: A horizontal layer of soil in a unit that is usually excavated together, although it may be excavated in sub-levels. A level may be arbitrary (10 cm deep, for example) or natural (yellow sandy clay, for example).

Literature review: Secondary source review identifying the types of cultural resources that may be expected in the APE and establishes a comparative basis for evaluating cultural resources. A literature search may include written reports (including published, unpublished, reproduced, and manuscripts forms), books, articles, etc., pertinent to the investigations carried out for a cultural resource management study.

Local government: A city, county, parish, township, municipality, borough, or other general purpose political subdivision of a state.

Local Public Agency (LPA): The cities, towns, and counties that make up the smaller political subdivisions of the state.

Local significance: Importance of a property to the history of its community, such as a town or county.

Location map: A graphic drawing used in study reports and meeting presentations to show the orientation and the relationship of the project with its study area in comparison with existing roadways, features, developments, municipalities, and principal land uses nearby. The graphic typically will be large enough to show all major roadways, major cities, and principal topographic controls on the region. A 7.5' USGS topographic map illustrating the project area is required for all projects submitted to INDOT's INDOT Environmental Services.

LPA project: Any highway improvement project or enhancement project that is funded through the Department and matched with local resources.

M

Mapping: A plan surface with graphic or photographic representation of land or water depicting the study area for a project. Existing alignments, alternatives, engineering design features, and environmental constraints are plotted on various types of mapping. Photogrammetric (aerial) mapping assists in resource identification and studies. Topographic (base) mapping provides a foundation in alignment layout. Property tax maps, insurance maps, and historical atlases are also consulted. The type and scale of mapping are selected to fit the terrain and land use intensity of the study area as well as the level of detail in the proposed design.

Memorandum of Agreement (MOA): The document that records the terms and conditions agreed upon to resolve the adverse effects of an undertaking on historic properties.

Memorandum of Understanding (MOU): An interagency agreement.

Metropolitan Planning Organization (MPO): The organization designated by the governor and local elected officials as responsible, together with the state, for transportation planning in an urbanized area. It serves as the forum for cooperative decision making by principal elected officials of general local government.

Minimization: Refers to a step in the alternatives analysis and means that unavoidable impacts are reduced to the maximum extent possible.

Mitigation: The restoration, creation, enhancement or, in exceptional circumstances, preservation of resources expressly for the purpose of compensating for impacts.

Mitigation Measures: Specific design commitments made during the environmental evaluation and study process that serve to moderate or lessen impacts deriving from the proposed action. These measures may include planning and development commitments, environmental measures, right-of-way improvements, and agreements with resource or other agencies to affect construction or post-construction actions. Mitigation includes:

- Reducing and eliminating impacts.
- Avoiding the impact altogether by not taking a certain action or parts of an action.
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- Compensating for the impacts by replacing or providing substitute resources or environments.

N

National Environmental Policy Act (NEPA): Passed in 1969, the federal legislation requiring agencies of the federal government to document the environmental impact of transportation projects. Various approaches, steps, and approvals now used in the INDOT Project Development process originated with the National Environmental Policy Act. The NEPA process is enforced by regulations of the Council on Environmental Quality (CEQ). INDOT complies with NEPA by following 23 CFR 771, FHWA's regulations governing the preparation of environmental impact and related procedures.

National Historic Landmark: A historic property evaluated and found to have significance at the national level and designated as such by the Secretary of the Interior.

National Historic Preservation Act (NHPA): This is the primary legislation that governs historic and archaeological preservation in the United States. The Act, in its policy statement, emphasizes the importance of supporting the spirit and direction of the nation through its links with the past, sustaining the people's sense of direction and ensuring future generations "a genuine opportunity to appreciate and enjoy the rich heritage of our nation." It is stated that the Federal Government would foster productive harmony between modern society and historic resources, provide preservation leadership, administer historic resources, encourage preservation of non-federally owned historic resources, and encourage preservation and use of the historic built environment. It set up a broad program to implement this policy, including the expansion and maintenance of the NRHP, the formation of the Advisory Council on Historic Preservation, and the requirement that federal agencies take into account the effect of their activities and programs on historic properties.

National Register Files for the State of Indiana: A repository of all properties (structures, buildings, objects, and sites) officially nominated to the NRHP by the Secretary of the Interior. The National Register Files for the State of Indiana are located at the Department of Natural Resources, Division of Historic Preservation and Archaeology (DHPA).

National Register of Historic Places (NRHP): The national list of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, or culture. It is maintained by the Secretary of the Interior under authority of Section 101 (a)(1)(A) of the National Historic Preservation Act, as amended.

National significance: Importance of a property to the history of the United States as a nation.

No Adverse Effect: In 36 CFR Part 800, this is one of the determinations of effect that can be made through consultation with the State Historic Preservation Office (SHPO). This finding means that an undertaking may have an effect on a historic property, but the effect is not adverse. It means the undertaking will not significantly alter the qualities of the property that make the property eligible for or listed on the NRHP (NRHP).

No Historic Properties Affected: In 36 CFR Part 800, this is one of the determinations of effect that can be made through consultation with the State Historic Preservation Office (SHPO). This finding means that the undertaking will have no effect on any historic properties because A) there are no historic properties in the area of the undertaking, or B) there are historic properties in the area of the undertaking but the undertaking will have no effect on them.

No Potential to Cause Effects: In 36 CFR Part 800, this is one of the determinations of effect that can be made. This finding means an undertaking is a type of activity that does not have the potential to cause effect on historic properties, assuming such properties are present.

Non-contributing resource - Indiana Historic Sites and Structures Inventory: Such properties are usually either built after 1950 or are older structures that have been badly altered and have lost historic character or are otherwise incompatible with their historical surroundings. These properties were not included in the inventory unless they were located within a historic district.

Non-contributing resource - National Register of Historic Places: A building, site, structure, or object that does not contribute to the historic significance of a property.

Non-select bridge: A bridge included in Indiana's Historic Bridge Inventory that is listed in or eligible for inclusion in the NRHP, but is not a suitable candidate for preservation or is not an excellent example of a given type of historic bridge. The Bridge PA defines treatment measures for Non-Select bridges.

Notable resource - Indiana Historic Sites and Structures Inventory: A property that is above average in its importance. Further research or investigation may reveal that the property could be eligible for NRHP listing.

Notice-To-Proceed: Letter affirming that the contracting agency has approved the contract, has arranged for access to the project area, and has released the funds for the archaeology firm to do the work. Work on the project should not begin until the agency has given the notice-to-proceed.

O

INDOT Environmental Services (ES): An administrative unit of the INDOT responsible for managing environmental programs, including developing and providing environmental policy procedures and technical guidance for other INDOT offices.

Outstanding Resource - Indiana Historic Sites and Structures Inventory: A property that has enough historic or architectural significance that it is already listed, or should be considered for individual listing, in the NRHP. Such resources can be of local, state, or national importance.

P

Phase Ia (Archaeological Reconnaissance): The purpose of a Phase Ia archaeological reconnaissance is to identify archaeological resources within the project area. If archaeological resources are present, the Phase Ia survey also seeks to define the horizontal, and to a lesser degree, vertical extent of those resources, as well as the cultural affiliation and integrity of the deposit in order to decide if the site(s) are eligible for listing on the National Register. In project areas where the ground surface visibility is greater than 30%, a controlled surface collection is utilized. Shovel probe survey is used when there is less than 30% ground surface visibility.

Phase Ib: The Phase Ib is designed to build upon the previous Phase I when additional information is required to better evaluate a site, and to guide areas for Phase II investigations. Phase Ib may involve controlled surface collection, piece plotting, or subsurface sampling.

Phase Ic (Subsurface Archaeological Reconnaissance): The systematic excavation of trenches in alluvial or colluvial sediments. Alluvial and colluvial sediments are soils that, because of deposition, may contain buried archaeological resources that have no surface manifestation.

Phase II (Archaeological Testing): The purpose of a Phase II is to document the nature, age, variety, density, and horizontal and vertical extent of archaeological deposits, document the extent of disturbances, gather adequate data to further evaluate the significance and eligibility of a site, and develop a mitigation plan, if necessary. The Phase II may involve a combination of test units, mechanically excavated trenches, and specialized analyses. Generally, the DHPA requires a minimum of 10% of the site's area be tested. The Phase II investigation must proceed according to a DHPA approved plan, and be guided by specific research questions.

Phase III (Mitigation through Data Recovery): The purpose of the Phase III investigation is to conduct a full-scale archaeological investigation designed to realize the site's research potential through excavation, since the site will be largely destroyed by proposed construction activities. In Section 106 terms, the proposed undertaking will have an "adverse effect" on the archaeological site, and that effect is mitigated through the Phase III investigation. Terms of the Phase III are stipulated as part of an MOA between the federal agency, SHPO, and other consulting parties. The Phase III investigation must proceed according to a plan approved by the

DHPA, and be guided by specific research questions. Since every archaeological site is different, every Phase III plan will be tailored to the specific site. Generally, the DHPA requires a minimum of 25% of the site's area (above and beyond the area tested during the Phase II) be tested during a Phase III.

Photolog: A photolog is a visual tool that provides project documentation of conditions within the project area concerning extent of ground disturbance and presence of architectural properties, and enables evaluation of cultural resources.

Placard: Plaque containing text with information about a bridge, i.e., builder, year built, designer and patents.

Plans: Technical drawings which show the location, character, and dimensions of prescribed project work, including layouts, profiles, cross-sections and other details.

Plan, Archaeological: A plan of investigation submitted to the DHPA and CRO for comment and approval before archaeological work may begin. Plans are necessary for Phase Ib, Phase Ic, Phase II, and Phase III investigations, and are required for any ground disturbance within Indiana state property or any cemetery. Archaeological plans include, at a minimum, a statement of landowner permission, a research design, and explicit methodology.

Potential to Yield Information: The likelihood of a property to provide information about an important aspect of history or prehistory through its physical composition and remains.

Predictive Model: The use of background information about the surrounding region as a basis for predicting the kinds of properties that may exist within the area of potential effects.

Pre-qualified Consultant: Those individuals or firms who meet the criteria and have been approved by INDOT for pre-qualification under the categories of Archaeological Investigations (5.9) and/or History/Architectural Investigations (5.10) or other types of environmental investigations under INDOT's Consultant Prequalification manual (8-10-2005). The individual or firm should be listed by INDOT as pre-qualified at the time cultural resource investigations are undertaken. INDOT pre-qualification is separate from the Qualified Professional list maintained by the SHPO.

Preservation in Place: Regarding archaeological sites eligible for or listed in the NRHP whose importance has determined to lie in its preservation in place, as opposed to a site whose importance lies in the information that can be extracted from it via excavation (i.e., data recovery).

Primary Consultant: An individual, partnership or firm with qualified expertise in engineering, environmental or public involvement disciplines who is contracted by the originating office to provide technical services.

Principal Investigator: Individual, usually with a M.A. or Ph.D. degree or extensive experience, who designs research projects and oversees the field and laboratory tasks, and has the principal responsibility for preparing the report.

Programmatic Agreement (PA): Agreement between agencies designed to accomplish all agency goals, including timely and efficient coordination. Establishment of a procedure that will reduce the paperwork and processing time for certain federal actions with minor impacts on the human and natural environment; a process that provides effective communication while reducing paperwork and time commitments for all involved agencies.

Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation and the Indiana State Historic Preservation Officer Regarding the Implementation of the Federal Aid Highway Program In the State of Indiana (Minor Projects PA): The document that records the terms and conditions agreed upon to resolve the effects of an undertaking upon federally funded or approved highway maintenance and minor projects.

Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Indiana State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Management and Preservation of Indiana's Historic Bridges (Bridge PA): The document that records the terms and conditions agreed upon to resolve the effects of an undertaking upon federally funded or approved highway bridge projects.

Project Area: That area involved in a highway improvement that will be directly impacted by the project. Direct impacts include land needed for construction or other highway-related uses, i.e., the construction footprint. This area can either be within existing right-of-way or include new right-of-way.

Project Development Process (PDP): The State of Indiana's procedures for advancing a transportation improvement project from concept to construction. The philosophy behind the process emphasizes the integration of engineering and environmental studies and coordination among INDOT offices, state and federal resource agencies, and the public. The ultimate goal is to select, design, and construct the most reasonable, practical, cost-effective, technically sound and environmentally sensitive transportation improvement option.

Project File: A compilation of all data and study materials associated with environmental documents, including all pertinent information gathered during the environmental evaluation, supporting reports, telephone memorandums and pertinent correspondence.

Projectile Point: A type of stone tool that is chipped on both sides and has one end that has been modified to allow the point to be attached to a handle or shaft. Often referred to as "arrowheads," but often actually spearheads.

Provenience: The source or origin of an artifact; the exact location where an object was found or made. This may include grid coordinates, operation number, stratum, and level.

Public Hearing: A meeting designed to afford the public the fullest opportunity to express support of, opposition to, or comment on a transportation project. Documentation is required.

Public Involvement: Coordination events and informational materials geared toward public participation in the Transportation Development Process.

Public Meeting: An announced meeting conducted by transportation officials designed to facilitate public participation in the decision-making process and to assist the public in gaining an informed view of a proposed project during the Transportation Development Process.

Public Need: An activity or project that provides important tangible and intangible gains to society; one that satisfies the expressed or observed needs of the public where accrued benefits significantly outweigh reasonably foreseeable detriments.

Q

Qualified Cultural Resource Professional: Those persons who meet the professional qualification standards published in 36 CFR 61 and the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation published in the Federal Register, 1983, Part IV, 48(190:44738-44739).

Qualitative Analysis: A general concept that categorizes a process used in certain types of environmental or route location studies where multiple factors are compared in a systematic and comprehensive manner on the basis of sound judgment. Factors analyzed by using a qualitative analysis are such that they cannot be measured in monetary terms, have no apparent common denominators, and are not readily quantifiable.

Quantitative Analysis: The process used in certain environmental, economic, cost benefit, engineering, or traffic studies where multiple factors, elements, and/or outcomes are evaluated and compared by the use of measurable data. Certain mathematical models, formulas, numerical indices, rankings, and value matrices may be used to assist with such a process.

R

Record of Decision (ROD): A document prepared by the Division office of the Federal Highway Administration that presents the basis for selecting and approving a specific transportation proposal that has been evaluated through the various environmental and engineering studies. Typically, the ROD identifies the alternative selected in the Final EIS, the alternatives considered, measures to minimize harm, monitoring or enforcement programs, and an itemized list of commitments and mitigation measures.

Records Search/Literature Review: The initial state of archaeological investigation completed before fieldwork occurs. The records review is documentary research on the environment and known culture history of a project area using maps, previous survey results, local and regional syntheses, and site forms and records. The records review must be done at the Indiana DHPA.

Red Flags: Identified points of concern, including environmental and engineering issues, within the project study area.

Red Flag Cultural Resources: Previously identified historic properties, i.e., listed in or eligible for listing in the NRHP, prehistoric or historic period cemeteries, or other cultural resources likely to meet the National Register criteria.

Register of Professional Archaeologists (RPA): A national certification organization for professional archaeologists. Some states are currently requiring that cultural resource projects be conducted by RPA-certified or equivalent archaeologists to help insure that research is conducted satisfactorily. Visit <http://www.rpanet.org> for more information.

Remote Sensing: A set of field techniques including aerial photography, satellite imagery, LIDAR and rader.

Research Design: A plan for conducting an archaeological investigation; preparatory to undertaking a particular study. It includes a statement of the problem, basic assumptions, activities, and techniques, including strategies and methods required for problem solution and hypothesis testing, and a specification of the relevant data and how they will be utilized for a full understanding of the resource.

Right-of-Way: Land, property, or interest therein acquired for and devoted to transportation purposes such as construction, maintenance, operations, and protection of a facility.

S

Scope of Work/Scoping: A detailed, written list of tasks prepared in advance of engineering and environmental work to define requirements of studies. A scope of work is provided to prospective consultant firms--prior to the initiation of studies--to aid in preparing estimates of working hours, schedules, and costs required to prepare, complete, and deliver the work described. Scoping is the process of preparing the list of tasks.

Section 4(f): Section 4(f) of the USDOT Act of 1966 (Title 49, USC, Section 303) requires special considerations be made regarding the “use” of any publicly owned park, recreation area, wildlife/waterfowl refuge or historic property that is listed in or eligible for the NRHP. These properties are called “4(f) Properties.” “Use” is defined as a permanent easement, fee taking, or “constructive use” of a Section 4(f) property. This law applies only to USDOT activities including funding or approvals.

Section 4(f) Determination: Administrative action by which FHWA 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 U.S. Department of Transportation Act, as amended (49 USC 303). These resources include: parks or recreation areas that are publicly owned or open to the public, publicly owned wildlife or waterfowl refuges, or any significant historic sites.

Section 106: A section of the National Historic Preservation Act of 1966. This section of the act requires Federal agencies to take into account the effect of their undertakings on properties included in or eligible for inclusion in the NRHP, and to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings.

Section 106 Process: Procedures based on Section 106 of the National Historic Preservation Act, that govern the identification, evaluation, and protection of historical and archaeological resources affected by state and federal transportation projects. Principal areas include evaluation of cultural resources based on NRHP criteria and application of the criteria of effect.

Select Bridge: A bridge included in Indiana's Historic Bridge Inventory that is listed in or eligible for inclusion in the NRHP, is most suitable for preservation, and is an excellent example of a given type of historic bridge. The Bridge PA defines treatment measures for Select bridges.

Seriation: A relative dating technique used to place artifacts in chronological order based on similarities in style.

Shovel Test Probe (STP): A systematic method of surveying areas with less than 30% ground surface visibility. STPs are placed in 10-m intervals (5-m intervals on archaeological sites) and are a minimum of 30-cm in diameter and extend into undisturbed soils.

Significance: An assessment of a site's unique data and research potential within a specific archaeological, cultural, and/or environmental context. This assessment is expressed in relation to a site meeting one of the four criteria for eligibility to the NRHP.

Site: The location of a significant event, a prehistoric or historic occupation or activity or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing structure. The actual boundaries of sites may be based on the density of features and artifacts or on other criteria. In Indiana, a single artifact may be considered an archaeological site.

Span: The distance between the supports of a beam, arch or the like.

State Historic Preservation Officer (SHPO): The Governor-appointed official responsible for overseeing the national historic preservation program at the State level.

State Significance: Importance of a property to the history of the state where it is located.

State Site Form: Forms filled out by archaeologists on archaeological sites, filled out at the completion of cultural resource projects.

Stratigraphy: The study of the layers (strata) of sediments, soils, and material culture at an archaeological site. It is often used as a relative dating technique to assess the temporal sequence of artifact deposition.

Structure: The term structure is used to distinguish from buildings those functional constructions made usually for purposes other than creating human shelter.

Study area: A geographic area selected and defined at the outset of engineering and environmental evaluations which is sufficiently adequate in size to address all pertinent project matters occurring within it.

Substructure: The portion of the bridge below the pier and abutment seats, including footers and pilings. The substructure transmits the loads and stresses from the deck, superstructure, or other load supporting system to the ground.

Summary of Environmental Commitments: Commitments made during the environmental evaluation and study process to moderate or lessen impacts from the proposed action. These measures may include planning and development commitments, environmental measures, right-of-way improvements, and agreements with resource or other agencies to effect construction or post construction action.

Superstructure: The entire portion of a bridge above the abutment and pier seats, excluding the deck. The superstructure transmits the deck loads to the substructure. The superstructure and substructure are generally the two most important aspects of the bridge.

T

Test Unit: A formal hand excavation, usually one or two meters square or three, five, or ten feet square. When combined, units are referred to as an excavation block.

Theme: A trend or pattern in history or prehistory relating to a particular aspect of cultural development.

Transect: Term used to define the location of a line followed by archaeologists during survey and testing.

Tribal Historic Preservation Officer (THPO): The tribal official appointed by the tribe's chief governing authority or designated by a tribal ordinance or preservation program who has assumed the responsibilities of the State Historic Preservation Office for purposes of Section 106 compliance on tribal lands in accordance with Section 101(d)(2) of the National Historic Preservation Act.

Tribal lands: All lands within the exterior boundaries of any Indian reservation and all dependent Indian communities.

U

Undertaking: A project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including those carried out by or on behalf of a federal agency; those carried out with federal assistance; those requiring a federal permit, license, or

approval; and those subject to state or local regulations administrated pursuant to a delegation or approval by a federal agency.

UTM Reference: A set of coordinates (easting and northing) that indicate a unique location according to the Universal Transmercator Grid appearing on maps of the United States Geological Survey.

V

Verbal Boundary Description: A statement that gives the precise boundaries of a historic property.

