



LPA GUIDELINES MANUAL FOR FEDERAL-AID PROJECTS (Version 1.00)



A Summary of State and Federal Requirements

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Governor

STATE OF NEBRASKA

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Comment Form

Nebraska Department of Roads Local Public Agencies (LPA) Guidelines Manual for Federal Aid Projects

Your input is welcome. Please submit your written comments and suggestions either online at <http://www.transportation.nebraska.gov/gov-aff/lpa-comment-form.html>, by mailing them or faxing them to the address below:

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Name: _____

Local Agency, or Company: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

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Comments:

STATE OF NEBRASKA DEPARTMENT OF ROADS

LPA Guidelines Manual for Federal-Aid Projects

“A Summary of State and Federal Requirements”

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1.1 Background

The Nebraska Department of Roads (*NDOR*), as the recipient of Federal transportation funds for the State, is responsible for ensuring that all Federal funds are expended in accordance with applicable laws and regulations. When NDOR passes Federal funds through to a subgrantee (*subrecipient*) to carry out a project, it is the responsibility of NDOR to ensure that the subgrantee is aware of all Federal and State laws and regulations that apply to the project and that the subgrantee complies with them in order not to jeopardize Federal or State funding. Subrecipients may include: local governments (*counties and cities*), Metropolitan Planning Organizations (*MPO*), universities, non-profit entities, etc. All these subrecipients are considered to be Local Public Agencies (*LPA*). If an LPA is to receive Federal funding for any portion of work on a project, all phases of that project must comply with Federal and State requirements.

1.2 Purpose

This procedural manual has been prepared to aid LPAs in planning, organizing, designing, constructing, and maintaining their public transportation facilities when seeking Federal Highway Administration (*FHWA*) Federal transportation funds. This manual identifies responsibilities and describes the processes, procedures, documents, authorizations, approvals and certifications, which are required in order to receive Federal-aid and/or State funds for many types of local transportation projects.

1.3 Legal & Regulatory Authority

Federal-aid funds shall not participate in any cost which is not incurred in conformity with applicable Federal and State Law, the regulations in 23 Code of Federal Regulations (*CFR*) and 49 CFR, and policies and procedures established by FHWA and NDOR. Federal funds shall not be paid on account of any cost incurred prior to FHWA authorizing NDOR to proceed with the project in part or in its entirety.

As specified in [23 CFR 630.112\(a\)](#), when NDOR authorizes a project, NDOR “agrees to comply with the applicable terms and conditions set forth in Title 23, United States Code (*USC*), the regulations issued pursuant thereto, the policies and procedures promulgated by the FHWA relative to the designated project covered by the agreement, and all other applicable Federal laws and regulations”. Laws and regulations related to the oversight of LPA administered projects include:

- [23 U.S.C. § 106\(g\)\(4\)\(A\)\(i\)](#) and [\(ii\)](#) (as amended by SAFETEA-LU Section 1904)
- [OMB Circular -133](#) in general and specifically:
 - Subpart D, § 400(d)(2) and (3)
- [49 CFR Part 18](#) in general and specifically:
 - [49 CFR 18.3](#)

- [49 CFR 18.26\(b\)\(1\) and \(2\)](#)
- [49 CFR 18.37\(a\)\(1\) and \(2\)](#)
- [49 CFR 18.40\(a\)](#)

NDOR is responsible for ensuring that subrecipients of Federal funds have adequate delivery systems for projects and sufficient accounting controls to properly manage such Federal funds. FHWA, NDOR and/or any authorized representatives have the right of access to review/audit any LPA records (*invoices, project records, etc.*) at any stage of the project.

1.4 NDOR Local Projects Division

NDOR's Local Projects Division administers State and Federal funding to more than 700 cities, villages, counties, and regional agencies for the purpose of improving their transportation infrastructure or providing transportation services. This funding comes from various Federal and State programs specifically designed to assist the transportation needs of LPAs. Annually, over 150 new projects are authorized through the Local Projects Division.

The Local Projects Division is located at NDOR's Headquarters in Lincoln, Nebraska. It consists of four sections: an urban section, a rural section, the enhancement program section, and the Liaison Services Section. This Division is administered by Mr. Jim Wilkinson, P.E., whom is designated by the Deputy Director of Engineering.

Local Projects Division Engineer

Mr. Jim Wilkinson, P.E.
Local Projects Division
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The Urban Section administers, distributes, and monitors Federal funds for the 32 first class cities (*having a population over 5,000*) and the 3 metropolitan areas of Omaha, Lincoln, and South Sioux City. The section acts as a liaison between the cities, counties, MPOs, and the FHWA.

Urban Engineer

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Urban Project Coordinator (*Districts 2, 4, 6 & 8*)

Mr. Patrick Schafer
Local Projects Division
1400 Hwy 2
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Urban Project Coordinator (*Districts 1, 3, 5 & 7*)

Mr. Raitis Tigeris
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The Secondary (*Rural*) Roads Section administers the various road programs for counties and municipalities of population less than 5,000. The unit acts as a liaison between the local county or village and the FHWA. It distributes Federal and State funding to the LPAs for their transportation projects.

Secondary Roads Engineer

Mr. LeRoy Juengel, P.E.
Local Projects Division
1400 Hwy 2
PO Box 94759
Lincoln NE 68509
(402) 479-4437

Assistant Secondary Roads Engineer

Mr. Mitch Doht, P.E.
Local Projects Division
1400 Hwy 2
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Lincoln NE 68509
(402) 479-4432

The Transportation Enhancement Program Section provides funding to LPAs to build and restore transportation infrastructure. Transportation infrastructure projects that are eligible under this program include non-motorized facilities for pedestrians and bicycles, development of scenic byways, restoration of historic transportation facilities, and other projects directly related to the historic, current, or future transportation infrastructure. This section is also responsible for the Safe Routes to School program.

Transportation Enhancement Administrator

Mr. R. James Pearson
Local Projects Division
1400 Hwy 2
PO Box 94759
Lincoln NE 68509
(402) 479-4881

The Liaison Services Section coordinates the department's administrative rules and regulations and legislative affairs. It also provides administrative support to the Board of Public Roads Classifications and Standards and to the Board of Examiners for County Highway and City Street Superintendents and serves as an information resource to counties and municipalities in administering their road and street programs.

Programs administered by the Liaison Services Section include:

- Certification of State Incentive Payments;
- Verification of Local Match of State Highway Allocation Funds; and
- Workshops for superintendent licensure and for local highway/street program management and reporting.

Highway Local Liaison Coordinator

Mr. LeMoyne Schulz
Local Projects Division
1400 Hwy 2
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Lincoln, NE 68509
(402) 479-4436

1.5 Roles & Responsibilities

NDOR is responsible for establishing State policy, developing procedures, and providing oversight to the LPA on their Federal-aid transportation projects. NDOR will also provide project coordination, quality assurance, and adequate supervision of the program for reimbursing LPAs for planning, project development, environmental studies, design, Right-of-Way acquisition, construction of transportation facilities, and transportation enhancement activities. NDOR is also responsible for updating the LPA Guidelines Manual for Federal-Aid Projects.

The FHWA has the authority and responsibility for implementing and monitoring Federal laws, regulations, and executive orders affecting the LPA program and projects. FHWA will conduct process reviews or project audits to ensure compliance with applicable laws and regulations. FHWA Nebraska Division personnel provide Federal-aid program delivery in planning, preliminary engineering, technology transfer, real property acquisition and management, bridge

expertise, roadway safety, traffic operations, environmental support, design, construction, asset management, and civil rights.

The LPA is responsible for the selection, planning, programming, environmental investigation, design, Right-of-Way acquisition, construction, and maintenance of their projects, including inspection oversight and the development of necessary project documentation. The LPA must ensure that its staff members, consultants, and contractors comply with the applicable State and Federal laws, regulations, and procedures in developing and constructing its projects. The LPA must provide a qualified full-time public employee to be the responsible charge for a project. This individual will be referred throughout the manual as the LPA Responsible Charge (*RC*). In the event that the LPA is not adequately staffed to provide technical delivery of the project, they may choose to utilize a consulting firm as an extension of their staff. Using a consultant does not relieve the LPA for the overall responsibility of the project's conformance with the LPA Guidelines Manual for Federal-aid Projects and all applicable Federal and State rules and regulations. Throughout this manual, the term LPA will refer to the LPA's Responsible Charge, staff, and its consultants.

1.6 Manual Maintenance & Updates

FHWA funding programs, eligibility requirements, and procedures frequently change. Therefore, this manual is considered a 'living' document and will be updated periodically. When changes are necessary, NDOR will inform the LPAs what topics and pages of the manual were revised. The [NDOR Local Projects Division website](#) will always have the current version of this manual and the related forms and documents.

1.7 NDOR District Map

The following map shows the district dividing lines and the contact info for your NDOR District Engineer and Nebraska Highway Commissioner.

Nebraska ♦ Department ♦ of ♦ Roads

District Engineers

Richard Ruby
District 1
Lincoln
(402) 471-0850
FAX (402) 471-3401

Tim Weander
District 2
Omaha
(402) 595-2534
FAX (402) 595-1720
or (402) 595-2406

Kristine I. Winter
District 3
Norfolk
(402) 370-3470
FAX (402) 370-3473

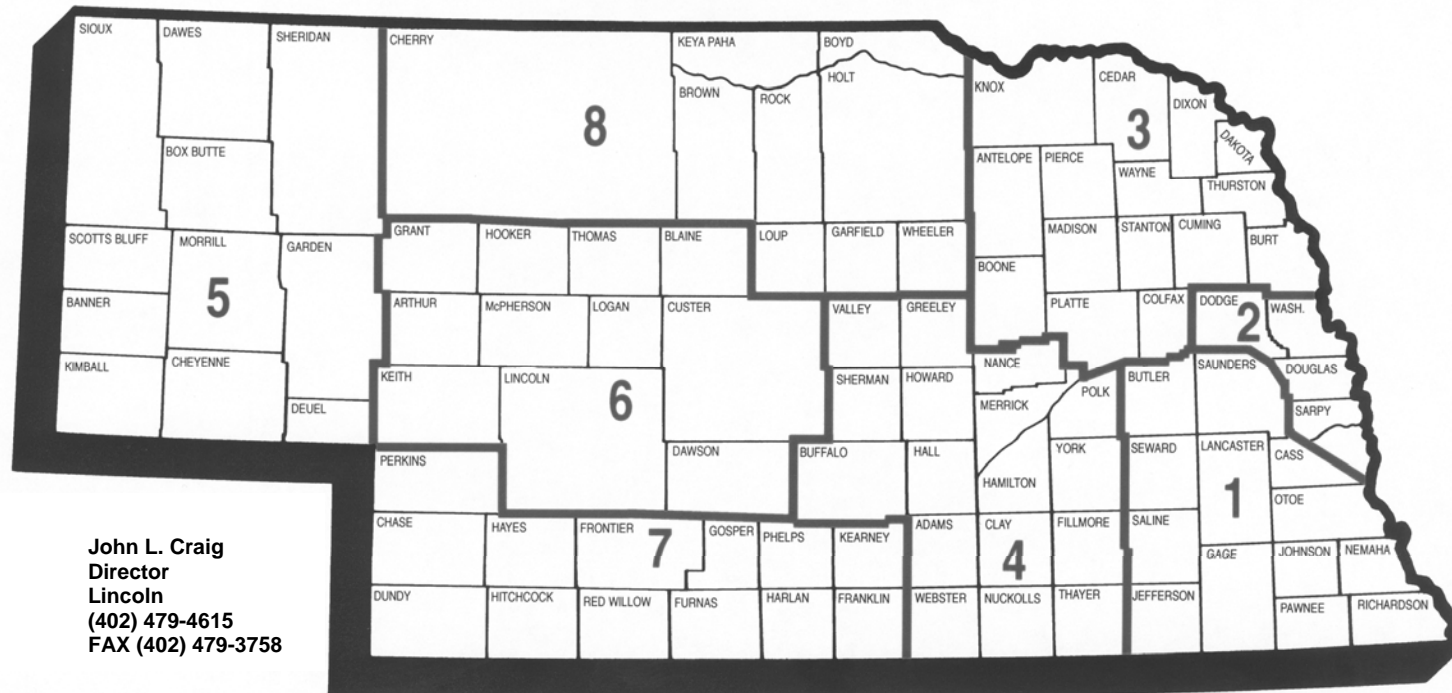
Wesley Wahlgren
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Grand Island
(308) 385-6265
FAX (308) 385-6269

Craig R. Lind
District 5
Gering
(308) 436-6587
FAX (308) 633-6614

Gary Thayer
District 6
North Platte
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FAX (308) 535-8034

Kurt Vosburg
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Mark Kovar
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Director
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Nebraska Highway Commission

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FAX (402) 245-2495

Richard S. Reiser
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(402) 894-3000
FAX (402) 894-3736

David E. Cople
District 3
Norfolk
(402) 371-4300
FAX (402) 379-3700

Donna Wanitschke
District 4
Grand Island
(308) 381-6655

Doug Leafgreen
District 5
Gering
(308) 635-2260
FAX (308) 635-2018

Ronald W. Books
District 6
North Platte
(308) 532-9480
FAX (308) 532-9484

Greg Wolford
District 7
McCook
(308) 345-2370
FAX (308) 345-2371

Jerome A. Fagerland
District 8
Atkinson
(402) 336-1208
FAX (402) 336-2276

1.8 Terms and Definitions

23 CFR - Title 23 Code of Federal Regulations is a codification of the general and permanent rules and regulations (*revised annually*) required to implement and carry out the provisions of Federal law relating to the National Highway Traffic Safety Administration and Federal Highway Administration, Department of Transportation.

49 CFR - Title 49 - Transportation, Code of Federal Regulations, Parts 1-99, contains current regulations issued under Subtitle A - Office of the Secretary of Transportation. The LPA Program will deal mostly with Parts 18, 19, 24, 26-29, 32, 37 and 38 of 49 CFR.

2 CFR - Title 2 CFR - Office of Management and Budget, Subtitle A p - Office of Management and Budget Guidance for Grants and Agreements, Part 225. Formerly known as OMB Circular A-87 and addresses allowability of costs incurred by State, local and Indian tribal governments.

Acquisition - The process of obtaining the Right-of-Way necessary to construct or support a project.

Administrative Settlement - Agreement to pay an amount in excess of the approved offer of just compensation for Right-of-Way that is closed prior to invoking of the LPA's condemnation authority. This must be justified in writing by a designated LPA official.

Allocation - The annual reservation of Federal funds to the LPAs.

Americans with Disabilities Act (ADA) - Under the ADA of 1990. When a LPA constructs any new facility or alters any part of an existing facility, work shall be performed so that the facility is readily accessible to and usable by individuals with disabilities.

Appraisal - A written statement independently and impartially prepared by a qualified appraiser setting forth an opinion of defined value of an adequately described property as of a specific date, supported by the presentation and analysis of relevant market information.

Authorization - Approval by FHWA to incur future costs on a project.

Betterment - Any upgrading of the facility being improved or relocated that is not attributable to maintenance or reconstruction of the existing facility at its current level of service.

Brooks Act - Requires agencies to promote open competition by advertising, ranking, selecting, and negotiating contracts based on demonstrated competence and qualifications for the type of engineering and design services being procured, and at a fair and reasonable price. Engineering and design related services are defined in 23 USC §112 (b)(2)(A) and 23 CFR §172.3 to include program management, construction management, feasibility studies, preliminary engineering, design engineering, surveying, mapping, or other related services. These other services may include professional engineering related services, or incidental services that may be performed by a professional engineer, or individuals working under their direction, who may logically or justifiably perform these services.

Categorical Exclusion (CE, Class 2) - Actions that do not individually or cumulatively have a significant effect on the environment; do not induce significant impacts to planned growth or land use for an area; do not require the relocation of significant numbers of people; do not have a significant impact on any natural, cultural, recreational, historic or other resources; do not involve significant air, noise or water quality impacts; or do not have significant impacts on travel patterns. Actions categorically excluded are exempt from further National Environmental Policy Act (NEPA) requirements to prepare either an Environmental Assessment (EA) or an Environmental Impact Statement (EIS). A Categorical Exclusion must still satisfy all Federal environmental laws and executive orders.

Change Order - A supplement to the contract that provides authority to pay for revisions (*increases or decreases*) in quantities or authorize changes to design features, time allowance, or specifications.

Commitment Compliance - Environmental documents and permits that record commitments made by the project designers and sponsors. These commitments must be fulfilled during and after construction. They are required to be included in PS&E for advertisement to obtain FHWA construction authorization.

Competitive Bidding - Construction projects are required to be advertised and awarded to the lowest responsible and responsive bidder through open competitive bidding.

Completion Letter - Letter from the LPA RC notifying the construction contractor that the project is complete and subject to inspection, audit, and acceptance by the State. This letter is required on competitive bid contracts and LPA force account projects.

Comprehensive Plan - The general, inclusive long-range statement of the future development of an LPA. The plan is typically a map accompanied by description and supplemented by policy statements that direct future capital improvements in an area.

Conflict of Interest – As per 23 CFR, no official or employee of a state or any other governmental institution who is authorized in their official capacity to negotiate, make, accept, approve, or to take part in negotiating, making, accepting or approving any contract or subcontract in connection with a project shall have, directly or indirectly, any financial or other personal interest in any such contract or subcontract.

Construction Engineering (CE) - Construction engineering services. Could include but is not limited to: construction inspection, project surveying and staking, and materials sampling and testing.

Consultant - An individual, public or private organization, or institution of higher learning having expertise in professional disciplines applicable to transportation programs and hired by the State or LPA.

Consultant Agreement - A standard NDOR template agreement used between the LPA and their selected consultant for professional engineering services.

Cultural Resources - A class of resources of historic age (*greater than 50 years old*) that include standing buildings, structures (*such as bridges*), districts (*that include structures and buildings*), and archeological sites. Locations of religious and cultural importance to Indian Tribes also may be cultural resources.

Damages - The loss in the value of the remainder in a partial acquisition of a property. When the LPA acquires a part of an owner's property, the acquisition, planned use, or construction may cause a loss in value of the remaining property. Damages may also extend to adjoining properties in which the property owner has an interest. Normally, the value of the damage is based on a before and after appraisal or on the cost to cure. A property owner is entitled to payment of damages and receives this payment as a part of the payment of just compensation.

Deficient Structure - A bridge which is either structurally deficient or functionally obsolete.

Disadvantaged Business Enterprise (DBE) - A Federal program that ensures equal opportunity in transportation contracting markets, addresses the effects of discrimination in transportation contracting, and promotes increased participation in Federally funded contracts by small, socially and economically disadvantaged businesses, including minority and women owned enterprises. All Federal-aid projects are subject to the legislative and regulatory DBE requirements which provide that a percentage goal of contractual labor and materials be supplied by DBE business enterprises.

District Construction Engineer (DCE) - The individual responsible for all FHWA and State construction project administration within a NDOR district.

District Engineer (DE) - Engineer in charge of one of the eight NDOR Districts in the State.

Donation - The voluntary conveyance of real property without compensation which may be utilized for an improvement project. Donations of future Right-of-Way can only be accepted if the offer to donate is done voluntarily by the property owner who is advised of the right to receive an appraisal but signs a written waiver of the rights to be compensated. Right-of-Way that is donated must also receive an environmental clearance even if no other Right-of-Way or rights in real property are required for the project.

Draft Environmental Impact Statement (DEIS) - Document identifying a course of action, alternative actions, analysis of the environmental impacts of alternates considered, and proposed mitigation of impacts. The DEIS is circulated to other agencies and the public for review and comment.

Easement - The right acquired by public authority to use or control property for a designated transportation purpose. A right created by grant, reservation, agreement, prescription, or necessary implication, which one has in the land of another. It is either for the benefit of the land (*appurtenant*), such as the right to cross A to get to B, or “in gross”, such as a public utility easement. Easements remain in existence until; (a) they are terminated by either the grantee or under the conditions set forth by law (*permanent easement*), or, (b) a specified amount of time has elapsed (*temporary easement*).

Eminent Domain (Condemnation) - The governmental power reserved to acquire private property rights by due process of law when the proven necessity arises. When exercising this right, two basic requirements must be met: 1) the use must be public, and 2) just compensation must be paid to the owner prior to taking possession of property.

Encroachment – A situation which occurs when improvements are discovered to be on another’s property illegally or without permission.

Environmental Assessment (EA, Class 3) - Actions in which the significance of the environmental impact to a project is not clearly established. All actions that are not clearly Categorical Exclusions (*CE, Class 2*) or Environmental Impact Statements (*EIS, Class 1*) are EAs. The EA provides sufficient analysis and documentation to determine if a Finding of No Significant Impact (*FONSI*) can be adopted or if an EIS must be prepared.

Environmental Impact Statement (EIS, Class 1) - Detailed written statement of project environmental effects. This term refers to either a Draft or Final Environmental Impact Statement or both, depending on its context.

Environmental Determination - Document used to determine the Class of Action. A checklist form is used for all actions not categorically excluded or not clearly requiring an EIS.

Environmental Document - Any document that identifies the social, economic, and environmental effects of a proposed project as defined by NEPA.

Environmental Justice - Efforts to avoid disproportionately high and adverse impacts on minority and low income populations with the respect to human health and the environment.

Environmental Mitigation - The act of lessening the damages to the surrounding area and its inhabitants which are attributable to a proposed project. Examples include: acquiring alternate sites to replace wildlife habitat or wetlands, or building sound walls for noise attenuation.

Environmental Site Assessment (ESA) - An environmental study conducted to assess the potential for contamination of a property or parcel with hazardous substances. The process by which a person or entity seeks to determine if a particular parcel of real property including improvements has been impacted by hazardous substances and/or petroleum products.

Fair Market Value (FMV) - The highest price estimated in terms of money which a property will bring if exposed for sale in the open market allowing a reasonable time to find a purchaser who buys with knowledge of all the used to which it is adapted and for which it is capable of being used. The highest price which a buyer, willing but not compelled to buy, would pay; the lowest a seller, willing but not compelled to sell, would accept.

Fee Simple - An absolute ownership without limitations or restrictions but subject to the inherent powers of government such as: eminent domain, escheat, police power, and taxation.

FHWA - The Federal Highway Administration and/or the Nebraska Division of FHWA.

Field Review - A site visit conducted to gather or verify data, define scopes of work, perform analyses, and make decisions for specific projects.

Final Design - The development of detailed working drawings, specifications, and estimates for transportation projects. Final design follows the receipt of necessary design and/or environmental approval, and it includes Right-of-Way acquisition and utility relocation.

Final Estimate - Estimate of the total project cost of a project prepared after completion of the construction contract and used as the basis for final payment to the contractor.

Force Account Work - Construction work that arises unexpectedly is not covered in the contract documents, and not amenable by a change order. Force-account reimbursement is used when it is difficult to provide an adequate measurement or to estimate the cost of certain items of work. The work can be performed by a contractor, a subcontractor, or the LPA's forces and the cost is determined by keeping track of the labor forces, equipment, material, and associated costs used to complete the unexpected work. This term can also refer to work performed by the LPA's work force. If the LPA elects to perform work with its own forces, and/or use their own materials and equipment, NDOR must approve all work being done. The work by LPA forces must be in the public interest and shown to be cost effective or an emergency situation.

Foreslopes (Front Slopes) - Roadway fill slope or ditch inside slope.

Functional Classification - Roadway classifications references in this manual are the Federal functional classifications shown on the official functional class maps maintained by NDOR Classifications and Needs Section (*e.g., principal arterial, minor arterial, collector*).

Functionally Obsolete - A bridge is generally considered functionally obsolete if it is unable to properly accommodate traffic due to poor roadway alignment, waterway, insufficient width, waterway, low structural evaluation, or inadequate clearances.

Hazardous Materials/Waste - A material is hazardous if it poses a threat to human health or the environment. The term is applicable to storage, deposit, contamination, etc., involving a hazardous material which has escaped, or has been abandoned. It can be defined in general terms as flammable, reactive (*subject to spontaneous explosion of fire*) substances, corrosive, and toxic. Regulations require all toxic substances be removed in accordance with local laws prior to a public project proceeding to construction. Involvement with hazardous waste sites can lead to significant clean up costs and project delays.

Hearing Summary - Summary of comments received from a public hearing.

Highway Easement - See definition for Easement.

Historic Significance - The quality of a property or place, fifty (50) or more years of age, by its association with one or more of the following: (a) important events in the past; (b) associations with important persons; (c) importance in design or construction; or (d) for the potential to provide important information about the past. The presence of this quality along with sufficient integrity are the criteria considered in making a determination whether a property is or is not eligible for the National Register of Historic Places.

Just Compensation - The payment made to a property owner in order to acquire property. The payment includes the value of the real estate acquired and any damages caused to the remainder of the property by the acquisition and/or construction and must be at least equal to the amount of the appraisal.

Lead Agency - A Federal, State, or LPA taking primary responsibility for preparing an environmental document.

Legal Settlement - Any settlement effectuated by final judgment.

Liquidated Damages - Amount(s) of money to be assessed against a contractor for late completion. The amount(s) must be related to, but not necessarily equivalent to, the actual damages suffered by the owner because of the late completion.

Local Public Agency (LPA) - Any local political subdivision, board, commission, governmental entity, or civic organization sponsoring a federally funded transportation project and determined to be qualified to assume the administrative responsibilities for such projects by NDOR.

Local Match - Portion of a project's cost paid for with LPA funds.

Location/Design Hearing - Public hearing to examine the location and conceptual design of a proposed transportation facility. Also called CORRIDOR HEARING or ROUTE HEARING.

Low Water Crossing - Waterway crossing, other than a bridge, where construction improvements have been made to produce a firm surface for vehicles to travel.

LPS Project Coordinator - NDOR or consultant personnel assigned to coordinate and work directly with the LPA.

Maintenance - Work directed toward the preservation of an existing roadway and related appurtenances as necessary for safe and efficient operation.

Materials Certification - A statement provided by the contractor, fabricator, or manufacturer that certain materials comply with the requirements of the contract.

Metropolitan Planning Organization (MPO) - An organization designated by the governor for communities with a population greater than 50,000 that is responsible for developing, implementing, monitoring, and updating a variety of transportation plans that are designed to enhance the region's competitive position, promote regional growth, improve personal mobility, and preserve the environment. It serves as the forum for cooperative transportation decision making by principal elected officials of general purpose government.

Milestone Date - One of many specific activity completion dates. These dates are used to indicate the status of the critical development path and the progress of a project.

National Environmental Policy Act (NEPA) - A law that requires all Federal agencies to consider environmental issues in their planning and decision making processes. Compliance entails implementing a systematic and interdisciplinary approach in order to account for environmental impacts of any Federal-aid action before transportation improvement actions are taken.

National Highway System (NHS) - Those roads and highways defined by the National Highway System Designation Act of 1995 as signed into law on November 28, 1995, plus any subsequent modifications.

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.

Nebraska Standard Plans - Construction detail plans available from NDOR that meet AASHTO design requirements.

Nebraska Standard Specifications for Highway Construction - The latest edition provides directions, provisions, and requirements for the performance of the work for the quantity, quality, and proportioning of materials.

Negotiation - The process of communication whereby an agreement is arrived at for the voluntary transfer of ownership at terms mutually acceptable to all parties of interest. This is the primary method for acquiring property for a project. It involves explaining items such as details of construction and just compensation, listening to the property owner, and determining the best way to reach an agreement for the sale of property.

New Construction - Building a new roadway, trail, or structure on substantially new alignment or the upgrading of an existing roadway or structure by adding one or more lanes. If 50% or more of the project length involves vertical or horizontal alignment changes, the project is considered new construction. The following types of projects are NOT classified as new construction, and the 3R standards apply:

- Modernization of an existing roadway or bridge by resurfacing, widening lanes, adding shoulders or adding turn lanes at intersections.
- Temporary replacement of a roadway or bridge immediately after the occurrence of a natural disaster or catastrophic failure to restore the facility.

Nonparticipation Items - Items of project work that are not eligible for Federal-aid.

Notice of Intent (NOI) - A notice printed in the Federal Register advising that an Environmental Impact Statement (EIS) will be prepared and considered for a proposal.

Obligation Limitation - Also called OBLIGATION AUTHORITY and CONTRACT CONTROL, it limits the amount of Federal funds that may be obligated during a certain time period.

Obligation of Funds - The formal commitment by FHWA to participate in a share of the project costs.

Off-System Routes - Routes that have a functional classification of rural local, local road or street, or rural minor collector.

On-System Routes - Routes that have a functional classification of urban collector, rural major collector, rural or urban arterial, or expressway.

Partial Acquisition - The taking of only a part of a property for public use under the power of eminent domain and for which just compensation must be paid, offsetting the damages and/or special benefits to the remaining property.

Permanent Easement - See definition for Easement.

Plans, Specifications, and Estimates Package (PS&E) - A packet of information needed to obtain Federal authorization prior to the advertisement of a project for construction bids. Its content shall include a copy of the project agreement, the Project Engineer's official cost estimate, a copy of the plans, the environmental consultation form, the Right-of-Way certification, and a copy of the project specifications. The estimate, plans, and specifications must be signed and sealed by a Professional Engineer/Architect.

Posting - Establishment of a maximum weight limit for vehicles using the bridge.

Preliminary Engineering (PE) - Preliminary engineering involves all engineering, design, and environmental studies work performed by the LPA or their consultant prior to bid letting. This involves the preparation of construction plans (*including permits*), specifications and cost estimates to be used for bidding and building a project. The PE phase of a project ends with the opening of construction bids.

Prequalified Consultant - The selected consultant is prequalified by NDOR for a particular work category through the submission of credentials, and has been chosen by the LPA or NDOR using a Quality-Based Selection Process. A list of prequalified consultants and prequalification categories is maintained on NDOR's website.

Prequalified Contractor - The selected contractor is prequalified by NDOR for a specific work type through the submission of credentials. A list of prequalified contractors and prequalification work types is maintained on NDOR's website.

Prequalifying Prospective Bidders - In advance of considering, opening or accepting bids, or in advance of issuing bid proposals, the process used by a contracting agency to establish limitations on the amounts and types of work contractors are permitted to bid on and to have underway at one time.

Prime Contractor - The selected NDOR prequalified contractor that is responsible for at least 51% of the awarded contract dollars.

Program Agreement for Safe Routes to School (SRTS) or Transportation Enhancement (TE) Projects - This is an agreement between the LPA and NDOR detailing responsibilities for completion of a SRTS or TE project. This agreement will be drafted by the NDOR LPD Project Coordinator and must be signed by the LPA and NDOR.

Progress Billing - Request from LPA or contractor for State/Federal reimbursement for work completed on a Federal-aid transportation project during a defined time period.

Progress Estimate - Estimate of the contractor's total amount of work completed by the date listed by work item.

Pro Rata Share - The legal Federal share for a project established at the time of project approval. Pro rata share is typically expressed as a percentage of the total participating costs of the project.

Progress Payment - Payment by a LPA to a consultant or construction contractor for work completed on a Federal-aid transportation project during a defined time period.

Project Program Agreement - A legal document of understanding between the LPA and NDOR. They are necessary for administration of each project.

Proprietary - A product or process available only through a single supplier or manufacturer.

Proprietary Specifications - Refers to and requires specific products by trade name and model.

Public Interest Finding - Justification of a project based upon a finding of cost effectiveness or an emergency situation that must be provided to FHWA by NDOR on behalf of a LPA.

Public Involvement Plan - Required, integral part of an environmental study that outlines procedures for presenting information to the public, obtaining public comment, and considering public opinion. Notice of public hearings must be published.

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.

Qualifying Low Bidders - After bid opening, the process by a contracting agency used to consider the qualifications of the apparent low bidder to perform the work.

Qualification-Based Selection Process (QBS) - A negotiated procurement process for consultant selection based upon qualifications and competence in relation to the work to be performed. Cost of services cannot be a factor in evaluating potential consultants.

Real Estate - The physical land and appurtenances including structures affixed thereto.

Reconstruction - Removal and rebuilding of all paving layers including base or sub-base layers.

Record of Decision (ROD) - Document prepared by the lead Federal agency after an Final Environmental Impact Statement has been completed that outlines the final decision on a proposal. It identifies the selected alternative, alternatives considered, and measures to minimize harm and outlines a monitoring or enforcement program.

Rehabilitation - See also RESTORATION. This type of work may include removal of the pavement layers down to but not including the base or sub-base, recycling or reworking existing materials to improve their structural integrity, adding underdrains, and improving or widening shoulders. Rehabilitation may include acquisition of additional Right-of-Way. Also, work required to eliminate the items that cause a bridge or structure to be identified as deficient.

Reimbursement - Payment of funds to a LPA.

Relaxation of Standards (*design exception*) - Departure from applicable design standards. Must be approved in writing by the Nebraska Board of Classifications and Standards.

Relocation Assistance - The process by which an LPA meets the legal requirements for providing relocation services, moving payments, and replacement housing payments for all eligible individuals, families, businesses, farms, and nonprofit organizations which are displaced by a project.

Responsible Charge – A full-time public employee is responsible charge of a Federal-aid transportation project who has decision making authority to assure project compliance with the LPA Guidelines Manual for Federal-aid Projects and all applicable Federal and State rules and regulations.

Restoration - Work performed on pavement or bridge decks to render them suitable for resurfacing. This may include supplementing the existing roadway by increasing surfacing and paving courses to provide structural capability and by roadway widening up to a total of ten (10) feet. Restoration will generally be performed within the existing Right-of-Way.

Resurfacing - Addition of a layer or layers of paving material to provide additional structural integrity, improved serviceability, and rideability. May include milling.

Right of Entry - A document used to obtain permission to enter and perform some activity prior to the effective date of a Right-of-Way contract or an Order for Possession. It may be used to certify control of Right-of-Way in rare instances such as emergency situations. Solicitation of Rights of Entry prior to the appraisal process should be restricted to circumstances which are exceptional or emergency in nature. Ordinarily, the Right of Entry will not displace people or impact improvements of a significant nature. In all instances when a Right of Entry is secured, the document must explain the provisions for use, disposal, amount, and the time period.

Right-of-Way (ROW) - Land acquired for or devoted to transportation purposes. ROW is granted by deed or easement for construction and maintenance of the designated use, which may include trails, roadways, or other public uses.

Right of Way Certificate - Document prepared and executed by the LPA that indicates the status of the transfer of title, relocation of displacees, demolition of improvements, and removal of hazardous materials or remediation of contamination on the Right-of-Way required for construction of the project. It also certifies that Right-of-Way activities were conducted in accordance with all Federal, State, and local laws, rules, and regulations.

Right of Way Cost Estimate - This document should include an estimate value of the takings, any damage costs, incidental costs (*such as appraisal fees, negotiator fees, title fees, etc.*), relocation expenses, possible condemnation costs, and demolition fees on a tract-by-tract basis.

Roadway Width - Portion of a street or road between curbs or including shoulders intended for vehicular use.

Safe Routes to School Selection Committee - A 5-member select committee reviews the applications submitted to NDOR for SRTS funds. This committee makes formal recommendations to the NDOR Director for project funding based on established program criteria.

SAFETEA-LU - Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users. Five year Highway Act from October 1, 2004 to September 30, 2009.

Scoping - Process for identifying issues and alternatives for an EIS.

Section 106 - Section of the National Historic Preservation Act of 1966 (*in 36 CFR 800*) which governs the identification, evaluation, and consideration of historical and archaeological resources affected by State and Federal transportation projects.

Section 404 - Section of the 1972 Federal Clean Water Act, as amended in 1977, regarding discharge of dredged or fill materials into wetlands or waters of the United States.

Section 401 Water Quality Certification - Provisions required by the Federal Clean Water Act for projects involving the discharge of materials into surface waters, including wetlands.

Section 4(f) of the U.S. Department of Transportation Act, as amended (49 USC 303) - Provides protection for public parks and recreation areas, wildlife and waterfowl refuges, and significant historic sites on publicly owned land.

Section 6(f) - A provision in the Federal Land and Water Conservation Fund Act 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 non-recreational uses. Proposed transportation projects which affect such lands require a study and an analysis of alternatives to serve as the basis for a Section 6(f) finding by the U.S. Department of the Interior.

Soft Match Credit - Credit earned by LPAs that replace their deficient bridges using local funding. The credit can be used in lieu of the required local match for future Federal-aid bridge projects.

Sole Source - Qualifications-based vendor selection, with or without competitive negotiation techniques. Selection of a contractor for negotiations based on its reputation or prior relationship with the agency, without first going through a competitive selection process. Use of this method is generally limited to situations where the vendor offers a unique and innovative concept, demonstrates a unique capability to provide particular services, or offers a concept or services not otherwise available to the LPA.

Special Provisions - Portion of the construction contract specifications addressing conditions that are unique to a specific project.

Standard Specifications - Sets of typical construction contract specifications.

State, Department, or NDOR - State of Nebraska, Department of Roads.

State Representative - This is the individual from the Nebraska Department of Roads District office assigned to the project, who will perform quality assurance activities on the project during construction.

State Transportation Improvement Program (STIP) - NDOR's State Transportation Improvement Program which sets forth all projects that have been approved for funding under the various programs administered by the Department.

Structurally Deficient - A bridge is generally considered to be structurally deficient if it is in relatively poor condition, or has insufficient load carrying capacity for modern design loadings. The insufficient load capacity may be the result of the loads used in the original design or degradation of structural properties due to deterioration.

Sufficiency Rating - A numerical rating of a bridge based on its structural adequacy, safety, serviceability, functional obsolescence, and essentiality for public use.

Supplemental Agreement - An agreement that revises or amends previous agreements between the LPA, Consultant, or NDOR.

Surfaced Width - Portion of a street or road between curbs or shoulders that is used by moving vehicles, including turning lanes, but excluding parking lanes and/or shoulders.

Temporary Easement – See definition for Easement.

Three R (3R) - Work undertaken to extend the life of an existing roadway, trail, or structure and enhance transportation safety. (*Restoration, Rehabilitation, and Resurfacing*).

Tied Bids - Practice of letting a single construction contract for two or more projects. Usually done to take advantage of economies of scale, such as more favorable unit prices for larger quantities of material.

Title 23 U.S.C. - Title 23 of the United States Code contains most of the laws governing the Federal-aid highway Program.

Transportation Enhancement Select Committee - A volunteer committee that reviews the applications submitted to NDOR for TE funds. This committee makes formal recommendations to the NDOR Director for project funding based on established program criteria.

Transportation Improvement Program (TIP) - A Transportation Improvement Program issued by a Metropolitan Planning Organization (*MPO*), comprising a listing of LPA projects to be funded, including those involving State and/or Federal funding programs.

Transportation Management Area (TMA) - Metropolitan planning organization for communities with a population greater than 200,000.

Uneconomic Remnant - A remainder of land that has little or no value or utility to the owner because of a partial acquisition of a larger portion of land.

Uniform Act - Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

Urbanized Area - Area with a population over 50,000 within the boundaries established by the U.S. Census Bureau or by responsible State and local officials.

Urban Area - Land area within the boundaries of the Federally-designated urban areas (*population over 5,000*) as shown on official NDOR urban area maps.

Utility, Slope, or Drainage Easement - Easements for specific purposes, covering areas which will either remain permanently under the acquiring LPA control, or be relinquished to the utility owner by formal agreement.

Walkway - Continuous way designated for pedestrians and separated from through traffic lanes by a curb, space, pavement marking, or barrier.

Wetlands - Those areas that are inundated or saturated by shallow surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, natural ponds, wet meadows, river overflow, and similar areas.

1.9 Commonly Used Acronyms

3R	Resurfacing, Restoration, Rehabilitation
4R	Includes 3R plus Reconstruction
AA	Affirmative Action
AASHTO	American Association of State Highway and Transportation Officials
ACHP	Advisory Council on Historic Preservation
ADAAG	Americans with Disabilities Act Accessibility Guidelines
ADA	American's with Disabilities Act
AADT	Annual Average Daily Traffic
ADT	Average Daily Traffic
AIA	American Institute of Architects
ANSI	American National Standards Institute
APE	Area of Potential Effect
ASTM	American Society for Testing and Materials
BMP	Best Management Practices
CE	Categorical Exclusion Action or Construction Engineer
CEQ	Council on Environmental Quality
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CFR	Code of Federal Regulation
COE	United States Army Corps of Engineers
COI	Conflict of Interest
CWA	Clean Water Act

DBE	Disadvantaged Business Enterprise
DNR	Department of Natural Resources
DOC	US Department of Commerce
DOJ	US Department of Justice
DOL	US Department of Labor
DR Form	Department of Roads Forms
EA	Environmental Assessment
EEO	Equal Employment Opportunity
EIS	Environmental Impact Statement
EJ	Environmental Justice
EO	Executive Order
EPA	Environmental Protection Agency
ER	Emergency Relief Program
ESA	Endangered Species Act
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMV	Fair Market Value
FONSI	Finding of No Significant Impact
FTA	Federal Transit Administration
FWCA	Fish and Wildlife Coordination Act
FWS	Fish and Wildlife Service
GIS	Geographical Information System
HAZMAT	Hazardous Materials
HRRRP	High-Risk Rural Roads Program
HSIP	Highway Safety Improvement Program
HUD	United States Department of Housing and Urban Development
LCLC	Lincoln City Lancaster County MPO

LEP	Limited English Proficiency
LPA	Local Public Agency
LPD	Local Projects Division
LUST	Leaking Underground Storage Tank
LWCFA	Land and Water Conservation Fund Act
MAPA	Metropolitan Area Planning Agency
MBTA	Migratory Bird Treaty Act
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organizations
MUTCD	Manual on Uniform Traffic Control Devices
NAAQS	National Ambient Air Quality Standard
NAP	Noise Abatement Policy
NDEQ	Nebraska Department of Environmental Quality
NDNR	Nebraska Department of Natural Resources
NDOR	Nebraska Department of Roads
NEPA	National Environmental Protection Act
NFPA	National Fire Protection Association
NFS	National Forest Service
NGPC	Nebraska Game and Parks Commission
NHS	National Highway System
NOI	Notice of Intent
NPDES	National Pollution Discharge Elimination System
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRD	Natural Resource District
NRHP	National Register of Historic Places
NSBP	National Scenic Byways Program
NTP	Notice-to-Proceed

NWP	Nationwide Permit
OMB	Federal Office of Management and Budget
PE	Preliminary Engineering or Professional Engineer
PIH	Plan-in-Hand
PIL	Public Interest Letter
PS&E	Plans, Specifications, and Estimates
QBS	Qualification-Based Selection
RC	Responsible Charge
RCRA	Resource Conservation and Recovery Act
RFP	Request For Proposal
ROD	Record of Decision
ROW	Right-of-Way
RRX/RRZ	Rail Highway Crossing
SAFETEA-LU	Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users
SHPO	State Historic Preservation Office
SIMPCO	Siouxland Interstate Metropolitan Planning Council
SRN	Safe Routes Nebraska
SRTS	Safe Routes to School Program
STIP	State Transportation Improvement Program
STP	Surface Transportation Program
SWPPP	Storm Water Pollution Prevention Plan
T&E	Threatened and Endangered Species
TE	Transportation Enhancement
THPO	Tribal Historic Preservation Officer
TIP	Transportation Improvement Program
TMT	Train Mile Tax
TRB	Transportation Research Board
USC	United States Code

US	United States
US DOI	US Department of Interior
US DOT	US Department of Transportation
USACE	US Army Corps of Engineers
USCG	US Coast Guard
USDA	US Department of Agriculture
USDOL	US Department of Labor
USFWS	US Fish and Wildlife Service
VE	Value Engineering
VMT	Vehicle Miles Traveled
WQS	Water Quality Certificate

Chapter 2
Programming the Project

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2.1 Introduction

This chapter describes the funding programs, processes, documents, and approvals necessary for obtaining Federal funds through the NDOR. Each Federal fiscal year (*October 1 to September 30*), NDOR makes Federal funds available for use by LPAs.

If a LPA intends to seek Federal funds for any phase of a project, it must be programmed as a Federal-aid project from its inception; all phases of the project must be developed in compliance with this manual. Federal funds include discretionary or demonstration funds (*earmarks*). Projects not programmed as Federal-aid will not be processed through NDOR or FHWA.

LPAs may apply to NDOR for Federal-aid funding from the following programs. These funding programs will be discussed in detail later in this chapter.

- STP-Urban;
- STP-Rural;
- STP-Enhancement;
- Highway Bridge Program;
 - Replacement
 - Rehabilitation
 - Soft-Match Credit Program
- Safe Routes to School;
 - Infrastructure
 - Non-infrastructure
- Highway Safety Improvement Program;
 - Highway Safety Improvement
 - High Risk Rural Road
- Rail Highway Crossings; and
 - Hazard Elimination
 - Protective Devices
- Special Federal-aid Funding.
 - Nebraska Byways
 - Emergency Relief
 - Earmarks

2.2 Annual Federal Apportionment

Federal-aid Transportation funds are authorized by Congress to assist the states and LPAs in maintaining and reconstructing roads and bridges on eligible Federal-aid roadway routes and for other special purpose programs and projects. Federal funds are normally apportioned at the beginning of every Federal fiscal year (*October 1*). NDOR will then allocate Federal funds to each of the different Federal-aid programs. All Federal funds remain available for three (3) years after the close of the fiscal year in which they were authorized. Unused funds may be withdrawn by NDOR to make other arrangements for their expenditure. This may be necessary in order to prevent loss of the funds through statutory lapse. FHWA is a reimbursable agency which means that the NDOR/LPA incurs the costs initially (*after receiving the FHWA authorization*) and then will be reimbursed by FHWA once the proper billing/invoice is submitted by the State to the Division.

2.3 Planning

The LPAs initial planning process should provide consideration of projects and strategies that will:

- Increase safety and security of the transportation system for vehicular and pedestrian users;
- Increase accessibility and mobility options available to people and freight;
- Protect and enhance the environment, promote energy conservation, and improve the quality of life;
- Enhance the integration and connectivity of the transportation system;
- Promote an efficient system of management and operation; and
- Emphasize the preservation of the existing transportation system.

It is recommended the LPA perform a life-cycle cost analysis of all projects to be considered. Life-cycle cost analysis is an economic evaluation of all current and future costs associated with investment alternatives. It is a valuable technique for evaluating transportation programs and projects that requires long-term capital and maintenance expenditures. Future costs are discounted using an appropriate discount rate to compare costs incurred at different points in time. See the [Life Cycle Cost Analysis Primer](#) or [FHWA website](#) for more details.

Most importantly, and LPA should provide an accurate initial estimate that will reflect the anticipated cost of the project. There are three ways the LPA can prepare and document the initial cost estimate:

1. The use of historical data from recently awarded contracts is the most common approach. Under this approach, previous unit bid prices and data are summarized and adjusted for project and market conditions.

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2. The actual cost approach takes into consideration factors related to actual performances of the work such as cost of labor, equipment and materials. This approach is especially useful in estimating unique items of work where there is insufficient bid history.
3. Combining the use of historical bid data with actual cost development. Prices for these items are estimated from actual costs and adjusted for specific project conditions. The remaining items are estimated based on historical prices and adjusted as appropriate for the specific project.

2.4 Finding the Appropriate Funds

The table below shows Federal funding programs that are available for the different types of improvements. Use this table for determining which funding type would best fit the project.

Note:

X = Typical funding source available for this type of project.
 Additional funding options and project types may be available.

Type of Improvement	Funding Categories						
	STP-Urban	STP-Rural	BR/BH - Bridge	STP-Enhancement	HSIP - Safety	SRTS – Safe Routes	Rail Highway Crossing
Roadway: New Construction	X	X					
Rehabilitation	X	X					
Widening	X	X					
Resurfacing	X	X					
Intersection Improvement	X	X			X		
Bridge: New Construction	X	X					
Replacement	X	X	X				
Rehabilitation	X	X	X				
Traffic Signals/Roadway Lighting	X	X			X		
New Railroad Viaduct							X
Rail Crossing Protection							X
Bicycle/Pedestrian Trails and Facilities	X	X		X	X	X	
Landscaping/Streetscaping	X	X		X			
Restoration of Historic Transportation Facilities				X			
Non-infrastructure Outreach Activities					X	X	
Traffic Calming and Speed Reduction Improvements					X	X	
Traffic Diversion Improvements in the Vicinity of Schools					X	X	

2.5 State Transportation Improvement Program (STIP)

Federal law requires each state to develop a State Transportation Improvement Program (STIP), listing all regionally significant projects, along with their anticipated costs and funding sources that are planned for the upcoming four (4) years. The STIP is developed annually by NDOR's Program Management Division in cooperation with other NDOR Divisions, the MPOs and other affected Federal, State, and LPAs. All Federally funded projects must be identified in the STIP for the funding to be authorized and released for the project. NDOR will work with all LPAs to ensure every new or current project gets listed into in the STIP.

Each MPO must develop a Transportation Improvement Program (TIP) for projects that fall within their metropolitan area. NDOR includes these TIPs by reference in their STIP. LPAs must have their road, trail, and bridge projects referenced in their One- and Six-Year Improvement Program.

For each LPA outside an MPO, the STIP will be developed in consultation between NDOR and the local officials with responsibility for transportation projects using NDOR processes.

For each area of the State under the jurisdiction of an Indian tribal government, the STIP shall be developed in consultation with the tribal government and the Secretary of the Interior.

Federal law also requires that NDOR and the MPOs provide citizens, affected public agencies, representatives of transportation agency employees, representatives of users of public transit, and other interested parties with a reasonable opportunity to comment on the proposed STIP. This is done through a series of public meetings held annually in each of NDOR's eight (8) field districts and in each of the MPO areas.

2.6 NDOR Internal Programming Procedures

After the appropriate NDOR LPD Project Coordinator approves the DR Form 530, the Coordinator will forward it to the Program Management Division for review. This section will assign a State Control Number and Project Number and then route the document through the appropriate District Engineer, the NDOR Bridge Division (*when necessary*) and the Local Projects Division Engineer for final approval. After final approval, the Program Management Division enters the project data into NDOR's Program Project Management and Project Finance computer systems.

Once the project data has been entered into NDOR's computer database, the project is considered "programmed." The Program Management Division informs the NDOR LPD Project Coordinator, who in turn informs the LPA. NDOR will then proceed with the preparation of the NDOR/LPA Project Program Agreement.

2.7 Obligation, Authorization and Notice-to-Proceed

An obligation is a commitment by the Federal government to reimburse the NDOR for the Federal share of a project's eligible cost. This commitment occurs when the project is ready to advance into the next phase of work. Obligated funds are considered "used" and, therefore, are unavailable for other purposes even though no cash has been transferred.

Federal aid transportation projects are developed by completing work in the following distinct work phases:

1. Preliminary Engineering/NEPA (*PE*)
2. Final Design
3. Right-of-Way (*ROW*)
4. Utilities
5. Construction Engineering (*CE*)
6. Construction

Each new work phase requires FHWA to: 1) approve obligation of funds, 2) authorize work in that phase to begin, and 3) NDOR to issue a notice-to-proceed to the LPA.

It is NDOR's responsibility to request obligation of funds. It is FHWA's responsibility to authorize the reimbursement of eligible expenses. When a Federal authorization date for a specific phase is given, a notice-to-proceed is issued by NDOR to the LPA. This authorization date is the day on which eligible work phase expenses can begin to be incurred.

NDOR approval of an executed project program agreement shall not be considered a general "Notice-to-Proceed" for the entire project. The LPA must have a written Notice-to-Proceed prior to the performance of each new Federal phase of work.

It is important to understand that the obligation of funds to the work phase does not automatically make expenses for that phase eligible for Federal-aid. For project costs to remain eligible, LPAs must follow all Federal and State regulations and requirements.

Any expenses incurred in a work phase prior to the authorization of Federal funds will not be eligible for Federal reimbursement. Other sanctions as described in Chapter 15 may also apply.

2.8 Project Program Agreement

The NDOR/LPA Project Program Agreement is the binding contract that empowers the LPA to administer a Federally funded project and also places the responsibility of adherence to all Federal and State regulations with the LPA. The agreement defines the project scope, project responsibilities, Federal and State requirements and regulations, design guidelines, detailed

funding amounts, maintenance responsibilities, and payment obligations. When an LPA uses Federal funds for a project, the LPA is required to maintain the completed project.

NDOR develops the Project Program Agreement and forwards it to the NDOR District Engineer. The District Engineer reviews the agreement and forwards it to the LPA. A resolution from the City Council or the County Board must be attached to the project program agreement as an exhibit indicating their full commitment to the project. This resolution will authorize the Mayor or the County Board Chair to sign the agreement. The LPA forwards the signed agreement and resolution to the NDOR District Engineer. When routing the program agreement to NDOR for execution, the LPA is required to submit a cost estimate of the PE work phase. The NDOR District Engineer recommends execution of the agreement and returns it to the NDOR LPD Project Coordinator. NDOR will then execute the Project Program Agreement and return one original to the LPA. NDOR approval of an executed project program agreement shall not be considered a "Notice-to-Proceed" for the PE phase of the project.

2.9 Supplemental Program Agreements

Occasionally, the conditions of the NDOR/LPA Project Program Agreement change. This may be due to adjustments in the project limits, project costs, responsibilities or specific project details. If this is needed, the NDOR LPD Project Coordinator will prepare a Supplemental Project Program Agreement amending the existing conditions and initiate the same approval process, including obligation, authorization, and Notice-to-Proceed as for the original agreement.

2.10 Synopsis of Each Funding Program

Information on each of the different funding types and how to apply for these funds is detailed in the summaries below.

2.10.1 Surface Transportation Program – Urban (STP–Urban)

Background

The Surface Transportation Program (STP) provides flexible funding that may be used by NDOR and LPAs for projects on any Federal-aid roadway route, including NHS, bridge projects on the Federal route, transit capital projects, and intracity/intercity bus terminals and facilities. It is required by 23 USC 133(d)(3) that, after required program deductions, STP Urban funds must be divided between urbanized areas over 200,000 in population and the remaining 1st class cities of the State.

Eligibility

NDOR designates Federal STP-Urban funds to 1st Class Cities (*population greater than 5,000*) and for the three areas under the jurisdiction of a Metropolitan Planning Organization (MPO). The three MPOs are: 1) Siouxland Interstate Metropolitan Planning Council (SIMPCO) encompassing the City of South Sioux City and Dakota County, 2) Metropolitan Area Planning

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Agency (MAPA) covering the Omaha metropolitan area, and 3) Lincoln/Lancaster MPO, covering Lincoln and Lancaster County. Federal STP Urban funds are distributed according to population percentages. The Urban Unit of NDOR's Local Projects Division manages and administers these funds and keeps a funding spreadsheet for each individual LPA and MPO. LPA officials may contact the Urban Engineer at any time for funding information and updates.

Federal legislation allows these funds to be used on eligible project expenses related to preliminary engineering, environmental, Right-of-Way, non-betterment utility relocation/rehabilitation, construction, and construction engineering. Typical improvements include: upgrading an existing road to a full urban section, roadway widening, roadway reconstruction, resurfacing, ADA/sidewalk improvements, and bridge projects.

A street or bridge project using STP-Urban funds must be within the urban boundary and be a roadway classified as an arterial or collector on the National Functional Classification System. Local roads are ineligible for STP funding. To classify or reclassify a road or street, contact the NDOR Classification and Needs Engineer at (402) 479-4783.

Application

When a proposed project meets the eligibility criteria and STP-Urban funds are sought, the LPA must complete an LPA Project Programming Request ([DR Form 530](#)) and submit it to the NDOR Urban Engineer.

For projects located within the boundaries of a MPO, the LPA must first submit their project request through the MPO. If the MPO approves the proposed project for funding, the LPA may proceed with programming the project with NDOR.

The DR Form 530 provides specific information about the project to NDOR. It is important that this document is completed thoroughly and accurately as it is used to help prepare the programming document needed for FHWA approval. The DR Form 530 can be downloaded from the [NDOR Local Projects Division website](#). The LPAs are required to complete all relevant information and attach a typical section and location map. An authorized representative of the LPA must sign the form and submit it to the NDOR Urban Engineer.

If the project request is approved, the project is assigned a State project number, State control number, project title, and proposed letting date. The NDOR LPD Project Coordinator assigned to the project will then notify the LPA of the project's approval and relay all appropriate assigned information regarding the project.

Match

Federal funds are available to finance up to 80% of eligible project costs with a minimum 20% match from the LPA.

Contact

NDOR Local Projects Division, Urban Engineer – (402) 479-4442.

2.10.2 Surface Transportation Program – Rural (STP - Rural)

Eligibility



NDOR designates Federal STP-Rural funds to counties and cities with a population of less than 5,000. A project using STP Rural funds must be on the NDOR National Functional Classification for Federal-aid Routes. For a rural area, Federal functional routes include arterials and collectors. Roads classified as local roads or rural minor collectors are not eligible to receive STP Rural funding. To classify or reclassify a road or street, contact the NDOR Classification and Needs Engineer at (402) 479-4783.

Federal legislation allows STP-Rural funds to be used for eligible project expenses related to preliminary engineering, environmental obligations, Right-of-Way costs, non-betterment utility relocation/rehabilitation, construction, and construction engineering. Typical STP-Rural projects include: upgrading an existing road to current minimum standards, roadway widening, roadway reconstruction, mill and overlay, ADA sidewalk improvements, and bridge projects.

The Secondary Roads Unit in the Local Projects Division manages and administers STP-Rural funds. A status sheet is kept for each LPA project showing a checklist of milestones with completion dates. Current status sheets are sent to the counties bi-annually. LPA officials can contact the Secondary Roads Engineer at any time for additional eligibility information and timely funding and project updates.

Application

Upon meeting the basic eligibility criteria discussed above, the LPA must complete an LPA Project Programming Request ([DR Form 530](#)) and submit a Resolution of Intent from the County Board to the Secondary Roads Engineer. It is important to document the proposed project as thoroughly and as accurately as possible, as this paperwork is used to prepare the programming document needed for FHWA funding authorization. The LPA is required to provide all relevant information, as well as a typical section and a project location map, to complete the application process.

The [DR Form 530](#) can be downloaded from the NDOR website or be obtained from the NDOR Secondary Roads Engineer. An authorized representative of the LPA must sign the form and submit it to the NDOR Secondary Roads Engineer along with the resolution. A completed sample form and resolution is included at the end of this section.

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If the request is approved, the project is assigned a project number, a state control number, and a project title. A member of the Secondary Roads Unit will then notify the LPA of the project's approval and relay all appropriate assigned information regarding the project to the LPA.

Match

Federal funds are available to finance up to 80% of eligible project costs, with a minimum 20% match from the LPA. State aid may be applied to a rural bridge project.

Contact

NDOR Local Projects Division, Secondary Roads Engineer – (402) 479-4437.

2.10.3 Surface Transportation Program – Enhancement (STP-Enhancement)



Eligibility

The Transportation Enhancement (*TE*) Program provides funding to construct and restore transportation infrastructure that are not eligible to be funded through other programs. TE activities offer funding opportunities to help expand transportation choices and enhance the transportation experience through twelve (12) eligible TE activities. Only state, LPA, or political subdivisions within the State of Nebraska are eligible to receive this funding. This includes

most local units of government such as villages, cities, and counties, Natural Resources Districts, Nebraska State Agencies, the University of Nebraska, and Tribal Governments. Certain other governmental entities may also be eligible to receive funding.

Other eligibility criteria include: 1) Project must provide an enhancement to transportation; 2) Project must relate to an existing, proposed, or potential intermodal surface transportation system; 3) Project must comply with all Federal and State laws, guidelines and regulations; and 4) Project must conform to one or more of the twelve (12) Transportation Enhancement Program funding activities. *(See application guidelines for more details related to program funding activities.)*

Application

To apply, eligible applicants should complete the [Intent-to-Apply Form](#) and submit the form to:

R. James Pearson
Transportation Enhancement Administrator
Nebraska Department of Roads
PO Box 94759
Lincoln NE 68509-4759
james.pearson@nebraska.gov

Intent-to-Apply forms are reviewed for project eligibility. If eligibility requirements are met, the applicant will be invited to submit a [draft application](#) and [final application](#). Site visits to the proposed project location will be conducted by NDOR and their program consultant after the draft application is submitted.

Selection of projects is made by the Nebraska Transportation Enhancement Selection Committee, a statewide committee of volunteers with expertise in the various funding categories. This committee meets annually to rank applications using an established 100-point scoring system, and makes funding recommendations to the Director of the Nebraska Department of Roads.

Funding Cap and Match Requirement

The maximum Federal funding limit available for each individual project, set by NDOR policy, is \$500,000. Applications may be submitted for up to 80% Federal funding with a minimum 20% cash match from the LPA for eligible project costs. The 20% match may not be Federal funds from other sources and should be committed at the time of application. Applicants meeting the following criteria may be eligible to provide a minimum of 10% non-Federal cash match of total project costs:

- 1) The communities population must be under 5,000;
- 2) Have not previously received TE funding or demonstrate an environmental justice neighborhood; or
- 3) The community must fall below the 50% statewide average valuation per capita.

Contact

For information on eligibility, application and required match, please contact: NDOR Transportation Enhancement Administrator, (402) 479-4881 or visit the [NDOR Local Projects Division website](#).

2.10.4 Highway Bridge Program (Urban and Rural)

Eligibility

The Federal Highway Bridge Program provides funding to improve the condition of their bridges through replacement or rehabilitation of bridges that are structurally deficient or functionally obsolete. These funds are also available for systematic preventive maintenance of bridges regardless of their eligibility for replacement or rehabilitation. NDOR reserves part of their annual Federal allocation for LPA bridge projects.

All eligible structures are included on a bridge selection list compiled from the National Bridge Inventory. This list contains all structurally deficient or functionally obsolete bridges with a sufficiency rating of eighty (80) or less. All bridges on the list are eligible for rehabilitation funding. Bridges with a sufficiency rating less than fifty (50) are eligible for replacement funding. NDOR will send the LPA a copy of the current NBIS list upon request.

Definitions

Bridge A structure over a depression or obstruction having a track or passageway for carrying traffic or other moving loads and having a length of over twenty (20) feet measured along the centerline of the roadway. Concrete box culverts meeting these criteria are also included in this definition.

Sufficiency Rating The numerical rating of a bridge based on its structural and functional adequacy, safety, and serviceability. For sufficiency ratings, please contact the NDOR Local Projects Division.

Rehabilitation The major work required to restore the structural integrity of a bridge, as well as work necessary to correct major safety defects. The work performed should be sufficient to remove the structure from the structurally deficient or functionally obsolete classification for a minimum of ten (10) years.

Reconstruction/construction Total replacement of a structurally deficient or functionally obsolete bridge in the same general traffic corridor.

Match

Federal funds are available to finance up to 80% of eligible project costs with a 20% match from the LPA.

Application

These funds are available to LPAs on a “first ready-first served” basis. For urban projects, the LPA should complete a [DR Form 530](#) and forward to NDOR’s Urban Engineer. Counties should complete a [DR Form 530](#) and submit to NDOR’s Secondary Roads Engineer.

Contact

NDOR Local Projects Division, Urban Engineer – (402) 479-4442

NDOR Local Projects Division, Secondary Roads Engineer – (402) 479-4437

NDOR Bridge Division, NBIS Program Manager – (402) 479-4705

2.10.5 Soft-Match Bridge Program

Eligibility

The Federal government created a special program in 1987 to improve off-system rural bridges. This program allows an LPA to use their local funds to replace or rehabilitate an existing bridge structure on any local road that is not on the Federal-aid System and receive credit for 80% of the eligible construction costs.



To be eligible for the Soft-Match Bridge Program, the bridge must: be classified as either “structurally deficient” or “functionally obsolete”, have a sufficiency rating of less than 50 for replacement or 80 or less for rehabilitation, be located on either a Rural Minor Collector or a Rural Local Road, and be non-controversial.

Eligible construction expenses for Soft-Match Credit include removal of the old structure, construction cost of the replacement structure and any drop-pipe culverts at the bridge location, safety improvements, erosion and sediment control, and construction engineering. Credit is not allowed for preliminary engineering, design engineering, preparation of plans and specifications, advertising for bids, or approach grading and surfacing.

In order to qualify for credit, Soft-Match Projects must follow the procedures and guidelines shown in the current [Soft-Match Bridge Program Policies](#) document.

Application

The application process for the Soft-Match Bridge Program begins with a letter from the LPA to the NDOR Local Projects Division with notification of intent to construct a bridge qualifying for Soft-Match Credit. The Soft-Match Bridge Program Policy document on the NDOR website includes a sample letter of request for a Soft-Match Project for use by the LPA. The Secondary Roads Engineer will review the proposed project to verify its eligibility for credit, and inform the LPA in writing whether the project is acceptable. When the project is accepted, the LPA can begin work on the project, following all of the procedures and guidelines in the current Soft-Match Bridge Program Policy document.

Match

The LPA will receive credit for 80% of eligible construction costs for a qualifying bridge project. This credit can be used as the local share of any required matching funds for a Federal-aid bridge replacement or rehabilitation project at another location.

Contact

NDOR Local Projects Division - Secondary Roads Engineer - (402) 479-4437

2.10.6 Highway Safety Improvement Program - HSIP

Eligibility

This program provides Federal funding to assist NDOR and the LPA in addressing transportation safety issues, with the intent to reduce fatalities and life-altering injuries. HSIP funds must be used to make improvements at locations which constitute an existing or potential danger to vehicles or pedestrians as measured by the frequency and severity of crashes. Eligible improvements may include: adding turn lanes, geometric/alignment modifications, pavement and shoulder widening, signalization, and lighting and should address one of the following five critical emphasis areas of the Strategic Highway Safety Program (*SHSP*):

- 1) Increase use of safety belts;
- 2) Reduce impaired driving;
- 3) Reduce crashes involving younger drivers;
- 4) Reduce intersection crashes; and
- 5) Reduce run-off the road crashes.

Major reconstruction of any appreciable length of roadway will not qualify for funding under this program.

Application

Proposals for the use of HSIP funds are reviewed by the NDOR Safety Committee. The committee selects projects based on volume of traffic, frequency and severity of crashes and a benefit/cost analysis. Approved projects are added to NDOR's Safety Schedule of Improvements.

An LPA must request Safety funds through the NDOR Traffic Engineering Division, District Engineer or the appropriate Local Projects Division Engineer.

When submitting a request to obtain HSIP funds, the following items must be prepared for review and evaluation by the Safety Committee:

- Location map and/or aerial photo;
- Evidence of a high crash location;
- Proposed improvements to decrease the hazard; and
- Cost estimate of the proposed improvement.

If the Safety Committee approves the project and the project passes the benefit/cost analysis, the LPA may proceed with programming the project. For projects in urban areas, the LPA must complete an LPA Project Programming Request ([DR Form 530](#)) and submit it to the Urban Engineer. For projects in rural areas, the LPA must complete and submit an LPA Project Programming Request ([DR Form 530](#)) and a Resolution of Intent from the County Board to the Secondary Roads Engineer.

When the programming request is formally approved, the project will be assigned a State project number, State control number, project title, and proposed letting date. The NDOR LPD Project Coordinator assigned to the project will then notify the LPA of the project's approval and relay all appropriate assigned information regarding the project.

Match

Up to 90% Federal funding with a minimum 10% cash match from the LPA.

Contact

NDOR Traffic Engineering Division – (402) 479-4594.
NDOR Local Projects Division, Urban Engineer – (402) 479-4442.
NDOR Local Projects Division, Secondary Roads Engineer – (402) 479-4437

2.10.7 High-Risk Rural Roads Program - HRRRP

Background

The purpose of the HRRRP is to achieve a significant reduction in traffic fatalities and incapacitating injuries on major or minor collectors, and/or rural local roads. The HRRRP is a set-aside component of the HSIP and as such must meet the priorities of the SHSP. It supports the road safety program efforts through the implementation of construction and operational improvements on high risk rural roads. The HSIP including the HRRRP element is mandated to consider all appropriate at-risk public roads, whether State or locally owned, for safety funding assistance.

23 USC §148(a) (1) defines a high risk rural road as “any roadway functionally classified as a rural major or minor collector or rural local road on which the crash rate for fatalities and incapacitating injuries exceeds the statewide average for those functional classes of roadway; or that will likely have increases in traffic volume that are likely to create a crash rate for fatalities and incapacitating injuries that exceed the statewide average for those functional classes of roadway.”

Eligibility

Examples of construction and operational improvements which would be considered eligible for HRRRP funding may include, but are not limited to: an intersection safety improvement, pavement and shoulder widening, installation of rumble strips or other warning devices, installation of a skid-resistant surface at an intersection or other location with a high frequency of crashes, an improvement for pedestrian or bicyclist safety or safety of the disabled, construction of a traffic calming feature, elimination of a roadside obstacle, improvement of highway signage and pavement markings, installation of a priority control system for emergency vehicles at signalized intersections, installation of a traffic control or other warning device at a location with high crash potential, installation of guardrails, barriers, or crash attenuators, the addition or retrofitting of structures or other measures to eliminate or reduce accidents involving vehicles and wildlife, installation of signs and construction, and operational improvements on high risk rural roads.

Application

The selection of HRRRP projects is data driven using both crash and exposure data, where available, for a particular location or for a certain classification or condition of roadway. Corridor analyses that can identify systematic safety improvements may also be used. For instance, where crash and/or roadway data suggest that many crashes occur given a certain type roadway feature, a State may systematically implement an appropriate countermeasure that would improve safety conditions on the respective roadways (*e.g. signs, pavement markings, rumble strips, horizontal curve treatments, etc.*). This type of systematic safety improvement project would be proposed, investigated, prioritized, and initiated by the NDOR Safety Committee, or the NDOR HRRRP Team.

For specific safety projects of interest to LPAs, application can be made to the NDOR Local Projects Division. The proposal should include crash and exposure data, aerial photos or plans, cost estimates, and any other supporting documentation. Approved projects are added to NDOR’s Safety Schedule of Improvements.

Match

Up to 100% Federal funding.

Contact

Nebraska Local Technical Assistance Program, Director – (402) 472-1226
NDOR Local Projects Division, Secondary Roads Engineer – (402) 479-4437

2.10.8 Rail Safety Program – RRX/RRZ/TMT/NFG

Eligibility

This program provides funding to address safety issues involving rail roadway crossing facilities. Both Federal and State laws govern the administration of the funds. Eligible improvements range from closing crossings to constructing new viaducts to the installation of roadway/rail crossing warning devices. Because this program is so broad, Chapter 9 of this manual is devoted to the details of programming and administering projects using these rail funds.



Application

NDOR's Rail and Public Transportation Division coordinates all requests for Rail Safety funds. LPAs must make a written request to:

Nebraska Department of Roads
Rail and Public Transportation Division
PO Box 94759
Lincoln NE 68509

NDOR will review the crossing and respond to the LPA. Full details on the review process, NDOR and LPA responsibilities and cost sharing may be found at:

www.nebraskatransportation.org/rpt/pdfs/415NAC4-7Rail%20Xings.pdf

If the proposed project is approved, the Rail and Public Transportation Division will assist the LPA in coordinating with the appropriate NDOR Division to move the project forward.

Match

The required LPA match varies from 0% - 100%, depending on the type of project.

Contact

NDOR Public Transportation Engineer – (402) 479-4438
Rail and Public Transportation Website: www.nebraskatransportation.org/rpt/rail.htm

2.10.9 Safe Routes to School Program - SRTS

Eligibility

The Safe Routes Nebraska Program provides funding to complete infrastructure and non-infrastructure projects that will better enable and encourage K-8 school children to walk and bike to school.

Most State and local governmental agencies or political subdivisions within the State of Nebraska are eligible to apply. Schools and/or school districts are eligible to apply for SRTS funds. Non-profit organizations that demonstrate an ability to meet the program eligibility requirements may be eligible to receive funding.

Eligible projects include infrastructure-related projects that will substantially improve the ability of students to walk and bicycle to school. Other eligible projects include non-infrastructure activities that will educate students how to walk and bicycle to school safely, and also encourage students and parents to choose walking and bicycling over motorized transportation.

Three required criteria establish project eligibility:

1. The project must fit within the eligible project types listed above;
2. Infrastructure projects must be within a two (2) mile radius of a K-8 school. Non-infrastructure projects related to traffic education and enforcement activities must also meet the two (2) mile criteria. However, all other eligible activities under the non-infrastructure portion of the program do not have a location restriction;
3. The applicant must commit to provide future maintenance of infrastructure projects and provide a sustainability plan for non-infrastructure projects.

Application/Contact

For information on eligibility, application, required match, applicants should submit an [Intent-to-Apply Form](#) to:

Kelly Morgan
Safe Routes Nebraska State Coordinator
Sinclair Hille Architects
700 Q Street
Lincoln, NE 68508
Phone: (402) 476-7331
kmorgan@sinclairhille.com

or

R. James Pearson
Nebraska Department of Roads
PO Box 94759
Lincoln NE 68509-4759
Phone: (402) 479-4881
james.pearson@nebraska.gov

The Intent-to Apply form should include a description of the proposed project, and specifically state what aspect(s) of the project will require the use of safe routes funds. A description of how the project will fulfill eligibility requirements should also be included.

Intent-to-Apply forms are reviewed for project eligibility. If eligibility requirements are met, the applicant will be invited to submit a [Full Application](#). Upon receipt of the application, NDOR and the State Coordinator will meet with each applicant at the nearest NDOR District Office.

A five-member Selection Committee reviews proposed projects and makes funding recommendations to the Director of the Department of Roads for approval. This committee is comprised of members of State and LPAs as well as citizen representatives with expertise in the various components of safe routes. Approved projects are added to NDOR's Safety Schedule of Improvements.

Funding Cap

The maximum funding per applicant is \$250,000. There is no local match requirement for Safe Routes Nebraska Projects.

2.10.10 Special Federal-Aid Funding

Nebraska Byways (National Scenic Byways Program)

Eligibility

The National Scenic Byways program is administered by the FHWA. Nebraska is one of 41 states that receive FHWA grants to support its Scenic Byways programs and implement projects on highways designated as National Scenic Byways or All-American Roads, or as State or Indian tribe scenic byways. Special emphasis is placed on how a proposed project benefits byway travelers. There are eight (8) categories of eligible project activities which include:

1. State and Tribal Programs;
2. Corridor Management Plan;
3. Safety Improvements;
4. Byway Facilities;
5. Access to Recreation;
6. Resource Protection;
7. Interpretive Information; or
8. Marketing Program.

The above eight (8) categories of eligible project activities are provided as a framework for thinking about eligibility, rather than a simple list of what's eligible and what's not. There is a degree of flexibility to consider when determining whether or not a project is eligible. It is highly recommended that potential applicants discuss eligibility with the State Byways Coordinator prior to application submittal. Ultimately, the FHWA Division office will confirm eligibility and the FHWA Headquarters' staff will verify eligibility. For more information on possible eligibility, potential applicants should contact the NDOR State Byways Coordinator. Grant guidance is available online at: www.bywaysonline.org/grants/.

Eligible applicants include: Federal, State, LPAs, or non-profit entities.

Application

To apply, eligible applicants must follow an [online application process](#).

Matching Funds Requirements

The Federal share of the total project costs shall not exceed 80 percent, except that in the case of any scenic byway project along a public road that provides access to or within Federal or Indian land, a Federal land management agency may use funds authorized for the use by the agency as a the non-Federal share. Thus, there must be a minimum of 20 percent in matching funds for the project. This matching requirement can be satisfied in whole or in part with State,

LPA, private sector, or Federal land management agency funds. Additionally, third party in-kind donations can be credited toward the State's share of the project cost.

Contact

For further information on eligibility, application and required match, the following contact is available to provide assistance:

R. James Pearson, State Byways Coordinator
Nebraska Department of Roads
PO Box 94759
Lincoln NE 68509-4759
Phone: (402) 479-4881
Fax: (402) 479-3771
james.pearson@nebraska.gov

Emergency Relief Program (ER)

Eligibility

The decision to seek ER financial assistance for repair of either State or LPA Federal-aid highways or roads rests with NDOR. FHWA may approve Federal ER funding for roads and bridges on the Federal-aid system that are damaged as a direct result of a proclaimed natural disaster or catastrophic failure. Rural minor collectors or local roads are not considered as being on the Federal-aid system. The Governor, or the President, must make an official disaster proclamation.

- There must be a minimum of \$5,000 per each damage site and;
- A minimum of \$700,000 per disaster (*with a maximum reimbursement cap of \$100 million per State*)

The funds must be used to restore a roadway or bridge to "pre-disaster" condition. **Betterments are typically not eligible for ER funding.** Betterments include enhancing or upgrading the project to where the repair would be greater than restoring to its original state. Betterments may be approved by FHWA with proper justification such as: increasing culvert size, meeting current standards, etc., in which a well-documented life-cycle cost analysis is a main factor. It is advisable that the LPA review [FHWA's Emergency Relief Manual](#) early in the process in order to learn, understand, or get reacquainted with eligibility and other issues associated with FHWA's ER program.

Damage to roadways or bridges must be severe, occur over a wide area, and result in unusually high expenses to the LPA. The ER program also applies to catastrophic failures (*sudden and complete failures due to an external cause*) which result in a disastrous impact on transportation services and unusually high expenses to the LPA. Economic hardship is not a basis to support use of ER funds.

Emergency vs. Permanent Repairs

All work done in response to a disaster is classified as either emergency repair or permanent repair. Emergency repairs are reimbursed by FHWA at 100%. Permanent repairs are reimbursed at the normal rate for the type of highway being repaired. (*90% on the Interstate, 80% on other Federal-aid routes*). Consequently, it is important for those on site to understand the difference and to record time and equipment costs accordingly.

Emergency repairs are those done immediately following a disaster to restore essential traffic and minimize the extent of damage or protect the remaining facilities. It is work that cannot wait for a finding of eligibility and programming of a project. This work must be performed within the first 180 days following the disaster. The intent of the law is that the 180-day period starts on the initial day of the disaster. However, in certain circumstances, emergency repair may not be able to be initiated on the initial day of the disaster. In such cases, FHWA may consider the date on which the first emergency repair work was started as the beginning of the 180-day period. Examples of eligible emergency repairs include:

- Regrading of roadway surfaces, roadway fills, and embankments;
- Debris removal;
- Installation (*and removal*) of barricades and detour signs, flagging, and pilot cars during the emergency period;
- Placement of rip-rap around piers and bridge abutments to relieve severe on-going scour action; and
- Construction of temporary detours and detour bridges.

Permanent repairs are those done (*normally after emergency repairs have been completed*) to restore the highway to its pre-disaster condition. **To be eligible for Federal reimbursement, permanent repairs must be authorized by FHWA before they are carried out.** In some instances, permanent work done before authorization may be approved if the LPA can document that it was more practical or economical to perform the work as part of the emergency repairs.

Procedures

1. When a disaster or catastrophic failure occurs, the LPA immediately begins collecting and documenting their costs for emergency repairs. The LPA must document, in detail, the equipment, hourly equipment rates, labor, hourly wage rates, materials quantities, materials unit prices, material type, and location of work performed. The LPA must take photos to document the damage; this is especially important when the damage will be repaired before NDOR or FHWA can make a site visit. The LPA should contact NDOR's Local Projects Division if there is a question as to whether the damaged route is on the Federal-aid system.

2. As soon as possible after the damage occurs, the LPA must inform and provide documentation to the NDOR District Engineer of the damage and request consideration (*LPAs do not apply directly for ER funds*) for Federal ER funding.
 - NDOR, in cooperation with FHWA and in coordination with the LPA, shall perform damage assessments. The damage assessments involve site visits to verify the extent of the damage, determine the cost of repairs, and determine site eligibility for ER funding;
 - Detailed damage assessments are to be conducted at most, if not all, sites; and
 - Disaster inspection teams shall consist of representatives from NDOR, FHWA, and the LPA working the request.
3. The District Engineer or designee will provide information to the NDOR Program Management Division in Lincoln where they will contact FHWA and begin the formal process to request funds.
4. NDOR Program Management Division will, as appropriate, contact FHWA to begin the formal process of requesting FHWA ER funds. The FHWA Division office will prepare a Field Report based on the field damage assessments and will make a recommendation for ER funding to its Headquarters.
5. Once FHWA approves the disaster, the Program Management Division will coordinate as appropriate with the NDOR LPD Project Coordinator to get projects programmed and approved for reimbursement. NOTE: due to limited funding made available by FHWA for ER, reimbursement to the State/LPA for submitted charges could take 1-2 years.
6. NDOR and the LPAs have [FHWA's Emergency Relief Manual](#) available as a reference to provide program guidance and instructions on policies and procedures when they seek ER funding.

Congressional Earmarks

These funds may be referred to as Congressionally Designated, Demonstration or Discretionary. In this manual, all of these funds will be referred to as Earmarks.

Earmarked funding represents special funding categories where FHWA or Congress solicits for candidates and selects projects based on applications received. Each program has its own eligibility and selection criteria that are established by law, by regulation, or administratively. Applications may be solicited at various times, generally when Congress is developing multi-year transportation bills or annual appropriation bills.

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Even though some of the funding awards may be referred to as grants, it is important to know that earmarks be distributed using the same rules as other Federal-aid funds, a reimbursable program subject to all the legal requirements for the Federal-aid program. Each earmark has a specific scope related to its use therefore any proposed scope changes requires a Congressional action.

Appendix

LPA Project Programming Request (*DR Form 530*)

STP Example Program Resolution

STP-Enhancement Intent-to-Apply Form

STP-Enhancement Draft Application Form

STP-Enhancement Application Form

SRTS-Intent to Apply Form

SRTS-Draft Infrastructure Application Form

SRTS-Infrastructure Application Form

SRTS-Draft Non-Infrastructure Application Form

SRTS-Non-Infrastructure Application Form

Nebraska Byways Application

New Revised

State of Nebraska Department of Roads

Local Public Agency (LPA) Project Programming Request

For: City County Other

TO BE COMPLETED BY NDOR PROGRAM MANAGEMENT SECTION	
Control Number:	
Project Number:	
Project Name:	

TO BE COMPLETED BY LOCAL PUBLIC AGENCY

Detailed Description and Location of Proposed Project: *(Attach Location Map and Typical Cross Sections to this form.)*

Road or Street	From	To	Length	National Functional Classification	National Highway System (Yes or No)

Purpose and Need of Proposed Project:

Proposed Project Schedule		Traffic Data		
Letting Date:	Begin Construction:	Current ADT	-Year ADT	% Trucks
Letting by: <input type="checkbox"/> State <input type="checkbox"/> LPA	End Construction:			

Estimated Project Funding				
	Federal	State	Local	TOTAL
Feasibility Study				\$0.00
PE/NEPA				\$0.00
Final Design				\$0.00
ROW				\$0.00
Utilities				\$0.00
Construction				\$0.00
CE				\$0.00
Total	\$0.00	\$0.00	\$0.00	\$0.00

Requested by LPA Responsible Charge:

Signature:	Date:	Title:
------------	-------	--------

Recommended by NDOR Urban/Secondary Roads Engineer		Approved by NDOR Local Projects Engineer	
Signature:	Date:	Signature:	Date:

Approved by the MPO (if applicable)		Approved by NDOR Program Management Engineer	
Signature:	Date:	Signature:	Date:

TO BE COMPLETED BY LOCAL PUBLIC AGENCY

Design Details			
	Existing	Proposed	Remarks/Existing Condition
Surface Width			
Surface Type			
Shoulder Width			
Shoulder Type			
ROW Width			

Existing Structures						
Structure No.	Feature Crossed	Type of Structure	Length	Width	Sufficiency Rating	Proposed Treatment

Schedule Considerations
(Attach explanations and supporting documentation to this form.)

<i>Does the proposed project involve:</i>	Yes	No	TBD	<i>Remarks (If Yes, please explain)</i>	
New Alignment or Realignment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Minor	<input type="checkbox"/> Major
Acquisition of New ROW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Relocation of People	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Residential	<input type="checkbox"/> Business
Utility Relocation or Adjustment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Railroad within Limits of Construction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Crossing	<input type="checkbox"/> Parallel
Public Involvement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Low	<input type="checkbox"/> Moderate <input type="checkbox"/> High
4(f) Land Present	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
(106) Historical Property Present	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Channel Changes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Minor	<input type="checkbox"/> Major
Floodplain Permit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Wetlands Present	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section 404 USACE Permit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
NPDES Storm Water Permit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Additional Remarks or Comments by Local Public Agency

(Attachments as needed)

**Resolution
(Program)**

Two copies for Lincoln office
Local Projects Division

_____ County

Project No. _____
(to be assigned later)

Whereas: Certain roads and streets in said county have been designated as being eligible for federal funds by the Federal Highway Administration in compliance with federal laws pertaining thereto, and,

Whereas: Said county desires to improve a certain portion of the county road system in said county, more fully described hereinafter, now therefore,

Be It Resolved: That the Department of Roads is hereby requested to act for said county and to program for construction that portion of county road described as _____
(Use Legal Subdivisions for Termini)

and which construction includes: *(Check each that apply)*

Grading Culverts Bridges Surfacing or other improvement to wit: _____

The **estimated** cost of such improvement:

Grading and Culverts _____ Miles \$ _____

New Bridges: Length: _____ Feet _____ Feet _____ Feet \$ _____
(See Reverse Side of Form)

Type of Surfacing: *(Check one)* Gravel Bituminous Concrete \$ _____

\$ _____

Preliminary Engineering *(only if federal aid is requested)* \$ _____

Utility Relocation *(only if federal aid is requested)* \$ _____

Right of Way *(only if federal aid is requested)* \$ _____

Estimated Total for Project \$ _____

Be it Further Resolved: That the chairman of the county board is authorized to sign this resolution on behalf of said board and that the county board hereby approves the above contemplated construction prior to first submitting of said project to the Federal Highway Administration.

Be it Further Resolved: That sufficient funds of said county are now, or will be, available and are hereby pledged to the Department of Roads in the amount and at the required time for the purpose of matching federal funds available for the contemplated construction.

Adopted this _____ day of _____, _____, at _____, Nebraska.
(Month) *(Year)*

Attest: _____
County Clerk

The Board of County _____
of _____ County

Chairman)

For Lincoln Office Use

Project No. _____
Route No. _____
Name of Road _____

Board Member _____
moved the adoption of said resolution
Roll Call: _____ yea _____ nay
Resolution adopted, signed, and billed as adopted.

Sample of Bridge Information Required

Location: Between Sec. 1 and 2, T8N, R1W

Length and Type: 1 – 70-foot span pony truss and 2 – 20-foot I-beam approach spans

Clear Roadway: (To be measured between inside of curbs) 18.34 feet

Condition of Bridge: Timber floor and backwalls - poor

Proposed Treatment: (Check one) Use in Place New Bridge

Estimated Length of New Bridge: 150 feet

(Show estimated cost of each new bridge on front of form)

Bridge No. 1

Structure No.: _____

Location: _____

Length and Type: _____

Clear Roadway: (To be measured between inside of curbs) _____

Condition of Bridge: _____

Proposed Treatment: (Check one) Use in Place New Bridge

Estimated Length of New Bridge: _____ Width of New Bridge: _____

Bridge No. 2

Structure No.: _____

Location: _____

Length and Type: _____

Clear Roadway: (To be measured between inside of curbs) _____

Condition of Bridge: _____

Proposed Treatment: (Check one) Use in Place New Bridge

Estimated Length of New Bridge: _____ Width of New Bridge: _____

Bridge No. 3

Structure No.: _____

Location: _____

Length and Type: _____

Clear Roadway: (To be measured between inside of curbs) _____

Condition of Bridge: _____

Proposed Treatment: (Check one) Use in Place New Bridge

Estimated Length of New Bridge: _____ Width of New Bridge: _____

Railroad Crossing Information

Name of Railroad: _____

Number of Railroad Crossings: _____

Number of Tracks: _____

Nebraska Department of Roads
Transportation Enhancement Program

Intent-to-Apply Form

TYPE OF GOVERNMENT AGENCY (Check One): GOVERNMENT AGENCY NAME:		<input type="checkbox"/> Village	<input type="checkbox"/> City	<input type="checkbox"/> County
		<input type="checkbox"/> NRD	<input type="checkbox"/> State	<input type="checkbox"/> Other
AGENCY CONTACT PERSON:		TITLE:		
MAILING ADDRESS: <i>(Street)</i>		CITY:	STATE:	ZIP:
DAYTIME PHONE NUMBER: () -	FAX NUMBER: () -	E-MAIL:		
SIGNATURE OF CONTACT PERSON:		ESTIMATED FEDERAL FUNDING REQUESTED: \$		
GOVERNMENT AGENCY SIGNATURE: (Mayor or Chairperson)		TITLE:		
PLEASE DESCRIBE THE PROPOSED PROJECT AND ITS PURPOSE:				

Please limit your response to the space provided.



DRAFT

Transportation Enhancement Program Application Form Instructions

The following pages provide specific instructions for filling out the attached Draft Transportation Enhancement Application Form (before filling out the Draft Application, applicants should be familiar with the Application Guidelines booklet provided by the Program Consultant). Please answer all questions directly on the form within the space provided. Attach only the required items (budget and map) as listed on the bottom of the form. Additional information and assistance is available by contacting the Program Consultant, Sinclair Hille, at (402) 476-7331 or jbolen@sinclairhille.com. Additional forms may be downloaded from www.dor.state.ne.us/trans-enhance/

- 1. Government Agency:** Provide information regarding the government agency that will own and maintain the project.
- 2. Contact Person:** Provide the name, address, daytime telephone number, fax number and e-mail address of the person who is submitting and directing this project.
- 3. Signature, Contact Person:** This is the person identified in Item 2 who will be responsible for the management and implementation of your proposed project.
- 4. Signature, Government Agency:** This is the mayor, chairperson or other head of the government agency listed in Item 1.
- 5. Project Name:** Provide a name for the project.
- 6. Project Description / Location:** Provide a description of the proposed scope of work for this project. Include information on the specific items of work to be performed with the funds requested and the location of the project. For trail projects, describe the length, width, surface type, and beginning and ending points. For building projects, describe construction (existing vs. new), dimensions, purpose, etc. Explain how your project relates to transportation according to the Application Guidelines booklet.

Attach an 8 1/2" x 11" map showing the project location. An aerial map that is clearly labeled with a north arrow, street names and points of interest is preferred. For help on how to obtain an aerial image, contact the Program Consultant.

- 7. Project Cost:** Identify the cost of this project. Provide the total cost of the project and the amount of federal funding you are requesting (up to 80% of total cost). Attach an itemized budget showing construction items, estimated unit costs, and estimated quantities. Preliminary engineering and construction inspection/testing are also eligible expenses. Please follow the sample budget provided in

the Application Guidelines booklet. A list of non-participating items is available from the Program Consultant.

The maximum amount of federal funding per project is \$500,000. (i.e. Total project cost of \$625,000 = 80% federal (\$500,000 max) + 20% local (\$125,000). If the total project cost exceeds \$625,000, the percentage of federal and local match must be adjusted. For example, \$750,000 total project cost = 67% federal (\$500,000 max) + 33% local (\$250,000).

- 8. Matching Funds:** Identify the percentage and source of matching funds (minimum 20% cash match required). *Exceptions to the minimum 20% cash match requirement would include 1) the use of federally approved railbanked land value in lieu of a cash match, and 2) meeting pre-defined criteria which would allow an applicant to be eligible to provide a 10% non-federal cash match. (This pre-defined criteria is available from the Program Consultant after the Draft Application stage and will be used when reviewing your proposed project).*
- 9. Project Type:** Check the box indicating your project category as shown below.

Trails

- Facilities for pedestrians and bicycles
- Safety and educational activities for pedestrians and bicyclists
- Preservation of abandoned railway corridors (including conversion and use as pedestrian / bicycle trails)

Historic Preservation

- Rehabilitation of historic transportation buildings, structures, or facilities (including historic railroad facilities)
- Archeological planning and research

Scenic or Historic Byways

- Acquisition of scenic easements and scenic or historic sites
- Scenic or historic highway programs (including tourist and welcome center facilities)
- Landscaping and other scenic beautification
- Environmental mitigation to address water pollution due to highway runoff or reduce vehicle-caused wildlife mortality while maintaining habitat connectivity
- Establishment of transportation museums

APPLICATION SUBMITTAL – Send one completed Draft Application to:

**Jennifer Bolen
Sinclair Hille Architects
700 Q Street
Lincoln, NE 68508**

State of Nebraska
Department of Roads

Transportation Enhancement Improvement Request (DRAFT)

1.	AGENCY NAME:	TYPE OF GOVERNMENT AGENCY <i>(Check One)</i> :	<input type="checkbox"/> Village	<input type="checkbox"/> City	<input type="checkbox"/> County
			<input type="checkbox"/> NRD	<input type="checkbox"/> State	<input type="checkbox"/> Other
2.	CONTACT PERSON:				FAX NUMBER:
	MAILING ADDRESS: <i>(Street)</i>	CITY:	STATE:	ZIP:	
	DAYTIME PHONE:	E-MAIL:			
3.	CONTACT PERSON: <i>(Print Name & Title)</i>		SIGNATURE		DATE:
4.	GOVERNMENT AGENCY: <i>(Print Name & Title)</i>		SIGNATURE		DATE:
5.	PROJECT NAME: <i>(Example: Beatrice Big Blue Trail; Neligh Mill Bridge Renovation)</i>				
6.	PROJECT DESCRIPTION/LOCATION: <i>(Include location, work to be performed, and attach map)</i>				
	DESCRIBE HOW YOUR PROJECT RELATES TO TRANSPORTATION (AS DESCRIBED IN APPLICATION GUIDELINES):				
7.	TOTAL ESTIMATED PROJECT COST:		FEDERAL FUNDS REQUESTED:		
8.	MATCHING FUNDS PROVIDED BY:		PERCENTAGE OF MATCH: <i>(Minimum 20% of total)</i>		
9.	PROJECT TYPE: <i>(Select One Category)</i>				
	<input type="checkbox"/> Trails		<input type="checkbox"/> Historic Preservation		<input type="checkbox"/> Scenic or Historic Byways

Attach the following required items:

- **Budget (follow sample provided in Application Guidelines booklet)**
- **8 ½ x 11 map - include aerial image, project location/alignment, north arrow, street names, points of interest**

State of Nebraska
Department of Roads

Transportation Enhancement Improvement Request (FINAL)

1.	AGENCY NAME:	TYPE OF GOVERNMENT AGENCY (<i>Check One</i>):	<input type="checkbox"/> Village	<input type="checkbox"/> City	<input type="checkbox"/> County
			<input type="checkbox"/> NRD	<input type="checkbox"/> State	<input type="checkbox"/> Other
2.	CONTACT PERSON:				FAX NUMBER:
	MAILING ADDRESS: (<i>Street</i>)		CITY:	STATE:	ZIP:
	DAYTIME PHONE:		E-MAIL:		
3.	CONTACT PERSON: (<i>Print Name & Title</i>)		SIGNATURE		DATE:
4.	GOVERNMENT AGENCY: (<i>Print Name & Title</i>)		SIGNATURE		DATE:
5.	PROJECT NAME: (<i>Example: Beatrice Big Blue Trail; Neligh Mill Bridge Renovation</i>)				
6.	PROJECT DESCRIPTION/LOCATION: (<i>Include location, work to be performed, and attach map</i>)				
	<p>DESCRIBE HOW YOUR PROJECT RELATES TO TRANSPORTATION (AS DESCRIBED IN APPLICATION GUIDELINES):</p>				

7.	TOTAL ESTIMATED PROJECT COST:	FEDERAL FUNDS REQUESTED:
8.	MATCHING FUNDS PROVIDED BY:	PERCENTAGE OF MATCH: <i>(Minimum 20% of total)</i>
9.	PROJECT TYPE: <i>(Select One Category)</i> <input type="checkbox"/> Trails <input type="checkbox"/> Historic Preservation <input type="checkbox"/> Scenic or Historic Byways	
10.	HAVE YOU RECEIVED TRANSPORTATION ENHANCEMENT FUNDS IN THE PAST? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, PLEASE LIST ALL PROJECTS FUNDED AND TOTAL DOLLARS RECEIVED:	
11.	IDENTIFY IF THIS PROJECT IS PART OF A OFFICIAL PLANNING DOCUMENT:	
12.	PUBLIC BENEFITS OF THIS PROJECT:	
13.	THIS PROJECT IS SUPPORTED BY:	

Attach the following required items:

- **Budget (follow sample provided in Application Guidelines booklet)**
- **8 ½ x 11 map - include aerial image, project location/alignment, north arrow, street names, points of interest**
- **Resolution**
- **Environmental Impact Forms (DR275) provided at site visit**



For Office Use Only
 Date Received: _____

Intent-to-Apply Form

TYPE OF APPLICANT: <i>(Check One)</i>		<input type="checkbox"/> School	<input type="checkbox"/> Village	<input type="checkbox"/> County	<input type="checkbox"/> NRD
APPLICANT NAME:		<input type="checkbox"/> School District	<input type="checkbox"/> City	<input type="checkbox"/> State	<input type="checkbox"/> Other
APPLICANT CONTACT PERSON:			TITLE:		
MAILING ADDRESS: <i>(Street)</i>			CITY:	STATE:	ZIP:
DAYTIME PHONE NUMBER: () -	FAX NUMBER: () -	E-MAIL:			
SIGNATURE OF CONTACT PERSON:		DATE:	ESTIMATED PROJECT COST: \$		
APPLICANT SIGNATURE:		TITLE:	DATE:		
PROJECT TYPE: <i>(Check One)</i>		<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Noninfrastructure	<input type="checkbox"/> Both	
PLEASE DESCRIBE THE PROPOSED PROJECT AND HOW IT WILL ENABLE & ENCOURAGE K-8 STUDENTS TO SAFELY WALK & BICYCLE TO AND FROM SCHOOL:					

Please limit your response to the space provided.

D R A F T



INFRASTRUCTURE

Draft Application Form Instructions

Please note: This form may be completed only after you receive NDOR notification that your intent-to-apply proposal appears eligible.

The following pages provide instructions for completing the draft Safe Routes Nebraska Infrastructure Project Application Form. The draft application form is attached to these instructions.

Please answer all questions directly on the form within the space provided. Attach only the required items (budget, map, and aerial image) as listed on the bottom of the form.

1. Applicant:

Provide information regarding the applicant that will own and maintain the project.

2. Applicant Contact Person:

Provide the name, address, daytime telephone number, fax number and e-mail address of the person who is submitting and directing this project.

3. Signature:

Contact Person - This is the person identified in Item 2 who will be responsible for the management and implementation of the proposed project.

4. Signature:

Applicant - This is the mayor, chairperson, director, principal, or superintendent listed in Item 1.

5. Project Name:

Provide a name for the project.

6. Project Description / Location:

Provide a description of the proposed scope of work for this project. Include information on the specific items of work to be performed with the funds requested and the location of the project.

a) Describe the current conditions for walking and bicycling to school.

What are the obstacles (physical or perceived) to walking and bicycling to/from the school?

What are the current risks facing children who walk and bicycle to/from school?

Provide relevant information such as crash data, traffic counts, speed data, pedestrian/bike/auto collision counts, gap studies, demographics, community and school surveys or audits, speed limits, environmental factors as appropriate, etc.

Provide a brief history of the neighborhood traffic issues to demonstrate the need for the proposed project

Indicate if a traffic study has been completed, and if warrants are met. Traffic studies should follow the federal requirements listed within the *Manual on Uniform Traffic Control Devices*, which can be found at <http://mutcd.fhwa.dot.gov/pdfs/2003r1/pdf-index.htm>.

b) Provide the following information about the affected school and student population:

School name

School grade level (i.e., K-8, K-6)

School enrollment data

Distance eligibility for riding a bus (radius) in miles

Number of students who currently walk to school

Number of students who currently bicycle to school

Number of students who are driven to school

Number of students who are eligible for busing

Number of students living within two miles of school

Number of students receiving free and/or reduced lunch

c) Describe how the project will help enable **and** encourage students to walk and bicycle to/from school. Please include how you will address the 5E's (Engineering, Education, Encouragement, Enforcement, and Evaluation) of a comprehensive safe routes to school program.

NOTE: If you are applying for both infrastructure and noninfrastructure projects, please indicate if the projects can be implemented independently. For example, if you were to only receive funds for the noninfrastructure project, would it be possible to implement it without the infrastructure funds?

NOTE: Please attach an 8 ½ x 11 school route map plan showing the project location, and identify any problem areas and proposed changes with appropriate labels. Please label the school location, sidewalk routes, crossings, stop signs, traffic signals, etc.

7. Project Cost:

Identify the cost of this project. Provide the total cost of the project and the amount of federal funding requested. Attach an itemized budget showing construction items, estimated unit costs, and estimated quantities. Preliminary engineering and construction inspection/testing are also eligible expenses (see enclosed sample budget).

8. Additional Funds Leveraged:

Check the box indicating if any other funds are being leveraged. If yes, please identify the percentage of the total project cost provided by additional funding, and list the additional funding source(s).

9. Project Type:

Check the box indicating the project type as shown below.

Traffic calming or speed reduction improvements: roundabouts, bulb-outs, speed humps, raised crossings, raised intersections, median refuges, narrowed traffic lanes, lane reductions, full- or half-street closures, automated speed enforcement, and variable speed limits.

Pedestrian and bicycle crossing improvements: crossings, median refuges, raised crossings, raised intersections, traffic control devices (including new or upgraded traffic signals, pavement markings, and traffic stripes).

Sidewalk improvements*: new sidewalks, sidewalk gap closures, significant sidewalk repairs, and curb ramps.

Off-street bicycle and pedestrian facilities: exclusive multi-use bicycle and pedestrian trails and pathways that are separated from a roadway.

Secure bicycle parking facilities: bicycle parking racks, bicycle lockers, designated areas with safety lighting, and covered bicycle shelters.

Traffic diversion improvements in the vicinity of schools: separation of pedestrians and bicycles from vehicular traffic adjacent to school facilities, and traffic diversion away from school zones or designated routes to a school.

Send one completed draft application to: Kelly Morgan
Safe Routes Nebraska Program Coordinator
Sinclair Hille Architects
700 Q Street
Lincoln, NE 68508

The *Application Guidelines*, application form, and sample budget may be downloaded from www.SafeRoutesNE.com.

*Sidewalk improvements must demonstrate a critical need.



Infrastructure Project Request (Draft Application Form)

<i>For Office Use Only</i>
Date Received: _____

1.	APPLICANT NAME: _____ TYPE OF APPLICANT <i>(Check One)</i> : <input type="checkbox"/> Village <input type="checkbox"/> City <input type="checkbox"/> Health Dept. <input type="checkbox"/> School <input type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> School District <input type="checkbox"/> Other								
2.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 65%;">APPLICANT CONTACT PERSON: _____</td> <td style="width: 35%;">FAX NUMBER: () - -</td> </tr> <tr> <td style="padding: 5px;">MAILING ADDRESS: <i>(Street)</i> _____</td> <td style="padding: 5px;">CITY: _____</td> </tr> <tr> <td style="padding: 5px;">DAYTIME PHONE: () - -</td> <td style="padding: 5px;">E-MAIL: _____</td> </tr> <tr> <td style="padding: 5px;">STATE: _____</td> <td style="padding: 5px;">ZIP: _____</td> </tr> </table>	APPLICANT CONTACT PERSON: _____	FAX NUMBER: () - -	MAILING ADDRESS: <i>(Street)</i> _____	CITY: _____	DAYTIME PHONE: () - -	E-MAIL: _____	STATE: _____	ZIP: _____
APPLICANT CONTACT PERSON: _____	FAX NUMBER: () - -								
MAILING ADDRESS: <i>(Street)</i> _____	CITY: _____								
DAYTIME PHONE: () - -	E-MAIL: _____								
STATE: _____	ZIP: _____								
3.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">CONTACT PERSON: <i>(Print Name & Title)</i> _____</td> <td style="width: 30%;">SIGNATURE _____</td> <td style="width: 20%;">DATE: _____</td> </tr> </table>	CONTACT PERSON: <i>(Print Name & Title)</i> _____	SIGNATURE _____	DATE: _____					
CONTACT PERSON: <i>(Print Name & Title)</i> _____	SIGNATURE _____	DATE: _____							
4.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">APPLICANT: <i>(Print Name & Title)</i> _____</td> <td style="width: 30%;">SIGNATURE _____</td> <td style="width: 20%;">DATE: _____</td> </tr> </table>	APPLICANT: <i>(Print Name & Title)</i> _____	SIGNATURE _____	DATE: _____					
APPLICANT: <i>(Print Name & Title)</i> _____	SIGNATURE _____	DATE: _____							

5.	PROJECT NAME: <i>(Example: Rushville Safe Routes Project; Hawthorne Elementary School Routes)</i> _____
6.	PROJECT DESCRIPTION/LOCATION: <i>(Include location, work to be performed, attach map and aerial image)</i>

a) CURRENT WALK/BICYCLE CONDITIONS:

b) SCHOOL AND STUDENT DEMOGRAPHICS:

	c) DESCRIBE HOW THE PROJECT WILL ENABLE & ENCOURAGE K-8 STUDENTS TO WALK AND BICYCLE TO SCHOOL:	
7.	PROJECT COST TOTAL: \$ FEDERAL FUNDS REQUESTED: \$	
8.	ADDITIONAL FUNDS: <i>(If yes, please describe)</i> <input type="checkbox"/> yes <input type="checkbox"/> no	PERCENTAGE OF TOTAL PROJECT COST: %
9.	PROJECT TYPE: <input type="checkbox"/> Traffic Calming or Speed Reduction Improvements <input type="checkbox"/> Pedestrian and bicycle crossing improvements <input type="checkbox"/> Sidewalk improvements <input type="checkbox"/> Off-street bicycle and pedestrian facilities <input type="checkbox"/> Secure bicycle parking facilities <input type="checkbox"/> Traffic diversion improvements in the vicinity of schools	

Attach the following required items:

Budget (see sample budget)

School Route Plan Map (8 ½ x 11 only—include project location/alignment, street names, north arrow, points of interest--see Appendix B within *Application Guidelines*)

Aerial image (8 ½ x 11 only—aerial images can be obtained at <http://earth.google.com/>)



Infrastructure Project Request (Final Application Form)

<p>For Office Use Only</p> <p>Date Received: _____</p>

1.	APPLICANT NAME:	TYPE OF APPLICANT (<i>Check One</i>):	<input type="checkbox"/> Village	<input type="checkbox"/> City	<input type="checkbox"/> County	<input type="checkbox"/> School
			<input type="checkbox"/> NRD	<input type="checkbox"/> State	<input type="checkbox"/> School District	<input type="checkbox"/> Other
2.	APPLICANT CONTACT PERSON:				FAX NUMBER: () -	
	MAILING ADDRESS: (<i>Street</i>)			CITY:	STATE:	ZIP:
	DAYTIME PHONE: () -		E-MAIL:			
3.	CONTACT PERSON: (<i>Print Name & Title</i>)		SIGNATURE		DATE:	
4.	APPLICANT: (<i>Print Name & Title</i>)		SIGNATURE		DATE:	

5.	PROJECT NAME: (<i>Example: Rushville Safe Routes Project; Hawthorne Elementary School Routes</i>)
6.	PROJECT DESCRIPTION/LOCATION: (<i>Include location, work to be performed, attach map, aerial image, & photographs</i>)

10.	IDENTIFY IF THIS PROJECT IS PART OF AN OFFICIAL PLANNING DOCUMENT:
11.	THIS PROJECT IS SUPPORTED BY:
12.	DESCRIBE HOW YOU WILL EVALUATE THE PROJECT OUTCOMES:

Attach the following required items:

- **Budget** (see sample budget)
- **School Route Plan Map** (8 ½ x 11 only--include project location/alignment, street names, north arrow, points of interest--see Appendix C within *Application Guidelines*)
- **Aerial image** (8 ½ x 11 only—aerial images can be obtained at <http://dnrmap2.dnr.state.ne.us/website/doqviewer/viewer.htm>)
- **Resolution** (see sample Resolution)
- **Labeled Photographs** (denote photos on map)

D R A F T



NONINFRASTRUCTURE

Draft Application Form Instructions

Please note: This form may be completed only after you receive NDOR notification that your intent-to-apply proposal appears eligible.

The following pages provide instructions for completing the draft Safe Routes Nebraska Noninfrastructure Project Application Form. The draft application form is attached to these instructions.

Please answer all questions directly on the form within the space provided. Attach only the required items (budget, project schedule, and map) as listed on the bottom of the form.

1. Applicant:

Provide information regarding the applicant that will own and maintain the project.

2. Applicant Contact Person:

Provide the name, address, daytime telephone number, fax number and e-mail address (if applicable) of the person who is submitting and directing this project.

3. Signature:

Contact Person - This is the person identified in Item 2 who will be responsible for the management and implementation of the proposed project.

4. Signature:

Applicant - This is the mayor, chairperson, director, principal, or superintendent listed in Item 1.

5. Project Name:

Provide a name for the project.

6. Project Description / Location:

Provide a description of the proposed scope of work for this project. Include information on the specific items of work to be performed with the funds requested and the location of the project.

a) Describe the current conditions for walking and bicycling to school.

What are the obstacles (physical or perceived) to walking and bicycling to/from the school?

What are the current risks facing children who walk and bicycle to/from school?

Provide relevant information such as crash data, traffic counts, speed data, pedestrian/bike/auto collision counts, gap studies, demographics, community and school surveys or audits, speed limits, environmental factors as appropriate, etc.

Provide a brief history of the neighborhood traffic issues to demonstrate the need for the proposed project

b) Provide the following information about the affected school and student population:

School Name

School Grade Level (i.e., K-8, K-6)

School Enrollment Data

Distance Eligibility for Riding a Bus (radius) in Miles

Number of Students who Currently Walk to School

Number of Students who Currently Bicycle to School

Number of Students who are Driven to School

Number of Students who are Eligible for Busing

Number of Students Living Within Two Miles of School

Number of students receiving free and/or reduced lunch

c) Describe how the project will help enable **and** encourage students to walk and bicycle to/from school. Please include how you will address the 5E's (Engineering, Education, Encouragement, Enforcement, and Evaluation) of a comprehensive safe routes to school program

NOTE: If you are applying for both infrastructure and noninfrastructure projects, please indicate if the projects can be implemented independently. For example, if you were to only receive funds for the noninfrastructure project, would it be possible to implement it without the infrastructure funds?

NOTE: Please attach an 8 ½ x 11 school route map plan showing the project location, and identify any problem areas and proposed changes with appropriate labels. Please label the school location, sidewalk routes, crossings, stop signs, traffic signals, etc.

7. Project Cost:

Identify the cost of this project. Provide the total cost of the project and the amount of federal funding requested. Attach an itemized budget showing necessary items to complete the activity, estimated unit costs, and estimated quantities (see enclosed sample budget).

8. Additional Funds Leveraged:

Check the box indicating if any other funds are being leveraged. If yes, please identify the percentage of the total project cost provided by additional funding, and list the additional funding source(s).

9. Project Type:

Check the box indicating the project type as shown below.

Public awareness campaigns and outreach to press and community leaders: Any promotional activity that draws attention to bicycling and walking for transportation. This can include any number of tools such as flyers, print and media advertising, letter campaigns, contests, and special events, etc.

Traffic education and enforcement in the vicinity of schools: Provide training and coordination for crossing guard programs, costs for additional law enforcement or equipment needed for specific SRTS enforcement activities, etc.

Student sessions on bicycle and pedestrian safety, health, and environment: Classes or discussions that teach students and/or parents safety practices relating to bicycling and pedestrian behavior, such as the proper way to cross streets, use sidewalks, load and unload buses, avoid darting out from between parked cars, helmet use, and bicycle skills, etc.

Funding for training, volunteers, and managers of safe routes to school programs: Paying designated local coordinators for time to start up a program is an allowable expense. Volunteers who assist with a program may be reimbursed for their expenses, but not for their time.

Send one completed draft application to: Kelly Morgan
Safe Routes Nebraska Program Coordinator
Sinclair Hille Architects
700 Q Street
Lincoln, NE 68508

The *Application Guidelines*, application form, and sample budget may be downloaded from www.SafeRoutesNE.com.



Noninfrastructure Project Request (Draft Application Form)

<i>For Office Use Only</i>
Date Received: _____

1.	APPLICANT NAME:	TYPE OF APPLICANT <i>(Check One)</i> :	<input type="checkbox"/> Village	<input type="checkbox"/> City	<input type="checkbox"/> Health Dept.	<input type="checkbox"/> School
			<input type="checkbox"/> County	<input type="checkbox"/> State	<input type="checkbox"/> School District	<input type="checkbox"/> Other
2.	APPLICANT CONTACT PERSON:				FAX NUMBER: () -	
	MAILING ADDRESS: <i>(Street)</i>			CITY:	STATE:	ZIP:
	DAYTIME PHONE: () -		E-MAIL:			
3.	CONTACT PERSON: <i>(Print Name & Title)</i>			SIGNATURE		DATE:
4.	APPLICANT: <i>(Print Name & Title)</i>			SIGNATURE		DATE:

5.	PROJECT NAME: <i>(Example: Ogallala Public Schools Walk to School Day; Ralston Crossing Guard Training Program)</i>
6.	PROJECT DESCRIPTION/LOCATION: <i>(Include location, work to be performed, and attach map)</i>

a) CURRENT WALK/BICYCLE CONDITIONS:

b) SCHOOL AND STUDENT DEMOGRAPHICS:

	c) DESCRIBE HOW THE PROJECT WILL ENABLE & ENCOURAGE K-8 STUDENTS TO WALK AND BICYCLE TO SCHOOL:	
7.	PROJECT COST TOTAL: \$ FEDERAL FUNDS REQUESTED: \$	
8.	ADDITIONAL FUNDS: <i>(If yes, please describe)</i> <input type="checkbox"/> yes <input type="checkbox"/> no	PERCENTAGE OF TOTAL PROJECT COST: %
9.	PROJECT TYPE: <input type="checkbox"/> Public awareness campaigns and outreach to press and community leaders <input type="checkbox"/> Traffic education and enforcement in the vicinity of schools <input type="checkbox"/> Student sessions on bicycle and pedestrian safety, health, and environment <input type="checkbox"/> Funding for training, volunteers, and managers of safe routes to school programs	

Attach the following required items:

Budget (see sample budget)

Project Schedule

School Route Plan Map (8 ½ x 11 only—include project location/alignment, street names, north arrow, points of interest--see Appendix B within *Application Guidelines*)



Noninfrastructure Project Request (Final Application Form)

<p><i>For Office Use Only</i></p> <p>Date Received: _____</p>

1.	APPLICANT NAME:	TYPE OF APPLICANT <i>(Check One)</i> :	<input type="checkbox"/> Village	<input type="checkbox"/> City	<input type="checkbox"/> County	<input type="checkbox"/> School
			<input type="checkbox"/> NRD	<input type="checkbox"/> State	<input type="checkbox"/> School District	<input type="checkbox"/> Other
2.	APPLICANT CONTACT PERSON:				FAX NUMBER: () -	
	MAILING ADDRESS: <i>(Street)</i>			CITY:	STATE:	ZIP:
	DAYTIME PHONE: () -		E-MAIL:			
3.	CONTACT PERSON: <i>(Print Name & Title)</i>		SIGNATURE		DATE:	
4.	APPLICANT: <i>(Print Name & Title)</i>		SIGNATURE		DATE:	

5.	PROJECT NAME: <i>(Example: Ogallala Public Schools Walk to School Day; Ralston Crossing Guard Training Program)</i>
6.	PROJECT DESCRIPTION/LOCATION: <i>(Include location, work to be performed, and attach map)</i>

10.	DESCRIBE ANY EXISTING PROGRAMS TO ENCOURAGE AND EDUCATE STUDENTS TO WALK AND BICYCLE TO/FROM SCHOOL:
11.	THIS PROJECT IS SUPPORTED BY:
12.	DESCRIBE HOW YOU WILL EVALUATE THE PROJECT OUTCOMES:

Attach the following required items:

- **Budget** (see sample budget)
- **Project Schedule**
- **School Route Plan Map** (8 ½ x 11 only--include project location/alignment, street names, north arrow, points of interest--see Appendix C within *Application Guidelines*)

Application for Federal Assistance SF-424

Version 02

* 1. Type of Submission:

- Preapplication
- Application
- Changed/Corrected Application

* 2. Type of Application:

- New
- Continuation
- Revision

* If Revision, select appropriate letter(s):

* Other (Specify)

* 3. Date Received:

4. Applicant Identifier:

5a. Federal Entity Identifier:

* 5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name:

* b. Employer/Taxpayer Identification Number (EIN/TIN):

* c. Organizational DUNS:

d. Address:

* Street1:

Street2:

* City:

County:

* State:

Province:

* Country:

* Zip / Postal Code:

e. Organizational Unit:

Department Name:

Division Name:

f. Name and contact information of person to be contacted on matters involving this application:

Prefix:

* First Name:

Middle Name:

* Last Name:

Suffix:

Title:

Organizational Affiliation:

* Telephone Number:

Fax Number:

* Email:

Application for Federal Assistance SF-424

Version 02

9. Type of Applicant 1: Select Applicant Type:

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

*** 10. Name of Federal Agency:**

11. Catalog of Federal Domestic Assistance Number:

CFDA Title:

*** 12. Funding Opportunity Number:**

* Title:

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

*** 15. Descriptive Title of Applicant's Project:**

Attach supporting documents as specified in agency instructions.

Application for Federal Assistance SF-424

Version 02

16. Congressional Districts Of:

* a. Applicant

* b. Program/Project

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment

Delete Attachment

View Attachment

17. Proposed Project:

* a. Start Date:

* b. End Date:

18. Estimated Funding (\$):

* a. Federal

* b. Applicant

* c. State

* d. Local

* e. Other

* f. Program Income

* g. TOTAL

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

a. This application was made available to the State under the Executive Order 12372 Process for review on .

b. Program is subject to E.O. 12372 but has not been selected by the State for review.

c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes", provide explanation.)**

Yes

No

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

**** I AGREE**

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix:

* First Name:

Middle Name:

* Last Name:

Suffix:

* Title:

* Telephone Number: Fax Number:

* Email:

* Signature of Authorized Representative:

* Date Signed:

Application for Federal Assistance SF-424

Version 02

*** Applicant Federal Debt Delinquency Explanation**

The following field should contain an explanation if the Applicant organization is delinquent on any Federal Debt. Maximum number of characters that can be entered is 4,000. Try and avoid extra spaces and carriage returns to maximize the availability of space.

Chapter 3
Managing the Project

	Page
3.1 Introduction	3-2
3.2 Project Roles & Responsibilities	3-2
3.3 Timeline for Infrastructure Projects	3-4
3.4 Project Deliverables	3-7
3.5 Project File Organization	3-10

Chapter 3

Managing the Project

3.1 Introduction

NDOR is responsible to FHWA for the local program and must assure compliance with all Federal and state laws, regulations, policies and procedures. NDOR has the option to authorize LPAs to perform selected project activities on Federal-aid projects.

LPAs must possess a minimum organizational structure, credentialed employees, and must have appropriate processes and experience in order for NDOR to qualify the LPA to administer Federal-aid projects. These considerations apply beyond the specific project development disciplines associated with design and construction, to the general aspects of public business, fiscal accountability, and other applicable requirements associated with Federal and state funding. NDOR will determine if an LPA possesses qualified staff, experience, and management oversight to successfully administer a project from preliminary development through construction and project maintenance.

3.2 Project Roles and Responsibilities

In order to ensure a high level of success in project delivery, NDOR will assign a Project Coordinator (*pre-construction*) and State Representative (*during construction*) to monitor and coordinate the project. As the LPA Federal-aid project advances, NDOR will furnish information to assist the LPA through the entire project.

The LPA will identify a project team responsible to complete the required work. LPA staff, their public employee in Responsible Charge and any contracted consulting firms comprise the LPA team.

NDOR describes state and Federal policies and procedures throughout this manual to assist the LPAs in meeting requirements for their projects. FHWA interprets Federal laws, rules and regulations. Although LPAs share the responsibility with NDOR for project administration, NDOR is ultimately responsible to FHWA to ensure that local projects conform with the applicable Federal and state requirements. Requests for information and assistance concerning Federal requirements must be coordinated through NDOR.

NDOR responsibilities include, but are not limited to, the following:

- Qualifying a LPA to manage a Federal-aid project;
- Administering and managing Federal funds;
- Reviewing and approving projects;
- Preparing the project program agreement;

- Requesting obligation of Federal funds and obtaining authorization from FHWA for phases of work;
- Issuing a Notice-to-Proceed for each work phase;
- Approving consultant selections;
- Reviewing and recommending NEPA documentation to FHWA for approval;
- Certifying ROW;
- Reviewing and approving PS&E package;
- Setting and verifying DBE goal compliance;
- Concurring with the lowest responsive bid or awarding the construction contract;
- Reviewing and approving construction documentation;
- Reviewing, verifying, and approving requests for Federal reimbursement; and
- Auditing and closing out the project.

The LPA shall appoint one or more full-time public employee(s), qualified by NDOR, to be in responsible charge of the project. This individual, known as the RC, is accountable for all phases of the work, manages the day-to-day operations on the project, involved in all project related decisions, monitors the progress and schedule of the project and visits the project during construction to perform their quality control responsibility as described in Chapter 15. **The RC cannot be an employee of a consulting firm.**

The LPA must assure that a RC has sufficient education, experience, and/or training in order to be assigned the LPA's oversight responsibility of a Federal-aid project.

Projects must be administered in accordance with NDOR's LPA Guidelines Manual for Federal-aid Projects. The LPA's responsibilities include, but are not limited to, the following:

- Obtaining sufficient trained and experienced personnel to adequately manage the project;
- Selecting and planning a new project;
- Preparing a project schedule;
- Assembling the LPA team, including the RC.
- Selecting consultants, if needed, including preparation of a scope of work and independent cost estimate;
- Day-to-day project decision making;
- Submitting reimbursement requests of eligible project expenses for all phases of work;

- Preliminary engineering and final design;
- Environmental investigation and preparation of NEPA documents;
- Obtaining ROW in accordance with the Uniform Act;
- Coordinating utility rehabilitation and relocation;
- Coordinating impacts to the railroad;
- Administering the construction contract;
- Certifying substantial project completion;
- Maintaining and following through with the environmental commitments after project completion; and
- Keeping an official record of all project documents for a minimum of three (3) years after the project has been closed.

FHWA maintains responsibility for transportation projects undertaken with Federal funding and is the approving authority for the programs discussed in this manual. FHWA has delegated authority and responsibility to NDOR for the local program as allowed under Safe, Accountable, Flexible, Efficient Transportation Equity Act (*SAFETEA-LU*) and previous transportation acts. NDOR has the responsibility to ensure that LPAs are administering the Federal-aid program in conformance with all applicable Federal requirements.

FHWA's responsibilities include, but are not limited to, the following:

- Authorizing Federal funds;
- Approving NEPA documents;
- Approving access points on the Interstate; and
- Auditing project documentation.

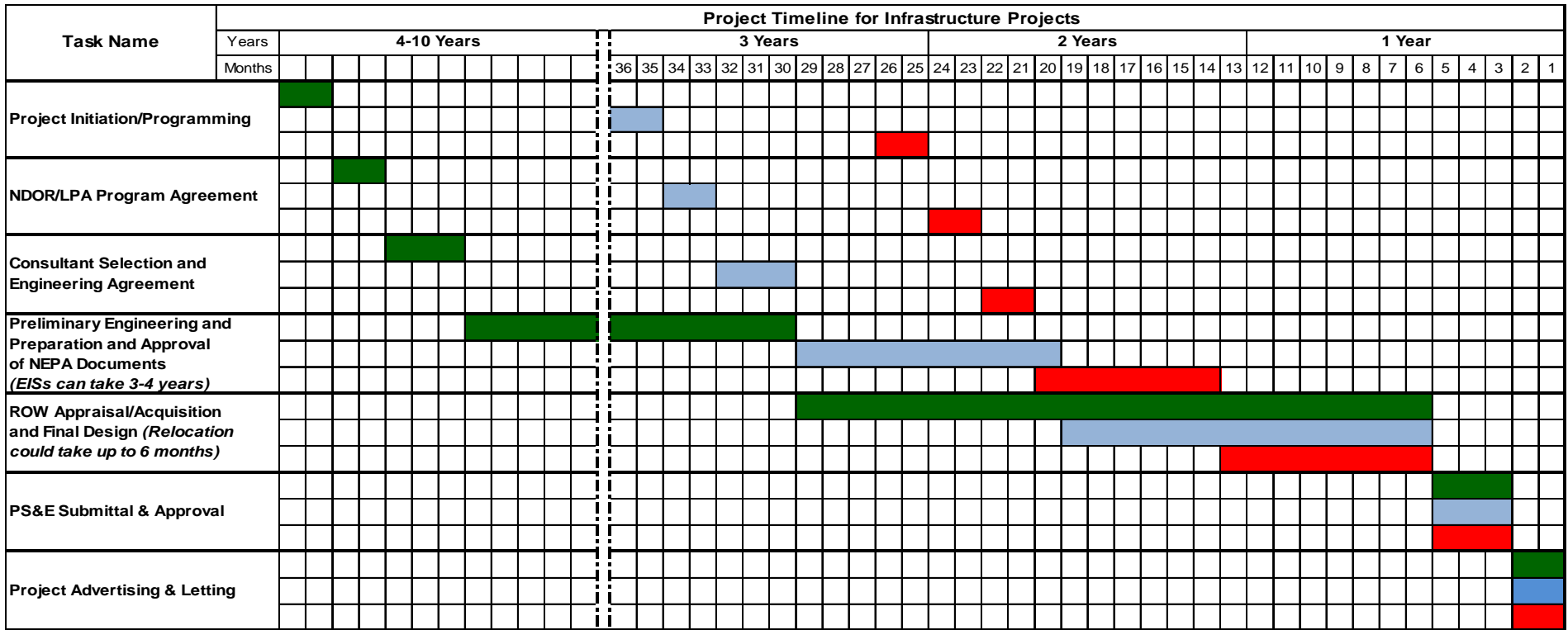
3.3 Timeline for Infrastructure Projects

After the LPA submits form DR-530, NDOR and the LPA discuss the project in order to come to a common understanding of the project issues and transportation goals. Considerations include location, type, size, scope and phasing for a facility, mode, and operational or management solutions to solve the identified transportation problem. Attendees should define at a minimum the general work requirements, develop an initial scope of work and discuss the development of a Request for Proposal (*RFP*) if needed to hire a consultant. These discussions take place before time and money is expended to advance extensive environmental analysis and design work.

After defining the project scope, the LPA determines the project schedule. The project schedule is crucial to managing transportation funding. The project schedule will vary depending on project type and complexity. Good planning on the part of the LPA is essential. LPAs must realistically plan adequate time for development, coordination and project delivery. LPAs are cautioned against setting unrealistic letting dates. Time for reviews and quality control activities must be built into the project schedule. Consideration must be given to the fact that NDOR and FHWA will be processing many other projects.

Figure 3.1 shows a range of approximate project timelines based on representative project types and project scope assumptions. Each project is unique, having its own circumstances, and therefore may not fit into the timeframes shown. The purpose is to convey the idea that some activities, such as environmental or ROW, need to be allowed enough time and may extend a Federal-aid project well beyond three (3) or four (4) years.

A project does not become a Federal-aid project until a project program agreement is executed.



Target Letting Date

- Complex Project:** Major urban/rural reconstruction project. New facility project. New viaduct or bridge project. Major bridge replacement project. (Most likely an EA or EIS with major ROW taking)
- Intermediate Project:** Typical urban/rural improvement project. Typical bridge rehab./replacement project. Enhancement projects. Safe Routes Nebraska projects. (Most likely a CE with minor ROW taking)
- Simple Project:** Hazard Elimination improvement project. Roadway resurfacing/maintenance project. Traffic signal installation project. (Most likely a PCE with no ROW taking)

NOTE: These are possible scenarios and the project timeline for each project can vary.

Figure 3.1

3.4 Project Deliverables

The following pages list LPA major deliverables. The list may be used to guide a LPA through a Federal-aid project from initial project application through construction and closeout. Refer to Chapter 15, Section 15.5, for QC/QA roles and responsibilities.

Unless specified otherwise, submittals are directed to the NDOR LPD Project Coordinator. Colored lines or cells are key points of authorization.

LPA Major Project Deliverables

1	Submit project application/programming request - DR Form 530
2	Submit executed project program agreement
3	Distribute project setup meeting minutes
4	Submit scope of work and Independent Cost Estimate (<i>ICE</i>) of PE services
5	Submit PE solicitation plan or method, selection panel names and titles, selection criteria (<i>evaluation factors, including weighting</i>), and draft RFP, draft public announcement or draft solicitation letter
	STOP - PROCEED PAST THIS POINT ONLY AFTER RECEIVING NDOR NTP LETTER FOR SOLICITING PE SERVICES
6	Submit the short list of consulting firms (<i>required only for large purchase procedure</i>), copies of final RFP, final public announcement or solicitation letters, proof of any advertisement, listing of responding firms, correspondence with responding firms, and copies of completed evaluation forms from each of the selection committee members
	STOP (<i>LARGE PURCHASE PROCEDURE</i>) - PROCEED PAST THIS POINT ONLY AFTER RECEIVING NDOR WRITTEN CONCURRENCE WITH SHORT-LISTED PE FIRMS
7	Submit copies of completed evaluation forms (<i>for short-listed firms, required only for large purchase procedure</i>), ranking of firms, final selection, the proposal submitted by the selected firm, related correspondence or notes related to the evaluation and decision, correspondence with consulting firms, and verification of selected firm's Title VI compliance.
	STOP - PROCEED PAST THIS POINT ONLY AFTER RECEIVING NDOR WRITTEN CONCURRENCE OF FINAL PE SELECTION

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8	Submit PE negotiation documentation: final scope of work, any revisions to the ICE and consultant's fee proposal, an explanation of any significant differences between the LPA's original estimate and the final fee agreed upon
	STOP - PROCEED PAST THIS POINT ONLY AFTER RECEIVING NDOR WRITTEN CONCURRENCE WITH LPA'S RECORD OF NEGOTIATION
9	Submit executed PE agreement
	STOP - PROCEED PAST THIS POINT ONLY AFTER RECEIVING NDOR NTP LETTER FOR PROCEEDING WITH PE SERVICES
10	Submit Plan-in-Hand plans
11	Distribute Plan-in-Hand report
12	Submit NEPA Determination Form
13	Submit a Public Involvement Plan, as required
14	Submit updated Purpose & Need statement (<i>CE, EA or EIS</i>) prior to public meeting
15	Submit Functional Design Plans
16	Submit public meeting documentation
17	Submit draft Categorical Exclusion, EA or EIS document
	STOP - PROCEED PAST THIS POINT ONLY AFTER ENVIRONMENTAL DOCUMENT IS APPROVED BY NDOR AND/OR FHWA, AND AFTER RECEIVING NDOR NTP LETTER FOR FINAL DESIGN
18	Submit 90% (<i>LOC</i>) plans, bridge plans, updated project cost estimate and applicable permits
	STOP - PROCEED PAST THIS POINT ONLY AFTER RECEIVING NDOR NTP LETTER FOR ROW ACTIVITIES
19	Submit ROW Plans, Cost Estimates and identified encroachments
	STOP - UNTIL NDOR ISSUES NTP LETTER TO PROCEED TO APPRAISALS

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20	Submit scope of work and a ICE of PE services for Supplemental Agreement as applicable
	STOP - PROCEED PAST THIS POINT ONLY AFTER RECEIVING NDOR WRITTEN CONCURRENCE OF SCOPE OF WORK AND INDEPENDENT COST ESTIMATE
21	Submit PE negotiation documentation and draft Supplemental Agreement. For time extensions only, submit justification and draft PE Supplemental Agreement
	STOP - PROCEED PAST THIS POINT ONLY AFTER RECEIVING NDOR WRITTEN CONCURRENCE WITH NEGOTIATION DOCUMENTATION AND DRAFT SUPPLEMENTAL AGREEMENT
22	Submit executed Supplemental PE Agreement
	STOP - PROCEED PAST THIS POINT ONLY AFTER RECEIVING NDOR NTP LETTER FOR PROCEEDING WITH SUPPLEMENTAL PE SERVICES
23	Submit Utilities Plans
24	Submit RR Plans
25	Submit LPA concurrence in eligible utility rehab costs
26	Submit draft Utilities agreement
27	Submit RR's concurrence of ROW appraisal plans
28	Submit ROW Compensation Estimates, Appraisals and Appraisal Reviews
	STOP - UNTIL NDOR ISSUES NTP LETTER TO PROCEED TO ROW ACQUISITIONS (<i>THAT DO NOT REQUIRE RELOCATIONS</i>), AND RELOCATION STUDIES AS APPLICABLE
29	Submit Relocation Assistance Benefit Studies (<i>if needed</i>)
	STOP - UNTIL NDOR ISSUES NTP LETTER TO PROCEED TO ROW RELOCATION ASSISTANCE
30	Submit ROW Relocation Assistance Claims
31	Submit ROW acquisition files
32	Submit ROW administrative settlements
33	Submit RR concurrence with final plans

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34	Submit draft RR agreement
35	Submit executed RR agreement
36	Submit environmental commitments file
37	Submit Final Plans
38	Submit executed Utilities Agreement
38	IF UTILITY WORK IS TO BE DONE PRIOR TO CONSTRUCTION, DO NOT PROCEED UNTIL NDOR ISSUES NTP LETTER AUTHORIZING UTILITY WORK
39	Submit scope of work and independent cost estimate of CE services
40	Submit CE solicitation plan, selection panel, selection criteria (<i>evaluation factors, including weighting</i>), and draft RFP, draft public announcement or draft solicitation letter
40	STOP - PROCEED PAST THIS POINT ONLY AFTER RECEIVING NDOR NTP LETTER FOR SOLICITING CE SERVICES
41	Submit the short list of consulting firms (<i>required only for large purchase procedure</i>), copies of final RFP, final public announcement or solicitation letters, proof of any advertisement, listing of responding firms, correspondence with responding firms, and copies of completed evaluation forms from each of the selection committee members
41	STOP - PROCEED PAST THIS POINT ONLY AFTER RECEIVING NDOR WRITTEN CONCURRENCE WITH SHORT-LISTED CE FIRMS
42	Submit copies of completed evaluation forms (<i>for short-listed firms, required only for large purchase procedure</i>), ranking of firms, final selection, the proposal submitted by the selected firm, related correspondence or notes related to the evaluation and decision, correspondence with consulting firms, and verification of selected firm's Title VI compliance
42	STOP - PROCEED PAST THIS POINT ONLY AFTER RECEIVING NDOR WRITTEN CONCURRENCE OF FINAL CE SELECTION
43	Submit CE negotiation documentation: final scope of work, any revisions to the ICE and consultant's fee proposal, an explanation of any significant differences between the LPA's original estimate and the final fee agreed upon
43	STOP - PROCEED PAST THIS POINT ONLY AFTER RECEIVING NDOR WRITTEN CONCURRENCE WITH LPA'S RECORD OF NEGOTIATION
44	Submit executed CE agreement

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	STOP - PROCEED PAST THIS POINT ONLY AFTER RECEIVING NDOR NTP LETTER FOR PROCEEDING WITH CE SERVICES
45	Submit PS&E package
	STOP - DO NOT PROCEED WITH THE PROJECT UNTIL NDOR APPROVES THE PS&E PACKAGE AND ISSUES NTP LETTER TO ADVERTISE FOR BIDS
46	Submit proof of advertisement
47	Submit bid addendums (<i>local let</i>)
48	Submit documentation for any non-responsive bids and get NDOR concurrence (<i>local let</i>)
49	Submit award recommendation (<i>local let</i>), or LPA's concurrence with reject/award recommendation (state let)
50	Submit list of subcontractors and certificate of insurance to NDOR State Rep (<i>local let</i>) or NDOR Construction Division (<i>State let projects</i>)
51	Submit list of DBE subcontractors, certificate of insurance and contracts to NDOR State Rep (<i>local let projects</i>) or NDOR Construction Division (<i>State let projects</i>)
52	Submit preconstruction meeting agenda to NDOR State Rep
53	Distribute preconstruction meeting minutes
54	Submit materials testing requirements (<i>local let projects</i>) to NDOR State Rep
55	Submit final Utilities invoice to NDOR State Rep
56	Submit DR Forms 441, 442 and 449 (<i>DBE</i>) to NDOR State Rep
57	Submit documentation verifying contractor's compliance with Title VI, labor/wage rates, DBE and EEO requirements to NDOR State Rep
58	Submit proposed change orders to NDOR State Rep
59	Submit progress payments for CE to NDOR State Rep
60	Submit progress payments for construction to NDOR State Rep

61	Submit scope of work and ICE of CE services for Supplemental Agreement as applicable
	STOP - PROCEED PAST THIS POINT ONLY AFTER RECEIVING NDOR WRITTEN CONCURRENCE OF SCOPE OF WORK AND INDEPENDENT COST ESTIMATE
62	Submit CE negotiation documentation and draft Supplemental Agreement. For time extensions only, submit justification and draft CE Supplemental Agreement
	STOP - PROCEED PAST THIS POINT ONLY AFTER RECEIVING NDOR WRITTEN CONCURRENCE WITH SUPPORTING DOCUMENTATION AND DRAFT SUPPLEMENTAL AGREEMENT
63	Submit executed Supplemental CE Agreement
	STOP - PROCEED PAST THIS POINT ONLY AFTER RECEIVING NDOR NTP LETTER FOR PROCEEDING WITH SUPPLEMENTAL CE SERVICES
64	Submit project punchlist from project final walkthrough, and submit DR Form 299 (<i>after resolution of punchlist items</i>) to NDOR State Rep
65	Submit final records to NDOR State Rep
66	Continue to monitor and maintain environmental commitments after construction; submit documentation as required
67	Submit permit close-out documentation to NDOR State Rep

3.5 Project File Organization

Federal-aid transportation project files should be organized in the following format. It is based on categories which correspond to phases or key activities that occur during a project. The main goals of keeping an organized filing system are to ensure completeness of documentation and to have the ability to retrieve information quickly. In addition, Federal and State auditors will be able to quickly determine that the local agency has complied with all laws and requirements. The contents outlined below are not intended to be complete listings; project files should include these items as appropriate but are not limited to these items.

All project related correspondence (*including emails*) and documents shall have complete project identification which includes: State project number, State control number, and project name.

A project can be documented using main categories or “folders”:

1. Pre-construction
2. Construction

3. Agreements
4. Consultant Selection
5. Reimbursements
6. Plans and maps

Each main folder consists of sub-folders and/or files within those subfolders.

Main Folder #1: Pre-Construction

Sub-project folders/files

1. Project Initiation

- Qualification of LPA to administer the Federal-aid project;
 - Interview,
 - Title VI Plan.
- Preliminary work done prior to project request file contains preliminary project development information;
 - scope definition,
 - Concept,
 - Basis for cost estimate,
 - Purpose/need,
 - Project maps/plans.
 - Copy of the project's entry in the one- and six-year plan,
 - Documentation of public involvement,
 - Project application/programming request (*DR-530*) with initial project approvals by local entity and NDOR.
 - Project schedule.
- Project setup meeting report.

2. Preliminary Engineering/NEPA Phase

- **Preliminary Design;**
 - NTP letter from NDOR authorizing work for PE/NEPA phase,
 - Preliminary design information,
 - Plan-in-Hand agenda,
 - Plan-in-Hand documentation of invitations,
 - Plan-in-Hand report,

- Traffic Study, if applicable,
- Any public involvement minutes, transcripts, and meeting notes.
- **Environmental;**
 - Requests to and clearances from resource agencies,
 - NEPA determination form and attachments,
 - Permit requests and approvals and issued permits,
 - Evidence that any project change orders were reviewed for environmental impact and potential changes to conditions of permits,
 - A plan for compliance with post-construction environmental commitments,
 - Evidence of follow-up visits or activity should be placed in this file,
 - Public Involvement Plan, as required,
 - Documentation (*transcripts, etc*) for any public meetings held,
 - Title VI compliance documentation.
 - Draft and final environmental documents (*CE/EA/EIS as applicable*),
 - Environmental commitments,
 - NDOR and FHWA approvals.
- **Utilities;**
 - Proof that utilities were contacted, provided with plan-in-hand plans, and invited to the Plan-in-Hand site visit,
 - Documentation of scope of utilities work, i.e. utility's rehab plan,
 - Documentation of estimate(s) of cost for utilities work,
 - Maps,
 - Meeting notes,
 - NTP letter from NDOR authorizing utilities work, if work is to be done prior to construction,
 - Reimbursements received from the utility for their portion of the work,
- **Railroad file;**
 - Proof that railroad was contacted, provided with Plan-in-Hand plans, and invited to the Plan-in-Hand site visit,
 - RR's concurrence of ROW appraisal plans,
 - RR concurrence with final plans,

3. Final Design/ROW Phase

- **Final Design;**
 - NTP letter from NDOR authorizing Final Design and ROW Plans/Estimates,
 - Functional design plans,
 - 90% (LOC) plans and 70% bridge plans,
 - Any public involvement minutes or transcripts,
 - Meeting notes,
 - Documentation of major decisions,
 - Final plans,
- **ROW;**
 - Project plans/estimates with the tracts involved identified,
 - NTP letter from NDOR approving plans/estimates authorizing appraisals,
 - Tract - a separate file/folder for each tract to be obtained,
 - Compensation Estimate, if applicable,
 - Appraisal and appraisal review, if applicable,
 - NTP letter from NDOR approving appraisal and authorizing acquisition, and a relocation study if applicable,
 - Relocation Assistance Benefit Study, if applicable,
 - NTP letter from NDOR authorizing Relocation, if applicable,
 - All meeting notes with landowners,
 - Correspondence,
 - Administrative settlement, if applicable,
 - copies of condemnation proceedings and outcomes,
 - Warranty deeds,
 - LPA's ROW Certificate,
 - NDOR ROW Certificate,

4. PS&E

- PS&E package;
- NTP letter from NDOR authorizing advertising for bids;
- Proof of advertisement (*Local Let Projects*);
- Bid addendums (*Local Let Projects*);

- Documentation for non-responsive bids, if applicable;
 - NDOR written concurrence.
- Award recommendation to NDOR (*Local Let Projects*);
- Concur/reject award documentation;

5. General Project Correspondence – Pre-construction

- Correspondence related to the project but would not easily be identified with any of the other previously identified project folders;
- Maintain in date – time (*chronological*) sequence.

Main Folder #2: Construction

Sub-project folders/files

1. Construction file

- Engineer's estimate just prior to letting;
- Bid tabs and notice of project contractor selection (*including NDOR and/or FHWA approval, as required*);
- Copy of construction contract;
- NTP to contractor;
- Copies of all certified payrolls (*as they correspond to construction contractor's progress estimates*).

2. On-site inspector (CE) file

- If SiteManager is not available, documentation is required in written form in a field book or some other type of permanent record, as described below;
- Documentation that supports the amounts reimbursed;
 - Group so that comparisons can readily be made between supporting documentation and invoices and progress payments. (*Progress payment # should be attached to each group of documents*).
- Diaries, to document daily project facts such as the:
 - Weather,
 - Contractors working on the project,
 - Activities being performed,
 - Unusual incidents affecting the work, and
 - Any pertinent conversation held.

- Field books, to document;
 - Daily work activities, for specific pay items at specific locations,
 - Computations of work performed,
 - Measurements of work performed, and
 - Tests performed in the field.
- Other documentation supporting progress payments:
 - Materials certifications,
 - Bills of lading,
 - Scale (*weight*) tickets,
 - Test reports from an off-site laboratory,
 - CE time and expenses records.
- Survey field books.

3. Change order file

- Project change orders and associated documentation;
- NDOR and FHWA correspondence and approvals;
- Environmental re-evaluations and approvals needed as a result of changes;

4. State Quality Assurance and Oversight file

- Document every onsite visit made by NDOR (*who, when, where and what was reviewed and recommendation*);
- Exceptions or comments requiring modifications to the project and any follow-up documentation.

5. Project Completion/Acceptance

- All final project acceptance documents including the final project progress estimate, approved by contractor;
- City/county project acceptance and NDOR and FHWA approvals, and all official project completion notices.

6. General Project Correspondence - Construction

- Correspondence related to the project but would not easily be identified with any of the other previously identified project folders;
- Maintain in date – time (*chronological*) sequence;

Main Folder #3: Agreements

Sub-project folders/files

1. Program Agreement (*and any supplemental agreements*) between LPA and NDOR.
2. Interlocal Agreement(s) between LPA and other public entities, if applicable.
3. PE Agreement (*and any supplemental PE agreements*) between LPA and Design Consulting Firm.
4. CE Agreement (*and any supplemental CE agreements*) between LPA and Construction Engineer/Inspector.
5. Utility agreements.
6. Railroad agreements.

Main Folder #4: Consultant Selection

Sub-project folders/files

1. PE Selection.

- Submittal to NDOR prior to advertising;
 - Scope of Work,
 - Independent Cost Estimate of PE services,
 - Evaluation criteria and form to be used,
 - Members of the selection panel,
 - Draft RFP,
 - Advertisement plan.
- NTP letter from NDOR to advertise RFP;
- Submittal to NDOR;
 - Proof of advertisement,
 - List of firms that responded to the RFP,
 - Short list of firms,
 - Documentation of interviews, with completed evaluation forms,
 - Correspondence with firms,
 - Final selection documented,
 - Verification of PE's Title VI compliance,
 - Documentation of the negotiation process and details including correspondence.
- NDOR approval (*NTP letter to proceed into PE/NEPA phase*);

2. CE Selection. (Note: if the CE is the same as the PE, the non-bolded items are not applicable.)

- Submittal to NDOR prior to advertising;
 - Scope of Work,
 - Independent Cost Estimate of CE services,
 - Evaluation criteria and form to be used,
 - Members of the selection panel,
 - Draft RFP,
 - Advertisement plan.
- NTP letter from NDOR to advertise RFP;
- Submittal to NDOR;
 - Proof of advertisement,
 - Short list,
 - Documentation of interviews, with completed evaluation forms,
 - Final selection documented,
 - Verification of CE's Title VI compliance,
 - Documentation of the negotiation process and details including correspondence.
- NDOR approval (*NTP letter to proceed into Construction/CE phase*).

Main Folder #5: Reimbursements

Sub-project files/folders

1. All funding approvals
2. Notices to Proceed
3. Invoices
4. Progress payments to contractors and consultants
5. Supporting documentation for all progress payments
6. Project closeout documentation

Main Folder #6: Plans and Maps

Sub-project files/folders

1. **Map/Plan file** – copies of all required plans/maps (*properly noted*) should be contained in this file. This would include all maps/plans used throughout the project, including the “as built” plans.

All of these files together form the overall project file to be retained by the LPA.

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Appendix All forms, samples, flowcharts, procedures and templates referenced within this Chapter which are denoted with an asterisk (*), are posted under the LPA Guidelines Manual Chapter 4 Appendix online at:

<http://www.roads.nebraska.gov/gov-aff/lpa-guide-man.html>

4.1 Introduction

An LPA may engage consultants to perform architectural, engineering, and related services to develop a Federal-aid and/or State funded project. LPAs must follow the selection and contracting procedures detailed in this chapter. The provisions of the Brooks Act (*40 USC 1101*) and Nebraska State statutes §81-1712 must be followed. The Brooks Act requires engineering and design contracts utilizing Federal funds be awarded on the basis of fair and open competitive negotiations, demonstrated competence, and professional qualifications (*23 CFR, Section 172.5*).

Additional regulations that govern consultant selection and administration include:

- [48 CFR, Part 31](#) - addresses contract cost principles and procedures;
- [49 CFR, Section 18](#) – uniform administrative requirements for grants and cooperative agreements to State and Local governments;
- [Title 23 USC, Section 112\(B\)](#) - amended by [Section 307 of the 1995 NHS Act](#) - prohibits limits on indirect cost rates (*overhead*) and requires NDOR to accept overhead rates established by a cognizant Federal or state government agency;
- Employment of Consultants <http://www.fhwa.dot.gov/programadmin/consultant.cfm>

4.1.1 Initial Obligation of Funds

Nebraska Department of Roads (*NDOR*), may request a nominal dollar amount be obligated in FMIS (*Financial Management Information System*) for project setup and to prepare a Request for Proposal (*RFP*) for professional services. This obligation will allow charges towards the project by both NDOR and the LPA's Responsible Charge to initiate the project and to procure consultant services. These preliminary activities include the preparation of an RFP, completion of the Qualifications Based Selection (*QBS*) process, development of an Independent Cost Estimate (*ICE*), and negotiation of a detailed work plan with the selected consultant.

4.1.2 LPA Responsible Charge (RC) Oversight of Consultants

The LPA must provide a qualified, full-time, public employee to be the responsible charge (*RC*) of their Federal-aid project. It is the duty of the LPA RC to competently manage and coordinate the projects day-to-day operations, including all project related decisions, on behalf of the LPA, which includes the LPAs governing body, staff and any extended staff dedicated to the project, such as consulting engineers. See chapters 3 and 15 of this Manual for additional requirements and guidance concerning the LPA RC.

4.2 Conflict of Interest Policy

Federal conflict of interest provisions prohibit public employees, public officials, officers, agents and others from having a direct or indirect financial interest, real or apparent, in any contract with the public entity for which he or she is a public official or is employed. This includes real estate interests adjacent to or within the limits of the project that is owned by an official or employee of the LPA, or by an owner or employee of the selected consultant firm. An example of a prohibited financial interest would be a situation involving a part-time County Highway Superintendent awarding a professional service contract to a firm in which the Superintendent is presently a partner. Many other less obvious situations may also represent a conflict of interest. The LPA is encouraged to contact the LPD PC for further clarification on less obvious scenarios.

State law prohibits public employees or public officials from having certain personal interests in contracts entered into by the employee or the official's governmental entity. See, for example, Neb. Rev. Stat. § 39-1509 (*County Highway Superintendent*), Neb. Rev. Stat. § 23-3113 (*County Purchasing Agent*), and the Nebraska Political Accountability and Disclosure Act, Neb. Rev. Stat. §§ 49-1401 to 1444 and 49-1493 to 14,104, in particular 49-14,101 to 14,103.07. The same, or a financially related, professional services consulting firm cannot serve as City Engineer/City Street Superintendent/County Highway Superintendent of record and also provide professional services {Preliminary Engineering (*PE*) or Construction Engineering (*CE*)} for a transportation project (*23 CFR 1.33 and Nebraska State Law*).

The LPA must comply with all these and any other provisions of law or risk the project being determined to be ineligible for federal funding, in addition to all other state law sanctions, penalties, or remedies. It is the responsibility of the LPA, its public employees and their contracted consultants to be familiar with federal and state conflict of interest laws that apply to Federal-aid projects. The laws and statutes identified above serve only as a guide. The LPA must adhere to any local laws and policies, and any new or revised federal laws or state statutes.

An LPA interested in completing a Federal-aid project, is required to formally designate the LPA's Conflict of Interest Officer who will use the current [Conflict of Interest Guidance Document for Local Public Officials, and Public Employees*](#) to disclose potential and actual conflicts. A completed copy of this form must be retained in the LPA's files and submitted to NDOR annually, prior to commencing any consultant selection process.

Engineering and architectural firms responding to professional services RFP's are required to include a completed the current forms in the [Conflict of Interest Guidance Document for Consultants*](#), with their proposal. This form is designed to assist consultants to disclose potential and actual conflicts of interest with the project.

At any time during the progress of the project, if the LPA and/or its contracted consulting firms recognize changes that might result in a Conflict of Interest, they shall immediately notify LPD PC and submit revised Conflict of Interest documents.

4.3 Consultant Selection

An LPA may supplement its staff by hiring a consulting engineer or architect to provide professional services. In order for the Consultant to be eligible to respond to an LPA's RFP, the Consultants must first be certified by NDOR to perform the scope of services requested by the LPA. Costs of professional services are eligible for Federal-aid reimbursement provided that applicable processes have been followed and requirements met. A list of consultants certified to provide services for specific categories can be provided by the LPD PC. Some of these lists are posted on the following website: www.nebraskatransportation.org/RFP

If an LPA elects to retain a consultant to perform right-of-way appraisal, negotiation and relocation activities they must follow [The NDOR Right Of Way Acquisition Guide for LPAs \(www.nebraskatransportation.org/ROWAY/pdfs/lpa/lpa-manual.pdf\)](http://www.nebraskatransportation.org/ROWAY/pdfs/lpa/lpa-manual.pdf). Procurement of Right-of-Way appraisal and negotiation services is not subject to the Brooks Act.

The LPA must use a Qualifications-Based Selection (QBS) process to select an engineering or architectural firm to provide professional services. This is independent of funding source. The objective is to select the most qualified firm for the proposed services. In a QBS process, price cannot be a selection factor. In other words, a bidding process for professional services is prohibited.

There are three NDOR approved procedures for procuring professional services. These are the only NDOR allowed methods of procuring professional services for Federal-aid transportation projects, i.e. if there are Federal and/or State funds in any phase of the project.

The three methods are:

1. Large Purchase Procurement Process
2. Small Purchase Procurement Process
3. Locally Funded Procurement Process (*approved procedure only when there are no Federal or State funds used to pay for the professional services*)

If the total estimated consultant fees from project conception through construction (*PE and CE combined, independent of funding source*) are anticipated to exceed \$60,000 or if a project's basic construction cost is estimated to be more than \$580,000 the LPA must follow the Large Purchase Procurement Process or the Locally Funded Procurement Process. For projects where professional services from all phases are anticipated to be less than \$60,000 and construction cost for the project is estimated to be less than \$580,000 the LPA may follow any of the three procurement processes defined in this Chapter. Regardless of contract amount, a Qualifications Based Selection (QBS) process must be followed. The criteria that the LPA can use to determine which procurement procedure to use, is summarized in the table below:

Professional Services Procurement Procedures

Procurement Procedure	Federal and/or State Funds for Professional Services:	Cost Thresholds	
		Professional Services	Project Construction
Large	Yes	≥\$60,000	or ≥\$580,000
Small ^{1,2}	Yes	< \$60,000	and <\$580,000
Locally Funded ³	No	N/A	

¹If an estimate is close to the threshold (\$60,000 or \$580,000), it is recommended that the LPA use the large purchase method as supplemental agreements or change orders may result in exceeding the threshold which may jeopardize Federal and/or State funding.

²The contract cannot be separated into smaller contracts merely to permit the use of the small purchase procurement procedure.

³The use of the locally-funded method is an option the LPA can choose if the LPA has no intention of using any federal or state funding for the contemplated professional services.

The LPA shall take affirmative steps when soliciting a consultant to assure that, if possible, Disadvantaged Business Enterprise (DBE) consultants are included in the solicitation process. Examples of affirmative steps may be found in [49 CFR Part 18.36\(e\)\(2\)\(i-vi\)](#).

One consultant contract often contains multiple Federal phases. NDOR approval of the executed agreement with the consultant shall not be considered a general “Notice-to-Proceed” for all phases. The LPA must have a Notice-to-Proceed prior to the performance of each new Federal phase of work.

The subsections below describe state and federal requirements for the three NDOR approved procedures for procuring professional services: Large Purchase, Small Purchase and Locally funded. LPAs must also comply with local laws and ordinances.

4.3.1 Large Purchase Procurement Procedure

The steps to procure a large purchase contract involve: issuing an RFP to the public, responding to consultants who inquire about the RFP, amending the RFP (*if required*), receiving and evaluating proposals, determining capability of prospective consultants, interviewing short-listed consultants, selecting the most qualified consultant, developing a detailed work plan, preparing an independent cost estimate, negotiating the price, and awarding the contract. A [Consultant Procurement and Agreement Process Flowchart*](#) summarizing this process is posted under the LPA Guidelines Manual Chapter 4 Appendix online.

4.3.1.1. Solicitation

The need for professional services must be advertised in sufficient national, state and local publications and websites to elicit a minimum of three competitive responses. In accordance

with NDOR rules and regulations, the RFP must be advertised for a minimum of three weeks. Direct mailing may be used to supplement the public announcement or advertising. The process must assure in-state and out-of-state consultants are given a fair opportunity to be considered for award of the contract. The LPA must select a firm that has been certified by NDOR to perform the scope of services that are being procured by the LPA. A list of consultants certified to provide services for specific categories can be provided by the LPD PC. A few of these lists are posted on the following website: www.nebraskatransportation.org/RFP

The RFP must include the following items:

- A basic scope of services with at least a planning-level of detail indicating general work categories
- Basic project information such as a project description, project limits, extent of the study area and complexity of the project;
- Project schedule for the completion of services;
- Criteria that will be used to rank responding consultants during the consultant selection process;
- Statements that indicate this is a Federal-aid Project, all rules in LPA Guidelines must be followed, and price is not a factor in selection;
- Indicate the method of payment to be used (*lump sum or cost plus fixed fee*)
- Submittal and selection protocol including: proposal page limits, software/hardware requirements, deadline & address for submittal, contact for questions, schedule for the review of the proposals, duration and method of interview, notification procedure, etc.
- A list of items required in the consultants response to the RFP:
 - Letter of interest;
 - Narrative approach to the project and project schedule;
 - Experience on similar projects;
 - Organization chart of the team identifying the Project Manager and other key personnel;
 - [Completed forms from Consultant Conflict of Guidance Document*](#);
 - Completed [DR Form 498 "Architect, Engineer & Related Service Detail Statement"](#)*; and
 - Proof of Insurance.

The LPA selection committee must consist of at least three public employees or elected officials; one of whom is trained as an LPA RC in Federal-aid highway projects.

All firms must be given the same information to base their proposals on. If the LPA receives questions to clarify the RFP, the LPA must take action to communicate the clarification to all firms who were notified of the original RFP.

4.3.1.2. Solicitation Plan: Documentation

Prior to advertising the RFP, the LPA must submit the following documents to the LPD PC for review and acceptance:

- The draft RFP. An [RFP template*](#) is posted on the LPA Guidelines Manual Chapter 4 Appendix online.
- [Short-List and Final Ranking and Summary Forms*](#), which have been updated by the LPA to include the consultant selection criteria that will be used by the selection committee for short-listing and final ranking of consultants. A list of [Sample Consultant Selection Criteria*](#), for Consultant Short-List and Final ranking, is posted on LPA Guidelines Manual Chapter 4 Appendix.

Caution: *If location criteria are used, the weight must be equal to or less than 10% of the overall score. Location criteria cannot be based on a political boundary.*

- Membership of the selection committee;
- Draft public announcement and solicitation method (*Be sure to include where the announcement will be placed, and proposed advertising dates, and any additional methods of communicating with consultants such as e-mails, website, phone calls, etc.*); and
- Samples of these forms can also be obtained by contacting the LPD PC, or referencing the LPA Guidelines Manual Chapter 4 Appendix online.

Upon review and approval of submitted documents and verification of funds, the LPD PC will issue the LPA a NTP with RFP advertisement.

4.3.1.3. Analysis and Selection

- a. Short-Listing - Each LPA selection committee member shall evaluate every consultant proposal submitted in response to an RFP. The proposals shall be evaluated and ranked using the [Short-List Ranking Form*](#) and [Short List Ranking Summary Form*](#) which was submitted by the LPA with the draft RFP, and approved by LPD PC. Price cannot be a selection factor and must not be requested in the RFP or mentioned in the proposal or prior to selection. When three or more qualified firms submit proposals, the short-list evaluation will narrow those being considered to a minimum three (3) firms. When fewer than three firms respond to an RFP, the LPA must notify the LPD PC to request

concurrence to proceed with the final selection process. The LPA may be required to re-advertise or extend the advertisement period to establish more competition. The top ranked (*three or more unless special concurrence*) short-listed firms will be further evaluated in the final ranking process.

- b. Interviews and Final Ranking - Interviews shall be conducted with the top ranked firms, and shall be performed in person or via telephone. All firms shall be interviewed in the same manner. The interview provides top ranked firms an opportunity to present their qualifications, experiences and approach to the project prior to the final ranking. The interview details (*e.g. date, time, length of each interview*), ranking forms and notes of committee members must be documented and retained in the LPA files.

Firms shall be evaluated and ranked using the [Final Ranking Form*](#), and [Final Ranking Summary Form*](#) which was submitted by the LPA with the draft RFP, and approved by LPD PC. The LPA shall rank the firms, prepare a [Final Selection Memo*](#), and submit them to the LPD PC requesting concurrence and NTP with consultant selection process. The LPA must provide the LPD PC with the following documents when requesting approval to proceed with consultant selection, from NDOR:

- Final RFP;
 - Proof of public advertisement and duration, or listing of firms the RFP was sent to (*if direct mailing is used*);
 - List of firms responding to the RFP;
 - Completed [Short-List Ranking Form\(s\)*](#) from each of the selection committee members;
 - Completed [Short-List Ranking Summary Form*](#) identifying the firms considered in the Final Ranking;
 - Completed [Final Ranking form\(s\)*](#) from each selection committee member;
 - Selection committee members notes concerning the evaluation (*if available*);
 - Completed [Final Ranking Summary Form*](#) ;
 - [Final Selection Memo*](#); and
 - Copy of the top ranked consultant's proposal, including current forms from the [Consultant of Interest Guidance Document*](#).
- c. The LPD PC will review the selection documentation and upon concurrence, provide the LPA a written NTP with the consultant selection process. Upon receipt of the written NTP, the LPA shall prepare formal notification of their selection to all submitting firms, with a copy to LPD PC.

4.3.1.4. Detailed Work Plan and Work Plan Matrix

The LPA and selected consultant may jointly develop a detailed work plan which includes a detailed scope of services (SOS) and a staffing plan.

The detailed SOS is developed from the general scope of services and/or standardized work categories outlined in the RFP. The detailed SOS expands on the specific work categories and sub-categories. The detailed SOS describes what services will be required, a schedule of milestones, a list of deliverables, expectations for quality, and the responsibilities of both the consultant and the LPA. An effective detailed SOS is written in clear language and is an integral part of the contract development process. Costly modifications (*in time and money*) can often be avoided with a well-written SOS and effective consultant contract management.

A staffing plan contains employee classifications specific to the procured services and their associated labor rates.

A detailed work plan matrix can be developed by merging the detailed SOS and staffing plan into a spreadsheet. A detailed work plan matrix typically includes a detailed breakdown of tasks (*work categories and sub-categories*) and a breakdown of employee classifications. The detailed work plan matrix would also include the application of an overhead rate, and fee for profit rate (*if applicable*), along with direct labor costs. This matrix can be used independently to estimate hours and direct costs during the development of the LPAs ICE and consultant's fee proposal

A sample of a [Detailed Scope of Services*](#), [Staffing Plan*](#) and [Detailed Work Plan Matrix*](#) are posted on the LPA Guidelines Manual Chapter 4 Appendix on-line.

Caution: *The detailed work plan must stay within the general scope identified in the RFP, and there must be no discussion of work hours, costs or expenses with the consultant prior to development of the Independent Cost Estimate (ICE).*

4.3.1.5. Independent Cost Estimate

An independent cost estimate (*ICE*) is required for each contract and contract modification. The LPA and the selected consultant must separately and independently develop cost estimates. The ICE becomes the basis for ensuring that the consultant work and services are obtained at a fair and reasonable cost. It will be used as a basis for the LPA's negotiations with the selected consultant.

The ICE is based on detailed breakdown of tasks, an appropriate breakdown of specific types of labor (*employee classifications*) required, work hours, indirect costs, and an estimate of the consultant's fixed fee for profit to be used during negotiations. The fixed fee for profit is calculated by multiplying the total labor costs and indirect costs by a percentage that generally ranges between 9 and 13 percent. The LPA and the selected consultant should use the [Fixed Fee Worksheet*](#) to calculate appropriate percentage during ICE and fee proposal development. The LPA and selected consultant may independently use a detailed work plan matrix outlined in

the previous section. The ICE will be used by the LPA's negotiating team and is to be kept confidential. If the detailed work plan is found to be insufficiently detailed to prepare the estimate, the detailed work plan must be updated before the ICE is completed.

For every contract modification, the LPA RC must sign and date the ICE, submit it to NDOR for review and approval, and retain a copy of the documentation including NDOR's NTP and letter of concurrence for their records.

After the detailed work plan and LPA's ICE, including the [Fixed Fee Worksheet](#)* completed by the LPA, are approved in writing by NDOR, the consultant shall submit their fee proposal to the LPA.

Caution to LPAs and consultants: Consultants are not permitted to submit their fee proposal to the LPA until after NDOR approves the LPA's ICE.

The consultant's fee proposal should include a detailed estimate of the hours for each of the major tasks. The estimated labor costs are determined by applying the employee's labor rates shown in the staffing, along with the consultant's current overhead rate, and a completed [Fixed Fee Worksheet](#)*. In addition to charges for labor, the consultant should, if appropriate, indicate the costs for subcontractors, travel, living expenses, reproduction, and other out-of-pocket expenses expected to be incurred.

The LPA will review the submitted fee proposal, compare it to the ICE, and prepare a pre-negotiation memorandum. The memo will identify the differences between the two estimates, and document the LPA's negotiation strategy. The pre-negotiation memorandum is intended to help the LPA prepare for the negotiations and identify misunderstandings and portions of the detailed work plan that require discussion.

Prior to negotiation with the consultant, the LPA must send the following to LPD PC for review and approval:

- [Pre-negotiation memo](#)* (A template and approved sample memo are posted on the LPA Guidelines Manual Chapter 4 Appendix on-line); and
- [Fixed Fee Worksheet](#)* completed by the consultant
- Consultant fee proposal.

4.3.1.6. Negotiation

Prior to negotiation, and after receiving NDOR's NTP, the LPA may share the ICE with the consultant. The LPA and the consultant will negotiate a final detailed work plan and cost. It is important to document a record of negotiations and include it in the project file. A post negotiation memorandum shall be prepared by the LPA to document negotiations and to justify any changes in cost and/or scope. Discussions should be conducted to reach a fair and reasonable fee for the agreed upon scope of services.

In the event negotiations are terminated with the first-ranked consultant, the LPA shall initiate discussions with the second-ranked consultant. The process will continue until an agreement is reached with a qualified firm. Once negotiations have been terminated with a firm and begun with another, they cannot be reopened with the former firm. If agreement cannot be reached with any of the short-listed firms, the project may need to be re-scoped and re-advertised, or the decision to utilize consultant services may need to be revisited.

After negotiations have taken place, the LPA must submit the following NDOR for review and approval:

- [Post negotiation memo*](#) (A template and approved sample memo are posted on the LPA Guidelines Manual Chapter 4 Appendix on-line); and
- Negotiated Scope of Services and consultant fee proposal.

4.3.1.7. Agreement, Federal Funding Obligation, and Notice to Proceed (NTP)

Upon NDOR's review and approval of the pre and post negotiation memos, negotiated work plan and fee proposal, the LPD PC will:

- Prepare a professional services agreement between the LPA and consultant;
- Request obligation authority from the NDOR Highway Project Funds Manager; and
- Forward required documentation to FHWA for review and approval, for the purpose of authorizing additional funds in FMIS.

Duplicate original agreements will be mailed to the LPA to obtain the appropriate approvals and signatures. Once the LPA and consultant sign the agreement, the originals must be returned to the LPD PC for final approval and processing. The LPD PC will review the agreement to verify that the appropriate signatures and attachments are included. Attachments include, but are not limited to the following: scope of services, consultant fee proposal, maps/charts, and insurance requirements. If the contents of the agreement are complete and Federal obligation of funds via FMIS is authorized, NDOR will issue a formal NTP to the LPA. It is strongly recommended that the LPA RC obtain proof of the Federal authorization from NDOR as an attachment to the NTP. The LPA in turn will issue a NTP to the consultant with a copy to NDOR. Work performed prior to this NTP will not be eligible for reimbursement with Federal funds.

Concurrent to NDOR's issuance of a NTP to the LPA, the agreement will be signed by the LPD Division Head, or designee, as to form, and originals will be returned to the parties.

4.3.1.8. Consultant Selection Folder

The LPA must maintain a consultant selection folder as detailed in Chapter 3, Section 5. The folder must include the information identified under the previous section defining Large Purchase Contracts:

- Selection supporting notes and documents;
- Copies of proposals; and
- Related correspondence.

4.3.2 Small Purchase Procurement Procedure

The LPA may not split professional services, which in aggregate cost more than \$60,000, into several smaller purchases in order to use the small purchase procurement procedure. The \$60,000 engineering threshold amount is a total of all professional services from project conception to completion (*PE plus CE*). The need for potential supplemental agreements must be considered when determining the small purchasing threshold. A [Consultant Procurement and Agreement Process Flowchart*](#) summarizing this process is posted under the LPA Guidelines Manual Chapter 4 Appendix online.

Small purchase procurement procedures are an abbreviated version of the large purchase procurement procedures. The steps to procure a small purchase contract involve: a streamlined solicitation process (*RFP*), receiving and evaluating proposals, determining capability of prospective consultants, selecting the most qualified consultant, developing a detailed work plan, preparing an independent cost estimate, negotiating the price, and awarding the contract.

LPAs must promote competition to the maximum extent practicable. The LPA shall provide the RFP to at least three qualified firms. In the event less than three firms respond, the LPA must justify the absence of more competition.

4.3.2.1. Solicitation

The RFP content requirements for the small purchase procedures are the same as the large purchase procedures defined earlier in this chapter. The LPA may choose to follow the large purchase solicitation requirements. However, at a minimum the LPA must submit the RFP by public notice, e-mail, and/or by sending it to at least three NDOR-certified firms.

The selection can be made by the LPA RC or, if required by local policy or ordinance, by a selection committee.

4.3.2.2. Solicitation Plan Documentation

Prior to advertising the RFP the following documents shall be submitted to the LPD PC for review and acceptance:

- Draft RFP which includes a sufficient description of the scope of services including general work categories. An [RFP template*](#) is posted under the LPA Guidelines Manual Chapter 4 Appendix online;
- Criteria that will be used to rank responding consultants during the consultant selection process;

Caution: If location criteria is used, the weight must be equal to or less than 10% of the overall score. Location ranking cannot be based on a political boundary.

- The name of the LPA RC making the selection or, if required by local policy or ordinance, the membership of the selection committee; and
- Draft public announcement and solicitation method (*Be sure to include where the announcement will be placed, and proposed advertising dates, and any additional methods of communicating with consultants such as e-mails, website, phone calls, etc.*)

The LPD PC will review documents submitted for the Solicitation Plan, and verify initial obligation of funds. Upon approval of documents and verification of funds, the LPD PC will issue the LPA a NTP allowing advertisement of the RFP.

4.3.2.3. Analysis and Selection

Consultant Ranking Criteria

The LPA RC or each selection committee member shall evaluate every consultant proposal submitted in response to an RFP. The proposals shall be evaluated and ranked using the [Final Ranking Form*](#), posted on the LPA Guidelines Chapter 4 Appendix. Price cannot be a selection factor and must not be requested in the RFP or mentioned in the proposal or prior to selection.

Consultant Interviews and Final Ranking

Interviews are not required, but may be conducted at the discretion of the LPA. If the LPA chooses to conduct an interview, refer to the short-listing and final ranking requirements in the Large Purchase Procurement Procedure Section of this chapter.

The LPA shall prepare a [Final Selection Memo*](#) and submit it to the LPD PC requesting concurrence and NTP with consultant selection process. Upon approval, the LPA shall furnish the LPD PC a copy of the following:

- Final RFP;
- Proof of public advertisement and/or RFP solicitation letters listing firms the RFP was sent to;

- Listing of firms that responded to the RFP and documentation of those firms who were contacted and indicated they were not interested;
- [Final Ranking form\(s\)*](#), and correspondence or notes related to the evaluation of the selected firm;
- [Final Selection Memo*](#); and
- Copy of the proposal and current forms from the [Conflict of Interest Guidance Document for Consultants*](#) submitted by the selected firm.

The LPD PC will review the selection documentation and upon concurrence provide the LPA with a written NTP indicating concurrence. Upon receipt of written NTP, the LPA shall prepare formal notifications of the LPA's selection, to the submitting firms with a copy to LPD PC.

4.3.2.4. Development of a Detailed Work Plan and Work Plan Matrix

The detailed Scope of Services (SOS) is developed from the general scope of services and/or standardized work categories outlined in the RFP. The detailed SOS expands on the specific work categories and sub-categories. The detailed SOS describes what services will be required, a schedule of milestones, a list of deliverables, expectations for quality, and the responsibilities of both the consultant and the LPA. An effective detailed SOS is written in clear language and is an integral part of the contract development process. Costly modifications (*in time and money*) can often be avoided with a well-written SOS and effective consultant contract management.

A staffing plan contains employee classifications specific to the procured services and their associated labor rates.

A detailed work plan matrix can be developed by merging the detailed SOS and staffing plan into a spreadsheet. A detailed work plan matrix typically includes a detailed breakdown of tasks (*work categories and sub-categories*) and a breakdown of employee classifications. The detailed work plan matrix must also include the application of an overhead rate, and fee for profit rate (*if applicable*), along with direct labor costs. This matrix can be used independently to estimate hours and direct costs during the development of the LPA's ICE and consultant's fee proposal.

A sample of a [Detailed Scope of Services*](#), [Staffing Plan*](#), and [Detailed Work Plan Matrix*](#) are posted on the LPA Guidelines Manual Chapter 4 Appendix online.

Caution: *The detailed work plan must stay within the general scope identified in the RFP, and there must be no discussion of work hours, costs or expenses between the LPA and the consultant prior to the LPA's development of the Independent Cost Estimate (ICE), and NDOR's review and approval of the ICE.*

4.3.2.5. Preparation of Independent Cost Estimate (ICE)

An independent cost estimate (*ICE*) is required for each contract and contract modification. The LPA and the selected consultant must separately and independently develop cost estimates. The ICE becomes the basis for ensuring that the consultant work and services are obtained at a fair and reasonable cost. It will be used as a basis for the LPA's negotiations with the selected consultant.

The ICE is based on detailed breakdown of tasks, an appropriate breakdown of specific types of labor (*employee classifications*) required, work hours, indirect costs, and an estimate of the consultant's fixed fee for profit to be used during negotiations. The fixed fee for profit is calculated by multiplying the total labor costs and indirect costs by a percentage that generally ranges between 9 and 13 percent. The LPA and the selected consultant should use the [Fixed Fee Worksheet*](#) to calculate appropriate percentage during ICE and fee proposal development. The LPA and selected consultant may independently use a detailed work plan matrix outlined in the previous section. The ICE will be used by the LPAs negotiating team and is to be kept confidential. If the detailed work plan is found to be insufficiently detailed to prepare the estimate, the detailed work plan must be updated before the ICE is completed.

For every contract modification, the LPA RC must sign and date the ICE, submit it to NDOR for review and approval, and retain a copy of the documentation including NDOR's NTP and letter of concurrence for their records.

After the detailed work plan and LPA's ICE, including the completed [Fixed Fee Worksheet*](#), are approved in writing by NDOR, the consultant shall submit their fee proposal to the LPA.

Caution to LPAs and consultants: *Consultants are not permitted to submit their fee proposal to the LPA until after NDOR approves the LPA's ICE.*

The consultant's fee proposal should include a detailed estimate of the hours for each of the major tasks. The estimated labor costs are determined by applying the employee's labor rates shown in the staffing, along with the consultant's current overhead rate, and a completed [Fixed Fee Worksheet*](#). In addition to charges for labor, the consultant should, if appropriate, indicate the costs for subcontractors, travel, living expenses, reproduction, and other out-of-pocket expenses expected to be incurred.

The LPA will review the submitted fee proposal, compare it to the ICE, and prepare a pre-negotiation memorandum. The memo will identify the differences between the two estimates, and document the LPA's negotiation strategy. The pre-negotiation memorandum is intended to help the LPA prepare for the negotiations and identify misunderstandings and portions of the detailed work plan that require discussion.

Prior to negotiation with the consultant, the LPA must send the following to LPD PC for review and approval:

- [Pre-negotiation memo*](#) (A template and approved sample memo are posted on the LPA Guidelines Manual Chapter 4 Appendix on-line); and
- [Fixed Fee Worksheet*](#) completed by the consultant;
- Consultant fee proposal.

4.3.2.6. Negotiation

Prior to negotiation, and after receiving NDOR's NTP, the LPA may share the ICE with the consultant. The LPA and the consultant will negotiate a final detailed work plan and cost. It is important to document a record of negotiations and include it in the project file. A post negotiation memorandum shall be prepared by the LPA to document negotiations and to justify any changes in cost and/or scope. Discussions should be conducted to reach a fair and reasonable fee for the agreed upon scope of services.

In the event negotiations are terminated with the first-ranked consultant, the LPAs shall initiate discussions with the second-ranked consultant. The process will continue until an agreement is reached with a qualified firm. Once negotiations have been terminated with a firm and begun with another, they cannot be reopened with the former firm. If agreement cannot be reached with any of the short-listed firms, the project may need to be re-scoped and re-advertised, or the decision to utilize consultant services may need to be revisited.

The LPA must submit the following NDOR for review and approval:

- [Post negotiation memo*](#) (A template and approved sample memo are posted on the LPA Guidelines Manual Chapter 4 Appendix on-line); and
- Negotiated Scope of Services and consultant fee proposal

4.3.2.7. Agreement, Federal Funding Obligation, and Notice to Proceed (NTP)

Upon NDOR's review and approval of the pre and post negotiation memos, negotiated work plan and fee proposal, the LPD PC will:

- Prepare a professional services agreement between the LPA and consultant;
- Request obligation authority from the NDOR Highway Project Funds Manager;
- Forward required documentation to FHWA for review and approval, for the purpose of authorizing additional funds in FMIS.

Duplicate original agreements will be mailed to the LPA to obtain the appropriate approvals and signatures. Once the LPA and consultant sign the agreement, the originals must be returned to the LPD PC for final approval and processing. The LPD PC will review the agreement to verify that the appropriate signatures and attachments are included. Required attachments include,

but are not limited to the following: scope of services, consultant fee proposal, maps/charts, and insurance requirements. If the contents of the agreement are complete and Federal obligation of funds via FMIS is authorized, NDOR will issue a formal NTP to the LPA. It is strongly recommended that the LPA RC obtain proof of the Federal authorization from NDOR as an attachment to the NTP. The LPA in turn will issue a NTP to the consultant with a copy to NDOR. Work performed prior to this NTP will not be eligible for reimbursement with Federal funds.

Concurrent to NDOR's issuance of a NTP to the LPA, the agreement will be signed by the LPD Division Head or designee, as to form, and originals will be returned to the parties.

4.3.2.8. Consultant Selection Folder

The LPA must maintain a consultant selection folder as detailed in Chapter 3. The folder must include the information identified under the previous section defining Small Purchase Contracts:

- Selection forms supporting notes and documents
- Copies of proposals
- Related correspondence

4.3.3 Locally Funded Procurement Procedure

The following procedure may be used when a local public agency chooses to locally fund professional engineering or architectural services or task(s), on a Federal-aid project. The local agency will not be reimbursed for these tasks with state or Federal funds. If this procedure is used by the LPA, it is critical that applicable local policies or ordinances are followed.

Caution: Failure to follow the local policies or ordinances may jeopardize Federal-aid on all phases of a federal aid project.

4.3.3.1. Assumptions and Understanding:

1. Unless the Local regulations require it, State statutes §81-1712 and §81-1713 et. seq. do not apply when State and Federal funds are not used.
2. This procedure may be used regardless of the cost of professional services or the total project cost.
3. This procedure describes the minimum effort required by a local agency when procuring 100% locally funded (*i.e. no Federal or State reimbursement*) professional services. If the LPA's procurement procedures refer to, or have adopted Nebraska statutes, or the LPA's governing body requires additional steps, the local agency shall follow them.
4. In order to maintain Federal-aid eligibility, the LPA Guidelines Manual shall be followed
5. Documentation that there are no conflicts of interest.

6. A scope of services shall be developed in accordance with Chapter 4 of the LPA Guidelines Manual. If the final scope of services needs to be modified or expanded the LPA shall pay for the cost associated with additional professional services. Federal-aid will not be allowed for supplemental agreements.
8. LPD PC will review documentation to check that the procurement procedure was followed.
9. NDOR will perform quality assurance audits to determine conformance with the LPA Guidelines Manual and local procurement procedures.
10. It is permissible for the local agency to pay for professional services with local funds for some services, and to seek Federal-aid or even State aid (*e.g. state-aid bridge funds*) for other professional services. However, the local agency must realize that segmentation of professional services in order to stay under Federal and State thresholds is not allowed. Contracts paid for with local funds will count toward Federal and state thresholds.
11. Locally-funded contracts and associated costs must be included on the DR-530 (*if known at that time*) and the TIP/STIP.
12. This procedure is not to be used for services that have already been procured in a Federal or State-aid participating professional services agreement. In addition, this is not intended for use in cases where the contracted firm is qualified and available to provide additional required services.
13. It is the intention of this procedure to require that professional services be awarded using a qualification-based selection (*QBS*) process.

Caution: Bidding for professional services is not allowed.

14. The LPA must select a firm that has been certified by NDOR to perform the scope of services requested by the LPA.
15. If the LPA has an on-call (*IDIQ*) contract, contact the LPD PC for further guidance.

4.3.3.2 Procedure

4.3.3.2.1 NDOR Advanced Approval

LPA must notify NDOR in writing that they intend to use this Locally Funded Procurement procedure. Upon receipt of this notification from LPA and approval, LPD PC will issue a written NTP to the LPA for each instance on a Federal-aid transportation project that the LPA wishes to procure and fund professional services.

4.3.3.2.2 Public Notice

The RFP can be accomplished through a newspaper advertisement, solicitation letters, documented phone calls, emails, or website notices or any combination of the above. As a minimum, include a general project description and work categories, that the project is funded in part with Federal funds, that the LPA Guidelines Manual for Federal-aid Projects and applicable Federal and State laws and requirements. The LPA must select a firm that has been certified by NDOR to perform the scope of services requested by the LPA. A list of consultants certified to provide services for specific categories can be provided by the LPD PC. Some of these lists are posted on the following website: www.nebraskatransportation.org/RFP

4.3.3.2.3 Ranking

The firms which submit their qualifications shall be ranked by the LPA. The LPA must justify and document the ranking in a selection memo, identifying the selected firm. If less than three firms submit proposals, the LPA shall document efforts made and steps taken to seek additional firms. Consultant rankings must be justified based on the following criterion:

- Professional qualification necessary for satisfactory performance;
- Specialized experience and technical competence in the type of services required;
- Past performance on contracts with government agencies and private industry;
- Capacity to accomplish the work in the required timeframe; and
- Location of the project and knowledge of the area. If this criterion is used, it cannot account for more than ten percent of the total score.

Interviews are not required under this procedure, but LPA's may elect to do so for more complex projects.

4.3.3.2.4 SOS/Cost Proposal and Negotiation

The selected firm shall submit a detailed scope of services along with a cost proposal. The agency head or designee shall attempt to negotiate professional services at a compensation which the agency head determines is fair and reasonable. In determining fair and reasonable compensation, the agency head or designee shall consider the scope, complexity, professional nature, and estimated value of the services to be rendered. If the agency head or designee is unable to negotiate a satisfactory contract with the firm, they shall formally terminate negotiations and then undertake negotiations with the next most qualified firm, continuing the process until an agreement is reached. If the agency head or designee is unable to negotiate a satisfactory contract with any of the selected firms, the agency head or designee shall consult with NDOR; one of the outcomes could be to start the process over.

After successful negotiations, the LPA shall submit the following documentation to LPD PC:

- Public Notice and solicitation documentation;
- Selection memo, justifying the ranking of firms based on qualifications. Also, if less than three firms responded, the documentation efforts made and steps taken to seek additional firms;
- A justification memo for any instances when negotiations were terminated;
- Agreement, including scope of services and final consultant fee proposal;
- Certification statement that the LPA followed local laws and ordinances; and
- Forms required by the [Conflict of Interest Guidance Document for Local Public Officials, and Public Employees*](#) and [Conflict of Interest Guidance Document for Consultants*](#).

4.3.3.2.5 Agreement

The LPA must use the NDOR's template for LPA/Consultant Locally Funded Professional Services Agreement. Obtain the latest current agreement from the LPD PC prior to entering into any agreement with a consultant.

4.3.4 Summary and Comparison of Procedures

This section provides an overall summary and comparison between the various methods of procuring professional services. The purpose is to clarify under what circumstances it is required or appropriate to use each method, and also point out the differences between the methods. Since this section is for clarification purposes only, the information presented does not supersede or take precedence over information in other parts of this chapter.

Previously in this Chapter 4, procurement procedures were described for professional services. The table below provides a summary of Criteria for Comparison regarding the three methods.

Criteria for Comparison	Procurement Process Type		
	Large	Small	Locally Funded ¹
Does the LPA need to develop evaluation factors and rank responding firms?	Yes	Yes	Yes
Does the LPA need to maintain documentation of all selection procedure activities, and submit copies to NDOR?	Yes	Yes	Yes
Does the LPA need NDOR approval prior to advertisement?	Yes	Yes	Yes
Does the LPA need to identify the consultant selection committee prior to selection?	Yes	No	No
Are LPA's required to short-list firms prior to final selection?	Yes	No	No
Is the LPA required to conduct consultant interviews prior to final selection?	Yes	No	No
Does the LPA need NDOR to concur with the final selection prior to development of Detailed Work Plan and ICE?	Yes	Yes	No
Does the LPA need NDOR's approval of the ICE prior to negotiating with the Consultant?	Yes	Yes	No
After negotiation, does the LPA need to wait for NDOR to issue a NTP, before they provide the Consultant with a NTP?	Yes	Yes	No

¹The LPA must get NDOR concurrence in advance of using the locally-funded purchase method, and must use the most current template agreement, obtained from the LPD PC.

4.4 Consultant Management

The LPA RC is responsible and accountable for maintaining technical and administrative control of both the project and the consultant. This manual has been prepared to help LPAs administer federally funded projects with the assistance of NDOR. This can be done with varying degrees of assistance from the selected consultant; however, the LPA RC is the LPA representative responsible for administration of the contract. It is the LPA RC's responsibility for the delivery of a final product which is of high quality and within the scope, budget, and schedule specified in the contract.

The LPA RC will monitor the contract schedule and budget. The LPA RC must inform NDOR, well in advance, when either costs or schedule are approaching the original contract amount, so that timely supplemental agreements can be prepared if needed. The LPA can seek additional

funds or grant time extensions for consultant agreements with documented justification. Time extensions can be given in cases where there is a change in scope of services, a delay caused by the Contractor or the LPA, or other justifiable conditions. It is not justifiable to overlook consultant related delays on the basis of these time extensions. Requests for additional funds must be justified and require a detailed work plan, ICE, and potentially a negotiation process. It is anticipated that these costs would be associated with out of scope services, not used to supplement hours due to mismanagement of resources, or to redo work that did not meet minimum requirements.

The steps that shall be followed for initiating a supplemental agreement are defined in the Supplemental Professional Services Agreement Section found later in this chapter.

The following sections outline consultant agreements and provide guidance and tools for supplementing those agreements when necessary. It should be noted that supplemental agreements require the same review and approval process as the original agreement. Please notify NDOR at the earliest possible date if changes are anticipated.

4.4.1.1 Agreements

4.4.1.1 Professional Service Agreements

Professional Service agreements between the LPA and the selected consultant will be prepared by the LPD PC using the applicable NDOR template agreements. Duplicate original agreements will be mailed to the LPA to obtain the appropriate approvals and signatures. Once the LPA and consultant sign the agreement, the originals must be returned to the LPD PC for final approval and processing. The LPD PC will review the agreement to verify that the appropriate signatures and attachments are included. Required attachments include, but are not limited to the following: scope of services, consultant fee proposal, maps/charts, and insurance requirements. Work performed prior to receiving a formal NTP from the LPD PC will not be eligible for reimbursement with Federal funds.

4.4.1.2 Supplemental Professional Service Agreements

Occasionally, it is necessary to change the terms of an agreement. This may be due to a change in scope or level of effort (*addition, reduction, substitution or a revision in the complexity, character or duration*) that may result in a change in the agreement. In order to justify the need to modify the agreement, the LPA must determine that additional professional services are necessary to complete the work originally negotiated, and verify that they were included in the original RFP.

Once the need for a supplement agreement is established, due to change in scope or level of effort, the LPA shall follow the Professional Services Agreement process described in Small and Large Purchase Procurement Procedure Sections in this chapter. This includes, but is not limited to: development of a detail work plan, work plan matrix, ICE, fee proposal and negotiating the supplemental agreement.

The LPD will mail duplicate original supplemental agreements to the LPA who will obtain the appropriate approvals and signatures. Once the LPA and consultant sign the agreement, the originals must be returned to the LPD PC for final approval and processing. The LPD PC will review the agreement to verify that the appropriate signatures and attachments are included. If the contents of the agreement are complete and Federal obligation of funds via FMIS is authorized, NDOR will issue a formal NTP to the LPA. The LPA will in turn will issue a NTP to the consultant with a copy to NDOR. Work performed prior to this NTP will not be eligible for reimbursement with Federal funds.

Concurrent to NDOR's issuance of a NTP to the LPA, the agreement will be signed by the LPD Division Head, or designee, as to form, and originals will be returned to the parties.

4.4.1.3 Consultant Work Orders

The Consultant Work Order form can be used in time sensitive situations to add a limited amount of professional services to an existing agreement. The additional services must have been included in the work categories defined in the original RFP to be eligible for this process. This form is not intended to replace the supplemental agreement process or to begin a new phase of a project. Justification for the additional services must be documented on this form. This form may also be used to document changes to the original agreement, such as items that don't require additional fees, changes in schedule or deliverables. A supplemental agreement will be written and signed at an appropriate time after this form is approved.

The Consultant Work Order form can be filled out by the LPA, Consultant, or jointly with both parties agreeing on the contents of the document. The form can be filled out for an estimated total fee or the final total fee depending on the additional services required. The estimated total fee may be used when the duration of the services is undefined. For example, in construction engineering, the duration of an activity may be dependent upon the contractor's resources, production rates, efficiency, and weather.

The final total fee may be filled out when the services are well defined or the final fee is negotiated. For example, a consultant may be required to attend an additional meeting that can be easily defined or negotiated. This will require both parties to develop separate Independent Cost Estimates (*ICE*) using the cost matrix. It is recommended that the detailed cost matrix be attached to this form. Negotiation processes defined within this chapter must be followed to establish the total fee.

The LPA RC and consultant must sign the [DR 250 Consultant Work Order for Local Projects Form*](#) before sending it to the LPD PC for review and approval by FHWA. Approvals may be granted by email and attached to the form.

Caution: ***Work shall not begin until the LPA has received an updated Consultant Work Order form that contains the NTP date from NDOR.*** The NTP date will be filled out by the LPD PC on the DR Form 250 and distributed to all parties listed on the form for their records.

A [Consultant Work Order Flowchart*](#) and [Instructions for completing DR 250 Consultant Work Order for Local Projects*](#) is posted on the LPA Guidelines Manual Chapter 4 Appendix online.

4.4.2 Consultant Invoicing

Consultants shall submit their invoices for professional services to the LPA RC in accordance with the LPA/Consultant Professional Services Agreement and the [LPA Reimbursement Procedures*](#). The consultant invoice must be accompanied by a progress report and a completed [DR 162 NDOR's Cost Breakdown Form*](#). It is the responsibility of the LPA RC and Consultant to keep track of expenses. Payments will be made only up to the maximum that is federally authorized. If the consultant expects to incur eligible expenses beyond the authorized amount, the consultant must give advance notice and justification for the proposed additional expenses to the LPA RC immediately. The LPA RC must review and upon approval, shall notify NDOR. NDOR must review and upon approval, shall obtain the necessary Federal authorization and sent a NTP to all parties once authorization is given. Work performed beyond the authorized amount prior to receiving authorization for additional expenses will not be reimbursed.

4.4.2.1. Consultant Invoice Review, Approval and Payment

The LPA RC must review and approve the consultant invoices and accompanying documentation to verify the following:

- Invoice is set up and formatted as per the project agreement's requirements. The invoice must include the following breakdown of costs:
 - For Lump Sum Agreements:**
 - Total Costs multiplied by the percent work complete.
 - For Actual Cost Agreements:**
 - Direct Labor Costs (hours worked multiplied by the actual labor rate);
 - Labor Fringe Benefits and/or if appropriate Indirect (Overhead) Costs;
 - Fee For Profit (as negotiated in the professional services agreement); and
 - Direct Non-Labor Costs.
- Invoice arithmetic is correct and overhead and fixed fee are properly applied:
- The Progress Report reflects the actual work complete and includes the following:
 - A description of the work completed within current billing period;
 - A description of work anticipated for next billing period;
 - A list of information required from LPA and/or LPD PC in order to complete the work for the next billing period and beyond;
 - A list of unresolved issues that will impeded the progress of the work; and
 - The percent of authorized work completed.
- Amount invoiced correlates with the Progress Report;

- Progress report discusses work within the scope of services identified in the agreement;
- The DR 162 includes a percent of work reported on the completed which correlates with the amount invoiced to date; and
- The total amount invoiced to date, does not exceed the contract amount.

After the LPA RC has reviewed and approved the consultant invoice and accompanying documentation, the LPA RC will prepare and send a Reimbursement Request Package to the LPD PC for PE services, and to the NDOR State Representative for CE Services.

The Reimbursement Request Package must include:

- A completed RC Transmittal Memo. The template [RC Transmittal Memo for Consultant Professional Services*](#) is available on the LPA Guidelines Manual Chapter 4 Appendix. Reimbursement Request Packages that are not accompanied by a properly prepared, signed and dated transmittal memo will be returned to the issuing LPA.
- Consultant Invoice;
- Completed and Signed [DR 162 NDOR's Cost Breakdown Form*](#); and
- Consultant Progress Report.

Upon review and approval of the Reimbursement Request Package, the LPD PC or State Representative will coordinate with the NDOR Agreements Section and Controller Division to process the reimbursement. NDOR will make every effort to pay the invoice within thirty (30) days of receiving the Reimbursement Request Package. Prompt payment is dependent upon the accuracy and completeness of the documentation submitted by the consultant and the LPA RC.

4.4.2.2 Reimbursable & Non Reimbursable Costs

Costs submitted for reimbursement must be consistent with the Federal cost principles contained in 48 CFR Part 31 and 23 CFR Part 172, as well as the terms and conditions contained in the project professional services agreement.

The following are typical costs allowable under the above regulations:

Direct Labor Costs

- Direct labor cost represents the cost of salaries/wages paid to company personnel for time that is directly chargeable to the project;
- Salary/wage rates must be calculated according to the terms of the professional service agreement;
- Consultants should make certain they understand whether premium overtime pay is reimbursable as a direct project labor and how the hourly rate for salaried individuals should be computed in pay periods where salaried individuals work more than the normal amount of hours but receive no additional compensation; and

- Consultants are responsible for determining if the salary/wage rate terms in the project agreement will require any modifications to their normal labor accounting policies and overhead rate methodology. If changes in their overhead rate are necessary, they should notify LPA and NDOR officials prior to signing the professional services agreement.

Pre-Award Review

NDOR may conduct a pre-award review of the selected consultant to:

- Confirm the acceptability of the consultant's accounting system's ability to track direct labor costs, overhead costs and direct non-labor expenses, and its ability to keep separate non-allowable costs; and
- to determine the reasonableness of the basis of proposed overhead, labor and direct non-labor rates.

NDOR or the LPA will consider requesting a pre-award review whenever one or more of the following circumstances exist:

- There is insufficient knowledge of the adequacy of the consultant's accounting system;
- The consultant's proposed overhead rate is not reasonable in comparison to the most recent NDOR accepted rate. If the accounting period covered by the most recent NDOR accepted rate is more than two fiscal years prior to the proposed rate, the proposed rate should be submitted for review by the NDOR Audit Section; or
- The LPA desires additional assurances that the labor and/or direct non-labor cost rates are representative of current actual rates.

Requests for pre-award review should be submitted to the NDOR Controller Division – Audit Section. Requests should be specific as to the areas that need to be reviewed. (*i.e. accounting system, overhead rate, labor rates, direct non-salary rates, etc*). Upon completion of the pre-award review, the Audit Section will issue an opinion regarding the areas reviewed, and concerns related to the accounting system or proposed rates.

Overhead Costs

Overhead costs include labor fringe benefits and indirect general and administrative costs that are allowable in accordance with costs principles and procedures contained in 48 CFR Part 31. These costs are billed to a project as a percentage of the direct labor costs billed to the project.

The allowable percentage for labor overhead allocable to a project is the ratio of a firm's total allowable overhead costs to a firm's total direct salary costs for a given period.

On agreements that do not allow the premium portion of overtime pay as a direct labor expense, consultant's are permitted to use an overhead rate methodology that excludes the premium overtime pay from the direct labor base and includes it in the indirect labor cost pool.

Suggested guidance for preparing overhead rates is contained within the latest edition of the AASHTO Uniform Audit & Accounting Guide, available on-line at:

<http://audit.transportation.org/Documents/UNIFORM%20AUDIT%20AND%20ACCOUNTING%20GUIDE%202010.pdf>.

Typical overhead costs include but are not limited to:

- Labor Fringe Benefits: Includes sick leave, vacation, and holiday pay; unemployment, excise, and payroll taxes; contributions for social security, employment compensation insurance, retirement benefits, and medical insurance benefits; and any other benefits customarily paid to or available to all employees; and
- General and Administrative Overhead: General and administrative overhead includes the following indirect costs which are not directly attributable to specific projects:
 - Provisions for office, light, heat, and similar items for working space, depreciation allowances or rental of furniture, computer equipment and engineering instruments, and office and computer/CADD supplies not identifiable to specific projects;
 - Taxes and insurance other than those included as salary cost, but excluding State and Federal income taxes;
 - Library and periodical expenses and other means of keeping abreast of advances in engineering such as attendance at technical and professional meetings and subscriptions to trade, business, professional, or technical periodicals;
 - Executive, administrative, accounting, legal, and administrative support salaries and expenses (*other than identifiable salaries included in salary costs and expenses included in reimbursable non-salary expenses, plus salaries or imputed salaries of partners and principals*) to the extent that they perform general executive and administrative services as distinguished from technical or advisory services directly applicable to particular projects;
 - Costs of memberships in trade, business, technical, and professional organizations;
 - Incentive compensation for management employees, cash bonuses except for early completion of work, suggestion awards, safety awards, and incentive compensation based on production, cost reduction, or efficient performance are allowable to the extent that the overall compensation is determined to be reasonable, and such costs are paid or accrued pursuant to an agreement entered into in good faith between the consultant and the employees before the services are rendered or pursuant to an established plan followed by the consultant so consistently as to imply, in effect, an agreement to make such payment. The allowable percentage for general and administrative overhead allocable to a project is the ratio of: all general and

administrative costs to the total direct salary costs (*excluding overtime*) for a given period; and

- Identifiable computer and office supplies and stenographic supplies and expenses charged to the sponsor's work as distinguished from such supplies and expenses that are applicable to two or more projects.

Direct Non-labor Costs

Direct non-labor costs must be reasonable and otherwise allowable in accordance with 48 CFR Part 31 and the terms and conditions contained in the project professional services agreement. Detailed records must be kept to support charges and allow auditing.

The billing of direct non-labor costs must also be consistent with the consultant's overhead rate methodology. If there are cost categories for which all costs are included within the consultant's overhead rate, then no costs from that category can be direct billed to a LPA/NDOR project. For instance, if all company vehicle costs are included as overhead costs, then no company vehicle costs can be billed to project as a direct expense. Similar examples would include computer use, postage, printing, supplies, etc.

Typical examples of direct non-labor costs include but are not limited to:

- Living and traveling expenses of employees and principals when away from the home office on business connected with the project. (*Records must include employee name, dates, points of travel, mileage rate, lodging, and meals.*);
- Identifiable communication expenses such as long-distance telephone, telegraph, cable, express charges, and postage, other than for general correspondence;
- Services directly applicable to the work such as special legal and accounting expenses, computer rental and programming costs, special consultants, borings, laboratory charges, commercial printing and bindings, and similar costs not applicable to general overhead;
- Identifiable reproduction costs applicable to the work;
- Advertising costs that are solely for the recruitment of personnel required for the performance by the consultant of obligations arising under the contract; and
- Sub-consultant and outside services.

Non-allowable Costs

The costs principles in 48 CFR Part 31 identify a number of cost categories that are unallowable. Consultants are responsible for ensuring that unallowable costs are not included in the overhead rate or direct billed to government projects. Typical examples of unallowable costs include but are not limited to:

- Costs of amusement and social activities and incidental costs such as meals, lodging, rentals, transportation, and gratuities;
- Contributions and donations;
- Bad debts, including losses due to uncollectible customer's accounts and other claims, related collection costs, and related legal costs, arising from other businesses of the consultant;
- Dividend provisions or payments and, in the case of sole proprietors and partners, distributions of profit;
- Interest on borrowed capital;
- Bonus payment for early completion of work;
- Lobbying costs;
- Losses on other contracts;
- Memberships in social, dining and country clubs;
- Personal use of company vehicles; and
- Alcoholic beverages.

4.4.3 Consultant Contract Administration

4.4.3.1 Change of Project Team/Staff Commitments by the Consultant

One of the major factors in the selection of a consultant to provide professional services is the make-up of the consultant's proposed project team. Both the Letter of Interest and consultant proposal require that the consultant's key personnel be identified. The LPA selects the consultant based on this promise and must ensure that the identified key personnel actually produce the work. The staff commitment is a contractual commitment and any major deviation from or revision in the classifications or key personnel must receive prior approval of the LPA. In the event that the consultant has failed to fulfill the staff commitment, the LPA shall investigate the situation and take appropriate actions which may include suspension of work on a contract.

4.4.3.2 Documentation of Deliverables Review

Comprehensive documentation of plan/documentation reviews is vital to effective consultant administration by both NDOR and the LPA. When the LPA forwards deliverables to NDOR for review, it is recommended that a copy of the LPA's comments be included with the submittal. Proper review documentation should include the following:

- A log of all reviews performed on the project. The log must indicate the date of submission, name of reviewer, and the date comments were transmitted to the consultant; and
- A copy of the comments transmitted to the consultant. These comments may be delivered by providing written comments, marked up prints, annotated comments on documents or reports, or documentation of all communication between the LPA and the consultant.

If marked up prints or annotated comments are used as the official means of communicating the comments to the consultant, then it is the LPA's responsibility to ensure that the comments are legible and clear. A copy of the marked up prints or annotated comments shall be kept in the project file where they can be easily accessed until such time that the project construction has been finalized. Original documents, such as tracings, plans, specifications, maps, basic survey notes and sketches, charts, computations, and other data prepared shall be defined under the terms of the consultant contract as property of the LPA.

4.4.3.3 Breach and Default of Contract

Problems discovered during a subsequent phase of project development will usually be categorized as negligent acts, errors or omissions. Additionally, breach of contract results from a consultant's failure to address an identified problem in the performance of the agreement. The LPA shall notify the consultant in writing of deficient performance, identify required solutions, and set a deadline for cure. After these steps have been carried out and the consultant has failed to address the deficiency, the consultant may be declared in default of contract and additional administrative remedies may be pursued by the LPA.

Unsatisfactory technical performance by the consultant must be addressed in writing by the LPA. The letter to the consultant must cite the specific areas of unsatisfactory performance, require a return to an acceptable level, and set a time limit for response by the consultant. The consultant's continued failure to provide an acceptable level of performance may result in default of contract with appropriate actions by the LPA.

4.4.3.4 Consultant Negligence - Identification and Procedures

The purpose of this section is to provide, for the use of those charged with administration of agreements, guidelines for identifying errors, omissions and negligent acts by consultants, and procedures for dealing with each situation.

Identification of Consultant Negligence

Services provided by the consultant shall be performed in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances.

This definition obviously does not define every error by a consultant as a negligent act that must be pursued for reparation of damages, but in all cases of consultant error the consultant must:

- Respond promptly to the LPA's request for clarification/correction; or
- Prepare any plans or data needed to correct the negligent act, error or omission without additional compensation.

The "negligent act, error or omission" will in most cases be identified during a subsequent phase of the work. Detection of errors, even major errors, during the review process would not normally fall within the negligent standard that is the subject of this section. Such errors and other review comments must be corrected by the consultant at no cost and later considered in rating the consultant's performance.

Negligent acts, errors or omissions as discussed herein will generally consist of harm to the LPA based on the LPA's use of the consultant's completed work. The most common occurrence will be design errors discovered during bidding or construction. Some additional examples are: wetlands not identified during an environmental investigation that are discovered during later design or construction; failure to identify dangerous conditions during a bridge inspection; or acceptance of a contractor's work such as bridge painting based on a consultant inspector's report and later the work is proven clearly deficient.

Procedures for Dealing with "Negligent Acts, Errors or Omissions"

Upon discovery of an alleged error by a consultant, the LPA shall carry out the following steps:

1. Notify NDOR of the problem either by telephone or in writing: a telephone call will be sufficient in most cases;
2. Notify the consultant of the problem either by telephone or in writing; a telephone call will be sufficient in most cases. This is the beginning of the "discovery phase" of investigation that is intended to fully identify the problem (*or possibly determine that a problem does not exist*).

Do:

- Ask for clarification of the discrepancy;
- Agree to a deadline for response; and
- Fully document the call in writing.

Do Not:

- Characterize the discrepancy as an error; and
 - Negotiate, reach agreement or sign any document relative to the consultant's responsibility for the problem.
3. Fully investigate the discrepancy to determine the extent, impacts (*harm to the LPA*) and source of the discrepancy. Notify other LPA personnel as appropriate. The consultant's response to the LPA's initial contact should be obtained and considered in completing the investigation. The consultant's scope of services must be considered in reaching any conclusions regarding responsibility for any error or omission. Relevant facts may include:
 - A determination that the project was constructed in accordance with plans and specifications and the problem did not result from consultant error; or
 - Reasonable assurance that the project was inspected properly.
 4. Fully document the investigation in writing including conclusions reached concerning responsibility for the error or omission. All communications with the consultant shall be documented.

Procedures for Corrective Actions

Upon agreement with the consultant and/or the consultant's professional liability insurance company that a negligent act was committed and corrective actions are required, the following steps should be initiated:

1. Enter into negotiation with the consultant and/or the consultant's insurer;
2. Corrective plans (*or other documents*) should be completed by the consultant or another consultant chosen by the insurer. Any payment to a third party consultant will be made by the insurer. Do not enter into agreement with any other consultant for the corrective plans;
3. All plans, once accepted, must be constructed by an NDOR qualified contractor. The cost of corrective construction may be negotiated by the insurer or may be let competitively through a competitive bid letting process. All payment will be made by the consultant or insurer either directly or indirectly.

4.4.3.5 Dispute Resolution

These procedures are nonbinding steps that a consultant will use to attempt to resolve disputes it has with an LPA arising from work covered under the original and subsequent agreements. When a consultant invokes these dispute resolution procedures, the LPA and consultant agree to make a reasonable effort to resolve the dispute using these procedures.

These procedures are designed to assist all parties in identifying, managing, and attempting to resolve conflicts that may arise.

There are several guiding principles to be considered:

- Engage relevant representatives early, actively, and continually in collaborative problem solving for work covered under the original and any supplemental agreements;
- Attempt to resolve disagreements at the earliest stage possible and at the appropriate organizational level; and
- Seek resolution first by focusing on how to meet interests and needs in the context of existing laws and regulations in order to resolve the disputed issues.

The following are several potential benefits to be gained from these principles:

- Minimizes or avoids unnecessary delays in developing transportation projects;
- Encourages collaborative decision making and coordination among all parties;
- Attempts to resolve disputes early in the process; and
- Builds trust and respect among all parties.

The relationship between the consultant and the LPA should always be on a professional level. All parties to a contract should have a thorough understanding of the dispute resolution process. Each party should make every attempt to fully understand the dispute and express honest statements of fact prior to initiating dispute resolution processes.

Prior to initiating dispute resolution processes, the following activities should occur:

STAGE ONE – INFORMAL ACTION

The Consultant will first attempt to resolve any contract dispute by discussing the dispute directly with the LPA RC.

STAGE TWO – REVIEW BY NDOR’S DEPUTY REPRESENTATIVE

1. Consultant may invoke this nonbinding Stage Two procedure in an attempt to resolve a dispute it has with any LPA interpretation of the requirements of the contract, so long as the rules set forth herein are met or followed.
2. The Stage Two process will be invoked by submitting to NDOR’s Local Projects Engineer, with a copy to NDOR’s Agreements Engineer, a written statement setting out his/her understanding of the:
 - Facts of the dispute;
 - Listing and discussion of all applicable contract provisions or law; and
 - Argument of the party in support of that party’s position.

3. The Director-State Engineer will designate an NDOR employee, who has not previously been involved in the dispute, to serve as his/her representative to consider the merits of the dispute. The NDOR Agreements Engineer shall notify the Consultant and the LPA RC of the name and contact information of the Director's Designated Representative. The Director's Representative shall not meet with either party to the dispute or otherwise independently investigate the dispute while serving as the Director's Representative.
4. The LPA RC will have 7 calendar days after receiving the Consultant's written statement, to submit a written response to the Director's Representative, with a copy to Consultant, including his/her understanding of the:
 - Facts of the dispute;
 - Listing and discussion of all applicable contract provisions or law; and
 - Argument of the party in support of that party's position.
5. Consultant and the LPA RC will participate in a face-to-face meeting with the Director's Representative, within 7 calendar days of the receipt of LPA's written statements to discuss the submittals and to respond to the other party's facts and arguments concerning the dispute.
6. Within 14 calendar days, the Director's Representative will provide a written recommendation to the Deputy Director of Operations (*in the case of a CE contract*) or the Deputy Director of Engineering (*in the case of a PE contract*) setting out his/her:
 - Findings of fact;
 - Interpretation of the applicable contract and legal provisions; and
 - A proposed resolution of the dispute.
7. The Deputy Director of Operations (*for CE contracts*), or Engineering (*for PE contracts*) shall review the findings and conclusions of the Director's Representative and may accept or reject the conclusions in whole, or modify the recommendations of the Director's Representative as deemed appropriate, and notify the LPA and Consultant of the official NDOR proposed resolution, if any, concerning this dispute.
8. The following statements apply to this nonbinding dispute resolution process:
 - The process is in addition to, and does not replace, any other legal or equitable remedy or defense Consultant, LPA, or State may have.
 - Because this process is nonbinding, this process is not intended to delay or impact in any way the calculation of any applicable statute of limitations related to any claim of Consultant under this contract.

- This process may only be used by the Consultant for an actual contract dispute between the LPA and Consultant. This process may not be used to determine a hypothetical question.
 - This process is nonbinding, shall not be treated by LPA or Consultant as a contested case as that phrase is defined in Neb.Rev.Stat. Section 84-901 et seq., and is not intended to provide either party with an independent right of appeal.
 - Failure to follow this process shall not constitute a breach and shall not provide a separate basis for relief under this contract.
 - Consultant's decision to invoke this process shall not limit, in any way, Consultant's right to simultaneously pursue any legal remedy.
9. If Consultant does not agree with the findings and conclusions of the Deputy Director, Consultant may avail itself of any additional remedy, including the filing of a contract claim under Nebraska law.

4.4.3.6 Retention of Contractual Records

Retention of contractual records is required by [49 CFR, Part 18.42](#). The LPA shall retain project records for a minimum of three years after project audit, the final payment has been made and project has been closed out. Such records may be required in any future dispute concerning the agreement, federal or state audit, etc.

4.4.4 Consultant Evaluation

Introduction

The Code of Federal Regulations 48 CFR 36.604 and 23 CFR 172.9(a) requires government agencies to have procedures in place to evaluate the performance of engineers and architects performing services for the agency. Evaluations are required for contracts totaling more than \$30,000 but may be performed on all contracts. The code requires an evaluation be conducted after the contracted work is completed.

Evaluation Guidance

During the review of the scope of services, the LPD PC or the LPA RC and the consultant will designate key points during a project to conduct performance evaluations. Performance evaluations will generally be associated with submittal points, but can occur anytime during a project. When services are based on submittals, performance evaluations will be scheduled during the course of work to benefit the communication and the quality of the services. Performance evaluation dates will be identified in the agreement. A final evaluation is required and shall be conducted after all services are accepted or after contract termination. Additional evaluations may be performed, at any time, over the duration of a contract, if agreed to by the project sponsor and the consultant.

The LPA RC is responsible for ensuring the performance evaluations are conducted, and required that the [DR 54 Consultant Evaluation Forms*](#) are submitted. The evaluations should be performed within one (1) month of a designated date, or submittal.

If the LPA RC concludes that a consultant's overall performance is unsatisfactory, the consultant shall be advised in writing that a report of unsatisfactory performance is being prepared identifying the conditions leading to the unsatisfactory performance rating. If the consultant submits any written comments, the LPA RC shall include them in the report, resolve any factual discrepancies and make appropriate changes in the report.

Performance evaluations must be completed in a fair and honest manner; personal dislikes and biased opinions must be set aside. Ratings shall be based on facts and documentation and not personal prejudices. The evaluation should consider only the performance of the consultant during the services specific to the contract.

Attention must be paid to the rating values. A description of each rating is provided on the evaluation forms. Scores below satisfactory require supporting comments.

The final ratings from the consultant evaluation will be organized, filed, and maintained by the project sponsor in a manner such that they can be readily available. The performance evaluation forms will be retained for six (6) years as required by the federal code.

If an agreement is of such a nature that no useful purpose will be served by periodic evaluations, the project sponsor may exempt the agreement from the evaluation procedures and substitute other procedures deemed appropriate to accomplish the intended purpose. The reasons for exemption and the substitute procedures must be documented in the project file.

In the event the consultant's performance is unsatisfactory, or it is deemed in the best interest of the project sponsor to cease work on a project, a written notification to stop work shall be issued to the consultant. The consultant may not proceed with work on the project unless a subsequent written NTP is given. If the project sponsor decides to terminate the contract, it must be done in compliance with the terms and conditions stated in the agreement.

4.4.5 Professional Services Agreement Closeout

When the LPA determines that all of the work associated with a professional services agreement is completed, the LPA RC shall prepare the agreement closeout memo to be sent to the State Representative for CE agreements and the LPD PC for PE agreements.

Upon review and approval of the agreement closeout memo, the LPD PC/State Representative will forward the approved completion memo to the NDOR Agreements Section. The NDOR Agreements Section will conduct a review of the documents submitted, and will initiate the Audit Process.

The memo shall include:

- the final completed [DR 54 Consultant Evaluation Form*](#); and
- a statement confirming that all the invoices (*including the entire eligible fixed-fee-for-profit*) have been submitted by the Consultant.

Appendix

All Forms, samples, flowcharts and templates referenced within this Chapter and are denoted with an asterisk (*), and are posted under Chapter 4 Appendix at:

<http://www.roads.nebraska.gov/gov-aff/lpa-guide-man.html>

Chapter 5
Environmental

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5.1 Introduction

One of the most important phases of a LPA project is the environmental phase. LPAs may not proceed with final design, right of way acquisition, or construction until full compliance with the National Environmental Policies Act (*NEPA*) and other applicable laws have been completed and approval has been received by NDOR and FHWA. **Failure to do this will make the project ineligible for FHWA participation in funding (i.e., no reimbursement).** This chapter provides a brief glimpse into the efforts needed to comply with NEPA and other laws. LPAs should confer with NDOR for detailed instructions on preparing and processing environmental documents for proposed transportation projects with Federal funding.

Back in the 1960s, Congress recognized man's impact on the natural environment, particularly the influences of population growth, urbanization, industrial expansion, resource exploitation, and recognized the critical importance of restoring and maintaining environmental quality for the overall welfare of man and the nation. It declared that the federal government, in cooperation with State and local governments, and other concerned public and private organizations, should use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans. A number of laws were passed that support these ideas, one of the most relevant to an LPA proposing and developing a transportation project with Federal dollars is the NEPA.

This chapter will provide guidance and an introduction to the considerations that must be documented in order to continue project development through to construction. In addition to the mandatory NEPA documentation, an LPA must also comply with other applicable Federal, State, and local laws, statutes, policies, and permits. Public and agency involvement throughout the environmental phase is necessary. Early and continued coordination will be beneficial while completing the environmental, design, and permitting phases that the LPA is required to complete prior to construction. NDOR fully recognizes the complexity of these requirements and is available for consultation and assistance.

5.2 National Environmental Policy Act (NEPA)

The [NEPA](#) articulated the national environmental policy, established Federal agency responsibility, and created the basis or foundation of the Federal decision-making process. The fundamentals of the NEPA decision-making process include: purpose and need, consideration of alternatives, examination of potential environmental impacts and mitigation (*avoidance, minimization, and mitigation, if necessary*), interagency coordination, public involvement, and documentation. The Council on Environmental Quality (*CEQ*) has established that the lead Federal agency is the agency responsible for NEPA compliance, although non-Federal project sponsors may conduct studies and prepare the NEPA document. FHWA is the lead agency for projects funded with Federal-aid highway funds. The LPA, with NDOR, will develop substantive

portions of the environmental document with FHWA being ultimately responsible for its scope, content, and approval with NEPA documentation. In other words, environmental documentation is an FHWA responsibility even though it is developed by NDOR and the LPA.

The goal of the NEPA process is to make better decisions through interdisciplinary and interagency review and coordination and public involvement. Environmental documents should be concise, clear, and to the point. The goal of the NEPA process is better decisions and not more documentation. The document should be supported by evidence that the necessary analyses have been made. The document should consider the areas the project may potentially impact and provide thorough analyses of relevant impacts that are likely to occur. Areas with lesser or no impact would only be briefly discussed. SCOPE and ADEQUACY of the analysis are the keys to a successful document. The length of the environmental document should be commensurate with the complexity and amount of impacts or controversy anticipated for the project.

Early and continued coordination with appropriate Federal, State, and local agencies, and the public from inception of the proposed project to completion of the environmental document is necessary in order to determine the scope of a project, identify possible project impacts, and issues related to avoiding, minimizing, and compensating impacts.

The CEQ regulations ([40 CFR §§ 1500-1508](#)) address the basic decision-making framework and action forcing provisions established in the NEPA. The principles or essential elements of NEPA decision-making include:

- Assessment of the social, economic, and environmental impacts of a proposed action or project;
- Analysis of a range of reasonable alternatives to the proposed project based on the LPA's defined purpose and need for the project;
- Consideration of appropriate impact mitigation: avoidance, minimization, or mitigation;
- Interagency participation: coordination and consultation;
- Public involvement including opportunities to participate and comment; and
- Documentation and disclosure of relevant information.

FHWA adopted the policy of managing the NEPA project development and decision-making process as an "umbrella," under which all applicable environmental laws, executive orders, and regulations are considered and addressed prior to the final NEPA project decision and document approval. Conclusion of the NEPA process results in a decision that addresses multiple concerns and requirements. The NEPA process allows transportation officials to make project decisions that balance engineering and transportation needs with social, economic, and natural environmental factors. During the process, a wide range of stakeholders, including the

public, businesses, interest groups, and agencies at all levels of government, provide input into project and environmental decisions.

FHWA will be the lead agency, with regard to NEPA compliance, and NDOR will be the lead State agency for projects expending Title 23 funds. Depending on the project, when an EIS is prepared, another agency may be considered a cooperating or participating agency. According to CEQ ([40 CFR 1508.5](#)), "cooperating agency" means any Federal agency, other than a lead agency, that has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposed project or project alternative. Cooperating agencies are those governmental agencies (*State, local, and tribal*) specifically requested to participate during the environmental evaluation process.

Participating agencies are specifically defined when an EIS is prepared for a project. Participating agencies include Federal, State, and local governmental agencies and Indian tribal governments with an interest in the project. Designation as a participating agency does not imply that the agency either supports the proposal or has any special expertise with respect to evaluation of the project. Non-governmental organizations and private entities or agencies cannot serve as participating agencies. Instead, such organizations and entities are included in public involvement.

The roles and responsibilities of cooperating and participating agencies are similar, but cooperating agencies have a higher degree of authority, responsibility, and involvement in the environmental review process. The role of both is to identify, as early as practicable, any issues of concern regarding the project's potential environmental or socioeconomic impacts that could substantially delay or prevent an agency from granting a permit or other approval that is needed for the project. Specifically, agencies are asked to provide meaningful and early input on defining the purpose and need, determining the range of alternatives to be considered, and the methodologies and level of detail required in alternative analysis.

5.3 Defining the Purpose and Need

The Project Purpose and Need statement concisely describes what the project intends to accomplish and the existing conditions that need to be modified or improved to achieve that goal. The purpose and need statement also is utilized to screen out alternatives that are not reasonable and is an important part of the analysis that results in the identification of a preferred alternative. The purpose and need statement must clearly demonstrate that a transportation need exists. The statement must provide factual, objective, and quantifiable data to support the need for the project, and it should be comprehensive, specific, yet concise. Care should be taken that the purpose and need statement is not so narrowly drafted that it unreasonably points to a single solution.

Confirmation of the purpose and need for the project, establishment of the logical termini and demonstration of its independent utility are critical to the overall process. A clear, well-defined purpose and need also is an essential element for successful agency coordination during NEPA and the permitting process. Without a well-defined, well-established, and well-justified purpose and need, it will be difficult to determine which alternatives are reasonable, prudent, and practical.

In developing a project which can be advanced through the stages of planning, environment, design, and construction, the "whole" or integrated project needs to be considered. The purpose of the project is to get from the present condition, to a desired condition, through some improvement. A project need often is an explanation of a problem or why the present condition is in need of modification. Needs, such as crashes, degraded road conditions, an absence of conditions for economic development, or inadequate capacity, should be considered in the context of the local area social, economic, and topographic conditions, the future travel demand, and other infrastructure improvements in the area. Without framing a project in this way, proposed improvements may result in only marginally satisfying the need or by causing unexpected problems which would then require additional corrective action. The better we are able to quantify the problem or project needs the better we will be able to:

- Justify project expenditures;
- Justify the impacts of the action, and why they are necessary;
- Defend the basis for their decisions; and
- Support alternative analysis, and why one alternative was selected over another.

The purpose and need establishes two necessary critical items for a project scope at the beginning of the NEPA process, **logical termini** and **independent utility**. Logical termini for a project are defined as 1) rational end points for a transportation improvement, 2) rational end points for a review of the environmental impacts, and 3) chosen so as not to preclude alternatives for future reasonably foreseeable transportation improvements. When establishing logical termini and independent utility, the following questions should be assessed:

- Why does the action begin and end where it does?
- Can the proposed improvement be constructed and operate independently without the need for additional improvements?

Defining a corridor with logical termini need not preclude a proposal to stage or phase construction. Therefore, related improvements within a transportation facility should be evaluated as one project, rather than selecting termini based on what is programmed as short-range improvements.

When identifying logical termini, the LPA must not “segment an action”. A project lacking logical termini becomes a non-independently functioning segment of infrastructure. For example, "segmentation" occurs where a transportation need extends throughout an entire corridor but only a segment of that corridor is proposed for Federal funding with the remaining portions funded with other funds in order to avoid the requirement to comply with Federal laws and regulations. Considering the whole or integrated project provides decision makers and the public with a clearer picture of transportation requirements in the project area and a better understanding of the project purpose and need.

The environmental impact review frequently covers a broader geographic area than the strict limits of the transportation improvements. In the past, the most common termini have been points of major traffic generation, especially intersecting roadways. This is due to the fact that in most cases, traffic generators determine the size and type of facility being proposed. However, there are also cases where the project improvement is not primarily related to congestion due to traffic generators, and the choice of termini based on these generators may not be appropriate.

In considering the termini of the action, the LPA must document that the project stands on its own and functions independently of any other project (*independent utility*). Documentation must clearly show that:

- The action is usable and is a reasonable expenditure even if no additional improvements in the area are made;
- The action does not restrict consideration of alternatives for other reasonably foreseeable improvements; and
- Establishes why the action only includes the features that it does, including the proposed starting and ending points, and does not include any other features, including possible future connections.

The following is a list of items typically considered in the explanation of the need for a proposed action:

- Project Status – Briefly describe the project history including actions taken to date, other agencies and government units involved;
- System Linkage – Is the proposed project a connecting link? How does it fit in the transportation system?
- Capacity – Is capacity of the present facility inadequate for the present traffic? Projected traffic? What capacity is needed? What is the level(s) of service for the existing and proposed facilities?

- Transportation Demand – Including relationship to any statewide planned or adopted urban transportation plan together with an explanation of the project's traffic forecasts that are substantially different from those estimates from the 23 USC (*Section 134*) planning process;
- Roadway/Bridge Deficiencies – Is the proposed project necessary to correct existing roadway deficiencies? (*i.e., pavement condition ratings; structural deficiency rating, lane width restrictions, load restrictions, substandard geometrics*);
- Safety-Accident Data – Is the project necessary to correct an existing or potential safety hazard? Is the existing crash rate excessively high? Why? How will the proposed project improve it? (*Accident reports are needed to justify intersection improvements, turn lanes, or other roadway modifications*).

The purpose and need statement serves as the cornerstone for the alternatives analysis, but should not discuss alternatives. The alternatives analysis section of the NEPA document should explain how the considered range of alternatives meets the purpose and need.

5.4 Project Classification

Transportation projects vary in type, size and complexity, and potential to affect the environment. Transportation project effects can vary from very minor to significant impacts on the human and natural environment. Impacts must be addressed whether they are considered beneficial or negative. To account for the variability of project impacts, three basic "classes of action" are defined in FHWA regulations ([23 CFR 771.115](#)) and determine how compliance with NEPA is carried out and documented:

- Class I - An [Environmental Impact Statement \(EIS\)](#) document is prepared for projects where it is known that the action will have a significant impact on the environment. At the conclusion of the EIS, a Record of Decision (*ROD*) is issued. Some examples when an EIS is normally required for proposed projects are: a new controlled access freeway, a roadway project of four or more lanes on a new location or an extension of an existing roadway. EIS are considered Class I NEPA documentation;
- Class II - [Categorical Exclusion \(CE\)](#) are issued for actions that do not individually or cumulatively have a significant impact on the environment;
- Class III - An [Environmental Assessment \(EA\)](#) is prepared for actions in which the significance of the environmental impact is not clearly established. Should environmental analysis and interagency review during the EA process find that a proposed project has no significant impacts on the quality of the environment; a [Finding of No Significant Impact \(FONSI\)](#) is issued. Some examples when an EA may be required for proposed projects are: two-lane relocation, roadway major reconstruction, roadway widening, or new viaducts.

All NEPA analyses consider the same criteria but to varying degrees of details and documentation. All projects must have environmental approval and clearance prior to the project moving forward with final design, property appraisal, property acquisition, and construction. Additional information can be found later in this chapter and at:

<http://environment.fhwa.dot.gov/projdev/impctr0771.asp>

To avoid possible re-work and delay, consultation with NDOR and possibly FHWA to identify the class of action is recommended. FHWA determines the appropriate level of NEPA analysis: the NEPA determination form is used as a tool to make that decision.

5.5 Range of Alternatives or Alternative Analysis

Once the purpose and need for a project has been identified and the study area has been defined, alternatives are identified and evaluated to determine how the transportation problem(s) can be resolved. All proposed projects must consider a No Action or No Build alternative. Consideration of the No Build alternatives can serve two purposes. First, it may be a reasonable alternative, especially for situations where the impacts are great and the need is relatively minor. More frequently, the No Build serves as a baseline against which other alternatives can be compared. The number of alternatives considered depends on the type of project and its size and complexity.

For example, an intersection improvement is likely to have a few alternatives, while a new roadway on new location is likely to have a fairly large number of possible alignments that will ultimately be screened to a reasonable and representative range. During development, it may also be appropriate to consider alternatives that provide for a unique solution to the transportation problem established in the purpose and need such as, extending bus or rail routes, starting a shuttle service, closing roads, and rerouting traffic.

Evaluation of alternatives should present the proposed action and all the alternatives in comparative form, to define the issues and provide for a clear basis for choice among the options. Regardless of whether there are multiple alternatives or just a build and no-build option, the alternative evaluation needs to adequately explain the rationale for identifying a preferred alternative. Just as important in this process is the examination and documentation of why alternatives have been eliminated from consideration during the NEPA process. Affected agencies and the public must be given opportunities to provide input into the development of alternatives that are considered. Agency and public involvement regarding alternatives for projects processed as EAs or CEs will vary according to the complexity of the project, its impacts, and its setting. Please consult with NDOR and FHWA in deciding whether the proposed involvement of agencies and the public is adequate.

The input from affected agencies and the public is what is referred to as Context Sensitive Solutions (CSS). CSS is one of FHWA's commitments to the advancement of its [Vital Few Goal on Environmental Stewardship and Streamlining](#). The objective is to improve the environmental quality of transportation decision making by incorporating CSS principles in all aspects of planning and the project development process by having the project sponsors reach beyond their normal processes at the systems planning or project level, and to search for solutions that demonstrate an improved compatibility between the natural and built environment. The results will demonstrate that a strong environmental ethic is compatible with good transportation solutions.

The application of CSS principles within the transportation planning process assists LPAs in reaching their transportation goals by encouraging the consideration of land use, transportation, and infrastructure needs in an integrated manner. When transportation planning reflects community input and takes into consideration the impacts on both natural and human environments, it also promotes partnerships that lead to "balanced" decision-making. This is a core principle of CSS.

Under CEQ regulations, federal agencies are required to evaluate alternatives to avoid or minimize impacts to the environment. Other regulations also require consideration of "avoidance" alternatives. Specifically, Section 4(f) of the Department of Transportation Act of 1966, the Executive Orders on Wetlands (*E.O. 12898*), and the USACE Section 404 (b) (1) guidelines, require agencies to develop alternatives that would avoid or minimize impacts. In meeting the Section 4(f) regulations, it must be determined if a feasible and prudent "avoidance" alternative exists. If no feasible and prudent "avoidance" alternative exists, and all alternatives have 4(f) impacts, then it must determine which alternative causes the least overall harm.

What is feasible? An alternative is considered feasible if it can be constructed as a matter of sound engineering. Alternatives that are studied should be feasible; otherwise they should not be carried forward for detailed study. Alternatives that are not feasible add no value to the decision-making process.

What is prudent? FHWA requires that a number of factors (see [23 CFR 774](#)) be considered and documented in a Section 4(f) evaluation, including the project context and the severity of impacts, in determining what is prudent. An alternative may be rejected as not prudent for any of the following reasons:

- It does not meet the project purpose and need;
- It involves extraordinary operational or safety problems;
- There are unique problems or truly unusual factors present with it;
- It results in unacceptable and severe adverse social, economic, or other environmental impacts;

- It would cause extraordinary community disruption;
- It has additional construction costs of an extraordinary magnitude; or
- There is an accumulation of factors that collectively, rather than individually, have adverse impacts that present unique problems or reach extraordinary magnitudes.

5.6 NEPA Determination

NEPA mandates that the type of environmental review required for federal action be determined by the potential impacts the project may have on the surrounding natural, cultural, economic, and social environment. The NEPA environmental review process is a stepped process with incremental reviews and approvals as the project moves forward. To classify the type of NEPA documentation a proposed action will require, the LPA must complete the [NEPA Determination Form](#). A [Categorical Exclusion Form](#) must be completed if any “yes” boxes are checked on the NEPA Determination Form (*with the exclusion of any “yes” boxes checked in the Permits or the Public Provisions Sections on Page 3*). If the project meets the definition of and criteria for a categorical exclusion (*no significant impacts*), all required coordination and consultations are satisfied, and all responses on the NEPA Determination form are negative, then the action may be classified as a Programmatic CE by NDOR. No additional approvals are required by FHWA. Concurrence from FHWA, will determine if a CE, EA, or EIS is required. The [Guidelines](#) for completing the NEPA Determination Form and the Categorical Exclusion Form, can be obtained from the NDOR LPD Project Coordinator or from this chapter’s appendix. All Federal-aid projects must have one or both completed and approved.

The LPA coordinates with the appropriate resource and regulatory agencies to insure all potential issues and impacts are clearly identified on the form. The LPA certifies the information in the NEPA determination form. **Coordination must occur throughout the entire NEPA process.** To ensure that the proposed action will comply with the requirements of NEPA, the Endangered Species Act, the National Historic Preservation Act, the Clean Water Act, and other applicable Federal and State laws, the LPA will solicit comments from all resource agencies applicable to the project, including the agencies listed below, and attach that correspondence to the NEPA Determination Form. This contact is to begin the NEPA process and not the application process for permits. Applying for permits is initiated after NEPA approval.

Please note it is NOT appropriate for the LPA to request a determination of effects to listed species, or to request a concurrence for effects from the US Fish and Wildlife Service. This coordination is done through NDOR/FHWA. In addition, NDOR/FHWA is responsible for coordination with the NE SHPO, tribes, and appropriate Federal agencies for concurrence regarding eligibility of historic resources and the effects to those historic resources from the project. The LPA coordination with the US Fish and Wildlife Service and the NE SHPO are limited to soliciting general input on the project and to request resource information.

1. U.S. Fish and Wildlife Service (*for information regarding Federally-listed threatened and endangered species and/or critical habitat that may occur in the project area, or for general project input, Migratory Bird Treaty Act, Fish and Wildlife Coordination Act, and Bald and Golden Eagle Act*).
2. U.S. Army Corps of Engineers (*for comment on the possibility of impacting wetlands and other Waters of the US*).
3. Nebraska Game and Parks Commission (*for comment on the possibility of impacting state-listed threatened and endangered species*).
4. Nebraska State Historical Preservation Office (SHPO) (*for information on resources that may occur within the project area and for general project input*).
5. Nebraska Department of Environmental Quality (*for comment on the possibility of impacting water quality, storm water runoff permit, or hazardous waste compliance*).
6. U.S. Environmental Protection Agency (USEPA) (*for comment on protection of human health, and the natural environment, including land, air and water resources*).
7. NDOR and FHWA should be the starting point of contact for discussion on where there could be potential Tribal impacts.

Once the NEPA Determination Form is completed, the LPA will forward it to the NDOR LPD Project Coordinator for NDOR review. NDOR's initial review may result in a determination that additional documentation is needed for compliance with Federal or State regulations and a CE, EA, or EIS may be required. If the responses provided in the NEPA Determination Form yields the need for additional research and documentation, NDOR and FHWA will jointly decide the appropriate NEPA document needed for the action.

Construction activities, Right-of-Way (ROW) appraisal and acquisition, and final design may not begin until the NEPA document is approved. Appropriate environmental studies (*e.g., scoping field reviews, technical studies*) and developing preliminary engineering details to gain adequate information to determine potential impacts can be performed. Throughout project development, changes in the project scope or the project limits require the project sponsor to contact the NDOR Environmental Section to reevaluate potential impacts.

5.7 Categorical Exclusion (CE)

Categorical exclusions are actions which 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 which do not induce, neither individually nor cumulatively, significant impacts to planned growth or land use for the area; do not require the relocation of significant numbers of people; 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; do not have significant impacts on travel patterns; or do not otherwise, either individually or cumulatively, have any

significant environmental impacts. A class of action that otherwise fits the definition of a CE but due to the presence of “unusual circumstances” result in significant impacts, must be processed as either an EA or EIS. Project documentation for a CE must certify that “unusual circumstances” do not exist for the project. Unusual circumstances include:

- Significant environmental impacts;
- Substantial controversy on environmental grounds;
- Significant impact on properties protected by Section 4(f) of the DOT Act or Section 106 of the National Historic Preservation Act; or
- Inconsistencies with any Federal, State, or local law, requirement or administrative determination relating to the environmental aspects of the action.

Proposed CE projects require proper study and coordination to be compliant with NEPA. The following steps are intended to guide the LPA through the critical decision-making areas typically experienced in the preparation of CEs.

Working with Stakeholders

The LPA, with assistance from NDOR, must identify the project stakeholders, identify the purpose and need for the project, and define the study area/project area. Stakeholders may include government officials, business and civic leaders, school officials, church leaders, the convention and visitors bureau, chambers of commerce leadership, other persons who might be considered community leaders, property owners, property occupants, and residents within the study area. Depending on the type and level of CE project, the LPA should keep stakeholders well informed on the process and record and consider issues that may be of concern to the community.

Conduct Technical Studies to Determine the Purpose and Need

The LPA needs to collect and analyze existing data relevant to the project, assessing existing and future conditions in the project area, continuing to involve the stakeholders and developing a draft purpose and need statement. Existing technical studies or resource maps or inventories that would identify ecologically and culturally sensitive sites and possible locations of hazardous materials in the study area need to be reviewed. The outcome of the review would identify possible environmental concerns as well as gaps in existing information that new studies may need to fill.

Identify and Evaluate Conceptual Alternatives

The LPA working with project stakeholders identify, analyze, and evaluate conceptual alternatives and identify the best alternative to meet the purpose and need for the project. Coordination regarding the alternatives should be initiated with the USACE, USEPA, USFWS, NeDEQ, NGPC, and SHPO (*including consulting parties for Section 106*).

Conduct Preliminary Engineering

Preliminary engineering will be conducted on all projects regardless of their environmental classification. The level of detail in the analysis will be dependent on the scope and complexity of the proposed project.

The primary purpose of preliminary engineering is to establish and develop the project design parameters to a level of detail comprehensive enough to generate an accurate scope, schedule, and budget for the remainder of the design. On projects with multiple alternatives (*other than no build*), preliminary engineering also should provide a level of design that allows for an objective selection of the preferred alternative and an equal review of resource impacts from these alternatives.

Preliminary engineering aids in the prevention of late-stage design changes. Preliminary design provides a level of plan development that allows for a comprehensive analysis of all design issues and a thorough review and comparison by the appropriate stakeholders. The preliminary engineering should provide enough detail so that the intent, design parameters, costs, and impacts of the project are clearly discernable. The detail should be such that a final design scope of services can be established. The scope of services aids in refining the project schedule and gives the design team a solid base upon which to complete the plans.

The project coordinator will determine if a constructability review will be conducted concurrent with the preliminary engineering review. The intent of the constructability review is to check the potential construction strategies, techniques, and logistical issues. The review checks construction durations, and alternative designs. It identifies labor and material availability, access for large equipment, project phasing, and the conceptual maintenance of traffic.

Preliminary Engineering should be conducted to a level of detail that provides:

- Accurate cost estimates for all reasonable alternatives;
- An accurate scope of services for final plan development;
- A comprehensive analysis of design issues;
- Preliminary construction limits;
- Geotechnical data; and
- Information necessary to complete the environmental document.

The LPA will perform preliminary engineering to develop the feasible alternatives. The LPA should ensure the following preliminary engineering issues are included where applicable:

- Courthouse research and associated field survey work;
- Calculation of ROW requirements, identification of property owners, delineation of structures to be taken, identification of the number and type of relocations, acreage to be taken, easements, residuals, assessment of access issues, etc.;

- Calculation of drainage areas and bridge/pipe sizes for major drainage ways based on the proposed alignment and profile;
- Soil borings, preliminary mapping, and preliminary line and grade;
- Cost estimates that include construction, ROW, and utilities;
- Traffic certification and determination of how traffic will be maintained during construction; and
- Results of preliminary engineering as well as the location of environmental resources plotted on a base map.

Environmental Analysis

Field studies are conducted to identify qualitatively and quantitatively the characteristics of the natural and manmade resources in the study area. The information gathered in the literature search and field studies will be used to avoid and minimize potentially adverse impacts to sensitive resources. Environmental studies are conducted, if needed, to identify and map resources in the study area. Studies for this include:

- Cultural resource survey that identifies both prehistoric/historic archaeology and historic architecture sites that may be impacted;
- An ecological survey that identifies the impacts of each alternative in the following areas: 1) aquatic, 2) terrestrial, 3) wetland delineation, and 4) endangered species;
- An environmental site assessment to identify liabilities in property acquisition, properties impacted with regulated substances and/or hazardous waste, and the potential for hazardous materials to occur within the project area; and
- Identification of Section 4(f) properties including publicly owned parks, recreational lands and wildlife and waterfowl refuges within the study area.

Additional studies should be conducted and coordinated for the preferred alternative. These studies are undertaken, if necessary:

- A noise analysis in accordance with NDOR Noise Abatement Policy;
- A cultural resources survey (*evaluation for significance*) performed within the area of potential effect by the project; and
- A determination of applicability of Section 4(f).

Present Recommendations/Preferred Alternative

The LPA, in consultation with NDOR and concurrence from FHWA, will determine the preferred alternative. The decision is based on the accumulated data from all field studies, agency input, and public comment, if available. The project purpose and need, design information, and

environmental resource data is entered on the [Categorical Exclusion Form](#). This form, along with [guidelines](#) for completing the form, are provided in the appendix to this chapter.

Once all sections of the CE Documentation Form are complete and have been reviewed by the LPA, the document(s) will be forwarded to the NDOR LPD Project Coordinator for review and comment. If the project fits the parameters of a programmatic CE, NDOR has the authority to approve the document. For other NEPA document types, NDOR will forward the reviewed and (if necessary) amended documentation to FHWA for review and approvals. The LPA will receive a copy of the approved CE document from the NDOR LPD Project Coordinator.

Public involvement is not required for a CE, but it is always recommended for consideration, depending on the proposed project, location, surrounding populations, and public sentiment towards the project. For additional information, see Section 5.12 in this chapter for the NEPA Public Involvement process. Depending upon project components, FHWA may specifically require some level of public involvement.

5.8 Environmental Assessment (EA)

An EA is to be prepared by the project sponsor for each proposed action that is not a CE and does not clearly require the preparation of an EIS. An EA may assist in determining if an EIS is needed. For projects that require an EA, the LPA in consultation with NDOR and FHWA, will at the earliest appropriate time, begin consultation with interested agencies and others to advise them of the scope of the project and to achieve the following objectives:

- Determine which aspects of the proposed action have potential for social, economic, or environmental impact;
- Identify alternatives (*including No Build*) and measures which might mitigate adverse environmental impacts; and
- Identify other environmental review and consultation requirements which should be performed concurrently with the EA.

The LPA will accomplish these objectives through an early coordination or a scoping process. The required public involvement will be summarized and the results of agency coordination will be included in the EA (see *Section 5.12 Public Involvement for the NEPA Process*). FHWA's NEPA regulations (*23 CFR 771.111(d)*) require that those agencies with jurisdiction by law or special expertise be requested to be cooperating agencies. In the case of projects that will require an Individual Section 404 Permit from the U.S. Army Corps of Engineers (*USACE*), NDOR and FHWA developed an Agreement with a number of regulatory agencies to adequately address environmental issues to meet USACE requirements for the Section 404 Permit application. This Agreement is known as the *Nebraska NEPA/404 Merge Process*, that provides signatory agencies the opportunity to review and comment on the project at specific decision points (*Purpose and Need, Alternatives Carried Forward, Selected Alternative, and Impact*

Minimization). This Agreement ensures early and appropriate involvement throughout development of the project.

After early scoping, surveys and field work will be necessary prior to drafting the EA. Refer to sections on study area, permits, and other considerations to ensure that all needed work will be adequately completed prior to documentation.

The EA document shall be submitted to the PPDD Environmental Section for review and comment prior to being forwarded to FHWA for their review and approval before it is made available to the public. The EA need not be circulated for comment, but the document must be made available for public inspection at the LPA's office and at the FHWA Division office. FHWA must be consulted with to determine if the EA needs to be circulated for public comment through a public meeting or hearing, or if a notice of availability for the document will suffice. The LPA will send a Notice of Availability of the EA, briefly describing the action and its impacts, to the affected units of Federal, State, and local government and public notice concerning document availability, location, and appropriate comment period will be made. NDOR and FHWA will decide whether one or more public hearings or the opportunity for hearings(s) will be necessary.

If no significant impacts are identified, the LPA will furnish NDOR four paper copies of the final EA document, and an electronic version as appropriate; the public hearing transcript, where applicable; and copies of any comments received and responses thereto. NDOR will submit copies of the EA documentation to FHWA. The EA should also document compliance, to the extent possible, with all applicable Federal, State, and local environmental laws, Executive Orders, and regulations or provide reasonable assurance that their requirements can be met.

If, at any point in the EA process, the LPA or NDOR in consultation with FHWA determines that the action is likely to have a significant impact on the environment, the preparation of an EIS document will be required by the LPA.

Findings of No Significant Impact

The FHWA will review the EA and any public hearing transcripts and other comments received regarding the EA. If FHWA agrees with the LPA and NDOR's recommendations, it will make a separate written document called a Finding of No Significant Impact (*FONSI*) incorporating by reference the EA and any other appropriate environmental documents. A copy of the signed FONSI will be returned to both NDOR and the LPA.

After a FONSI has been signed by FHWA, a notice of availability of the FONSI will be sent by the LPA to the affected units of Federal, state, and local government and the document will be available from the LPA, NDOR, and FHWA upon request by the public. For additional assistance on EAs or FONSI, contact NDOR LPD Project Coordinator.

5.9 Environmental Impact Statement (EIS)

The EIS document will be prepared by the LPA when, in concurrence with FHWA, it is determined that the action is likely to cause significant impacts on the environment.

Notice of Intent (NOI) and Notice to Initiate the Environmental Review Process

In instances where a project would likely result in significant impacts, the LPA needs to informally discuss the proposed project scope and impacts with NDOR and FHWA. If all agree that preparing an EIS is appropriate, the LPA and NDOR need to send a letter to FHWA to initiate the environmental review process to prepare an EIS. This letter or notice needs to indicate the type of work, termini, length, general location, and a list of Federal approvals. Importantly, this notice also identifies the timeframe within which this process should begin based upon the project sponsor scheduling of committed staff, consultant services, financial resources, and leadership attention. When NDOR and FHWA decide that an EIS is appropriate, the FHWA will issue an NOI for publication in the Federal Register. The letter to initiate the environmental review process may also contain a request to FHWA to prepare and publish a NOI. LPAs are encouraged to announce the intent to prepare an EIS by appropriate means at the local level.

Coordination Plan and Schedule

At the same time the project is being initiated, the LPA must prepare a draft coordination plan and project schedule. This coordination plan will outline the project milestones (*such as the NOI, development of the purpose and need, range of alternatives, draft EIS, final EIS, ROD*) and how coordination or outreach to agencies and the public would occur. This plan also must identify the local, State, and Federal agencies (*and cooperating agencies*) who will be invited to participate in the project. It will also identify the lead agencies for the EIS, which will minimally be FHWA and NDOR. The LPA may be invited to be a joint lead agency, which means it will be an active participant in the development and decision making of the EIS. In the case of projects that will require an Individual Section 404 Permit from the U.S. Army Corps of Engineers (USACE), regulatory agencies that are signatories to the *Nebraska NEPA/404 Merge Process*, (*described in Section 5.8*) will be invited to participate. They will be provided the opportunity to review and comment on the project at specific decision points (*Purpose and Need, Alternatives Carried Forward, Selected Alternative, and Impact Minimization*) as outlined in the NEPA/404 Merge Process. Once drafted, the coordination plan and schedule must be circulated to participating agencies, allowing them to comment on the proposed project schedule, and made available to the public, for their review and comment. As the EIS process proceeds and necessary modifications to the coordination plan or schedule are made, the revised plan and schedule must be made available to agencies and the public.

Scoping

After publication of the NOI, the LPA, in cooperation with NDOR and the FHWA, will begin a scoping process. The scoping process will be used to identify the range of alternatives and impacts and the relevant issues to be addressed in the EIS. Scoping is normally achieved through public and agency involvement procedures. Scoping is achieved by soliciting agency and public responses to the action by letter and by holding scoping meetings. If a scoping meeting is to be held, it will be announced in the FHWA's NOI and by appropriate means at the state and local level. Per CEQ requirements, agencies with jurisdictional law must be requested to become cooperating agencies. During this phase of the EIS, the purpose and need statement is created.

The LPAs must also provide opportunities for the involvement of participating agencies and the public in defining the range of alternatives to be considered for the project. Additional coordination is required for the lead agencies to collaborate with participating agencies in deciding the methodologies and level of detail in the analysis of alternatives. Each of these requirements, the opportunities for agency and public involvement in purpose and need, range of alternatives, and for agencies, the methodologies and level of detail in analyzing alternatives, should be identified as a separate milestone in the coordination plan and schedule.

Purpose and Need as Related to the EIS

The purpose and need of a project is essential in establishing a basis for the development of the range of reasonable alternatives required in an EIS and assists with the identification and eventual selection of a preferred alternative. The lead agencies are responsible for the development of the project's purpose and need statement. In developing the statement of purpose and need, the lead agencies must provide opportunities for the involvement of participating agencies and the public and must consider the input provided by these groups. After considering this input, the lead agencies will decide the project's purpose and need. If the lead agencies do not agree, they must work out their differences because progress on stating the project's purpose and need, and other activities that depend on the statement of purpose and need will be stalled until the lead agencies agree. If a cooperating or participating agency has permit or other approval authority over the project, it would be useful, though not required, for the lead agencies and that permitting agency to develop jointly a purpose and need statement that can be utilized for all applicable environmental reviews and requirements.

Technical Studies and Coordination

Once the NOI has been issued and the Scoping phase begun, a number of technical (*engineering, biological, cultural, historical, social*) research, studies, reports, consultations, and field work must be started and in many cases completed prior to issuing a draft EIS. Collecting and analyzing this data is a very time consuming phase of NEPA development. It is also a time for early coordination with Federal, State, and local regulatory agencies and possibly either to

hold additional informational meetings with the public or plan for public involvement. Refer to other sections in this chapter for details or contact the NDOR LPD Project Coordinator.

Draft Environmental Impact Statement

The Draft Environmental Impact Statement (*DEIS*) will be prepared by the LPA with appropriate guidance and participation by NDOR and FHWA. The DEIS will evaluate all reasonable alternatives to the action and discuss the reasons why other alternatives, which may have been considered, were eliminated from detailed study. The DEIS will also summarize the studies, reviews, consultations, and coordination required by Federal, State, and local environmental laws and regulations, Executive Orders, etc., to the extent appropriate at this stage in the environmental process.

After coordination and acceptance from NDOR, the DEIS will be forwarded to the FHWA. When satisfied that the DEIS complies with NEPA requirements, FHWA will approve the DEIS document for circulation by signing and dating the cover sheet. The FHWA will provide information to the Environmental Protection Agency (*EPA*) which will issue in the Federal Register, a public availability notice that establishes a period of not less than forty-five (45) days for the return of comments on the DEIS.

Typically the LPA or NDOR will be responsible for printing the DEIS. The initial printing of the DEIS will be in sufficient quantity to meet requirements for copies which can reasonably be expected from agencies, organizations, and individuals as well as copies necessary for access in public locations (*local libraries or city hall*). It may also be appropriate to make the DEIS available electronically on one or all of the LPA, NDOR, or FHWA websites.

Review and Comment Period

The DEIS will be circulated for comment by the LPA on behalf of NDOR and FHWA. The DEIS will be made available to the public and transmitted to agencies for comment no later than the time the document is filed with the EPA. The current listing of agencies and addresses will be provided by NDOR at the request of the LPA. The notice of availability and the DEIS document will be transmitted to:

- Public officials, interest groups, and members of the public known to have an interest in or be affected by the proposed action or the DEIS;
- Federal, State, and local government agencies expected to have jurisdiction or responsibility over, interest or expertise in the proposed action. Copies will be provided directly to appropriate Federal, State and local agencies, and to the State intergovernmental review contacts established under Executive Order 12372; and

- State, local, and Federal land management entities which may be significantly affected by the proposed action or any of the alternatives. These copies will be accompanied by a request that such agency or entity advise FHWA in writing of any disagreement with the evaluation of impacts in the statement. The FHWA will furnish the comments received to the LPA and NDOR along with a written assessment of any disagreements for incorporation into the final EIS.

A public hearing is required during the comment period. The DEIS document will be available at the public hearing and for a minimum of fifteen (15) days in advance of the public hearing. The availability of the DEIS will be published and public comments requested in any public hearing notice and at any public hearing presentation. If a public hearing on an action proposed for FHWA funding is not held, a notice will be placed in a newspaper similar to a public hearing notice advising where the DEIS is available for review, how copies may be obtained, and where the comments should be sent.

The FHWA will issue in the Federal Register, a public availability notice that establishes a period of not less than forty-five (45) days for the return of comments on the DEIS. The notice and the DEIS transmittal letter will identify where comments are to be sent. It is important to note that the review period may be established for more than forty-five (45) days and can be extended during the review period.

Final Environmental Impact Statement

After circulation of a DEIS, consideration of comments received, and possibly additional studies completed, a Final Environmental Impact Statement (FEIS) document will be prepared by the LPA. The FEIS will identify the preferred alternative and evaluate all reasonable alternatives considered. It will also discuss substantive comments received and responses on the DEIS, summarize public involvement, and describe the mitigation measures that are to be incorporated into the proposed action.

Mitigation measures presented as commitments in the FEIS will be incorporated into the project. *(It is the responsibility of the LPA and NDOR to ensure that these commitments are incorporated into the construction documents.)* The FEIS will also document compliance, to the extent possible, with all applicable environmental laws, regulations, Executive Orders, etc., or provide reasonable assurance that their requirements can be met.

The FHWA will indicate approval of the EIS for an action by signing and dating the cover page. Approval of the FEIS document does not commit the FHWA to approve any future grant request to fund the preferred alternative.

The initial printing of the FEIS will be in sufficient quantity to meet the request for copies which can be reasonably expected from agencies, organizations, and individuals. It may also be appropriate to make the FEIS available electronically on one or all of the LPA, NDOR, or FHWA websites.

Review and Comment Period

The FEIS will be transmitted to any persons, organizations, or agencies that made substantive comments on the DEIS, may be affected by the proposed action, or requested a copy, no later than the time the document is filed with EPA. In the case of lengthy documents, the FHWA may provide alternative circulation processes. The LPA will also publish a notice of availability in local newspapers and make the FEIS document available through the mechanism established pursuant to DOT Order 4600.13 which implements Executive Order 12372. When filed with EPA, the FEIS will be available for public review at the LPA's offices and at appropriate FHWA offices. A copy should also be made available for public review at institutions such as local government offices, libraries, and schools, as appropriate.

Record of Decision

The FHWA will complete and sign a Record of Decision (*ROD*) no sooner than thirty (*30*) days after publication of the FEIS notice in the Federal Register or ninety (*90*) days after publication of a notice for the DEIS, whichever is longer. The ROD will present the basis for the decision as specified in 40 CFR 1505.2, summarize any mitigation measures that will be incorporated in the project and document any required Section 4(f) approval. Until any required ROD has been signed, no further approvals may be given except for administrative activities taken to secure further project funding and other activities.

Before FHWA can sign a ROD, the project described as the preferred alternative must be fiscally constrained. This means that the funding for the project must appear in the State's or local government's long range-plan and at least one subsequent phase (*e.g., PE, final design, ROW, utility relocation, or construction*) of the project has to be included in the approved STIP/TIP.

If after a ROD has been published, the FHWA subsequently wishes to approve an alternative coordinated with the LPA and NDOR which was not identified as the preferred alternative but adequately evaluated for environmental effects in the FEIS, or proposes to make substantial changes to the mitigation measures or findings discussed in the ROD, a revised ROD will be subject to review by those FHWA offices which reviewed the FEIS. To the extent practicable, the approved revised ROD will be provided to all persons, organizations, and agencies that received a copy of the FEIS.

Supplemental Environmental Impact Statements (*SEIS*)

A DEIS or FEIS may be supplemented at any time. It will be supplemented whenever the FHWA determines that:

- Changes to the proposed action would result in relevant environmental impacts that were not evaluated in the DEIS or FEIS; and

- New information or circumstances relevant to environmental concerns and bearings on the proposed action or its impacts would result in significant environmental impacts not evaluated in the DEIS or FEIS.

However, a supplemental DEIS or FEIS will not be necessary where:

- The changes to the proposed action, new information, or new circumstances result in a lessening of adverse environmental impacts evaluated in the DEIS or FEIS without causing other relevant environmental impacts that were not previously evaluated in the DEIS or FEIS; or
- The FHWA decides to approve an alternative fully evaluated in an approved FEIS but not identified as the preferred alternative.

Where the FHWA is uncertain of the significance of the new impacts, the LPA and NDOR will develop appropriate environmental studies or, if the FHWA deems appropriate, an EA to assess the impacts of the changes, new information, or new circumstances. If, based upon the studies, the FHWA determines that an SEIS is not necessary, the FHWA will so indicate in the project file.

A supplement will be developed following the same process and format (*i.e.*, *DEIS*, *FEIS*, and *ROD*) as an original EIS, except that scoping is not required.

In some cases, an SEIS may be required to address issues of limited scope, such as the extent of proposed mitigation or the evaluation of location or design variations for a limited portion of the overall project. Where this is the case, the preparation of an SEIS will not necessarily:

- Prevent the granting of new approvals;
- Require the withdrawal of previous approvals; or
- Require the suspension of project activities; for any activity not directly affected by the supplement. If the changes in question are of such magnitude to require a reassessment of the entire action, or more than a limited portion of the overall action, the FHWA will suspend any activities which would have an adverse environmental impact or limit the choice of reasonable alternatives, until the SEIS is completed.

5.10 Administrative Record

There is always potential for legal challenge of a NEPA document and Federal permits that can seriously delay or even cancel a project that the LPA and NDOR have spent years planning. Managing the risk of possible litigation should be part of good project planning. In addition to diligent adherence to NEPA procedures, careful, coordinated preparation of the Administrative Record by the LPA, NDOR, and FHWA is an important component of risk management.

Beginning in the earliest phases of project development, it is wise to begin to develop a project's Administrative Record. The Administrative Record is a written record supporting the agency's decisions on a particular project. While there is no statutory requirement for an administrative record, court cases have essentially established the requirement that the project record should include everything the agency considered in reaching its decision. **Information not found in the Administrative Record cannot be used in court.**

Documents that may be considered Federal records include:

- Minutes;
- Directives;
- Phone logs;
- Personnel folders;
- Engineering records;
- Email and other correspondence;
- Record of agency publications;
- Environmental documents; and
- Project and fiscal files.

FHWA has two internal guidance documents that address the administrative record and that provide some assistance in understanding and developing the record.

- Memorandum from Director, Office of Environmental Policy, FHWA, to Regional Federal Highway Administrators (*September 25, 1985*); and
- FHWA Memorandum, [Presenting and Defending Administrative Records](#) (*February 1992*).

5.11 Re-Evaluations

The approved CE, FONSI, and ROD documents represent final environmental approvals under NEPA. Once an environmental document has been approved, the LPA and NDOR shall consult with the FHWA to assure the environmental designation remains valid for the project as described in 23 CFR 771.129(c). Re-evaluation or consultation with FHWA is required prior to each major approval or action such as authorizations to acquire ROW, to advertise for bids, or award construction contracts. The purpose of the re-evaluation is to assure that the original basis for the CE approval or FONSI/ROD decision is still valid.

During the project development period between the environmental approval and project construction, the environmental baseline conditions of the project area may change, as well as environmental regulations and policies that govern impact analyses and the development of mitigation measures. There may also be changes to the project during the project development and design process that require additional review of environmental impacts.

If, after a period of three years, no other FHWA approvals have occurred for a project for which a CE approval, FONSI, or ROD has been made, a written re-evaluation must be prepared and coordinated with FHWA in order to evaluate whether any changes have occurred that would require reconsideration of the NEPA approval. Likewise, a re-evaluation will be required if the scope of the project has changed, the limits of changed, if there is a change in regulations, or a change in existing conditions since the previously approved NEPA document (*the exception to this is when a SEIS is required as opposed to a re-evaluation*). Coordination and consultation among the LPA, NDOR, and FHWA is recommended. The re-evaluation focuses on changes in the project, its surroundings and impacts, and any new issues identified since the last environmental documentation. To accomplish the re-evaluation, the current ROW or construction plans should be reviewed to ensure that no significant changes have occurred. It may be necessary to conduct field reviews, additional studies and agency coordination. Any additional public involvement that has occurred should be described in these re-evaluations.

Projects are often broken into smaller sections for funding and/or construction purposes. The re-evaluation for the various sections must consider the entire project addressed in the original environmental document. The re-evaluation should mention which sections of the project are being advanced to ROW or construction.

If the project decision, affected environment, mitigation or other environmental commitments, or environmental requirements have not changed or if the changes examined do not result in the determination by FHWA that the Original NEPA approval is no longer valid, the re-evaluation process is complete. Through the re-evaluation process, if it is determined that the previously approved environmental document is no longer adequate, then supplemental environmental documentation is needed to fully analyze the changes that have occurred. FHWA should be consulted for the appropriate written re-evaluation format.

5.12 Public Involvement for the NEPA Process

The goal of public involvement is to promote an exchange of information between the public and the project team so that information about a project and its impacts may be disclosed and concerns and issues raised by the public may be considered by the project team. A public involvement plan is created, proposed, and agreed at the scope meeting by LPA and NDOR with concurrence from FHWA. The level of public involvement is based on the scope, complexity of the proposed project, and in accordance with NDOR's Public Involvement Guide. Public involvement may be as simple as informal conversations with property owners in the

project area, notification letters to property owners, or announcement in local newspapers. More complex projects may require multiple public involvement meetings and/or hearings. FHWA and NDOR must be invited to attend all meetings/hearings and be given the opportunity to comment on the location and format of the meeting/hearing prior to its announcement.

Public Involvement Plan

The LPA is responsible for meeting all milestones in and compliance with the public involvement plan. The LPA must create an administrative record by documenting all public involvement activities including copies of letters, informal meetings with property owners, newspaper announcements or other news articles about the project and/or copies of public meeting announcements and handouts. NDOR and FHWA attendance at public meetings is optional, based on the level and complexity of the project. However, NDOR will make every effort to attend these meetings. Examples of a public involvement plan and required milestones are available in [NDOR's Public Involvement Manual](#).

Initial Contact Letters

Notifying residents directly impacted by the proposed improvements is essential to the NEPA and project development processes and should be done early in the process. This is typically done by providing these residences with a letter or flyer. The property owner notification serves three main purposes: solicitation of input regarding the project scope or potential impacts, notification of the beginning of a proposed project that may impact them and of pending field studies that require access to their property. This initial letter should include a project description and information on what type of work may be performed and who to contact at the LPA or NDOR if the owner/tenant has questions. It should also include details that explain the ROW acquisition process, questions concerning access for studies (*non-destructive, short or long term, etc.*), on what should be done if property damage occurs. For projects with more complex community impacts or environmental justice issues, the property owner notification may be extended to more than those located within or along the proposed alignment study area.

Mailing Lists

The LPA is responsible for compiling a mailing list, updating the mailing list as warranted and sending the notifications as agreed upon in the scope meeting. NDOR may supply an initial list and suggestions of whom to include. The maintenance of an accurate mailing list is critical to the success of the environmental process that can span several years for completion.

Public Meeting

Typically, a public meeting will be sufficient for most types of public involvement. All public meetings require public notice of the meeting at least fourteen (14) days in advance. Suggestions for locations of notice are in city newspapers, community newsletters, public interest groups, and public building bulletin boards. Many kinds of formats are acceptable but selection will be dependent on the type of information that the LPA is providing or receiving. It is

important to consider a number of factors when selecting a place and a time for meetings. Some factors to consider are:

- What is the expected attendance and are there adequate copies of handouts?
- Is the location of the meeting in the vicinity of the impacted communities?
- Are there alternative transportation routes providing access to the meeting?
- Is it ADA accessible?
- Will interpreters be needed (*foreign or sign language*)?
- Should the meeting location have restroom facilities?
- Will a microphone, speaker system, projector be needed?
- Are there community activities on certain nights that may limit attendance?
- Should multiple meetings be held at different times of the day, different days, and multiple locations to ensure comprehensive coverage of interested parties created by the proposed project?
- Are subject matter experts needed?

There are several formats through which project information may be presented to the public. An informational meeting format may be appropriate. An example of this type of meeting is when the LPA presents the project, explains the process, answers questions, and allows audience participation. The informational meeting format has a set beginning and end time.

An open house format may also serve the needs of the public. An open house format generally has small, separate, information areas that may contain focus areas of environmental studies, mapping, ROW information, construction information, and an area for commenting. An open house format often requires a person who fully understands both the proposed project and topic at the information area. This format allows for one-on-one discussions and for individuals to go to only those areas they have interests. The public can enter and leave at their leisure. For projects requiring acquisition of ROW, it is recommended that qualified real estate representatives attend the meeting to address any ROW acquisition questions or issues.

The location and anticipated attendance must be considered when selecting a suitable meeting facility. Any facility to be used for a public meeting must be ADA compliant.

Public Hearings

A public hearing is necessary for projects that require preparation of an EIS and possibly an EA depending on complexity. Public hearings have a number of requirements. A notice of opportunity for public hearing will explain the procedure and specify the deadline for requesting a public hearing. The deadline for requesting a public hearing will not be less than twenty-one (21) days after the date of publication of the first notice, not less than fourteen (14)

days after the date of publication of the second notice. For EAs, FHWA must be consulted with to determine if a hearing or meeting is required between the signed draft EA and the final EA submittal.

Federal regulation 40 CFR 1502.6(c)(2) states that if a DEIS is to be considered at a public hearing, the LPA will make the DEIS available to the public at least fifteen (15) days in advance (*unless the purpose of the hearings is to provide information for preparing the DEIS*). Formal or open forum public hearings are held after the EA, DEIS, or FEIS has been approved for circulation by the FHWA and prior to commitment to any of the alternatives to be presented at the hearing. The LPA with NDOR is responsible for successful completion of all public hearing requirements.

The LPA administrative lead will be identified as the presiding officer for the hearing. If the hearing covers controversial issues, the LPA should consider selecting a neutral person, who has no interest in the project, to act as presiding officer. The following main topics will be presented to the public at the public hearing:

- A brief introduction stating local, State, and Federal roles;
- A summary of coordination and interaction to date;
- Explain the purpose and need of the project;
- Logical termini;
- State the design assumptions;
- Summarize the traffic analysis;
- Review the major features of all project alternatives;
- A short discussion on the draft NEPA document;
- Present potential impacts;
- Identify the location of any wetlands crossed or impacted by the project;
- Present the noise study and air quality findings;
- Discuss the tentative ROW impacts such as: the schedule of acquisition, the estimated number of families, business and other concerns to be relocated, housing availability, and the relocation assistance program;
- Provide a tentative time schedule for construction noting any significant items that may affect the schedule;
- Other information items that may be of particular concern within the proposed project area; and
- Reasonably foreseeable future actions affecting the same resources as the proposed project.

The LPA should document any public meeting, including sign-in sheet(s), a discussion of who attended, any handouts provided for the meeting, what issues were discussed or comments and how they were addressed. All coordination needs to be fully documented and summarized in the environmental document.

Record of Public Hearing

After a formal or open forum public hearing is held, a Record of Public Hearing must be prepared by the LPA to document the proceeding. The Record of Public Hearing includes a title page, table of contents, resume of the hearing, index of speakers, a verbatim transcript, reproductions of displays, documents submitted for the record, reproductions of publicity items (*including public hearing notices*) and a list of invitations. The open forum hearing record will also include a synopsis of the comments, concerns and questions discussed with the public but not entered into the formal verbatim transcript. Copies of the Record of Public Hearing will be forwarded to the NDOR LPD Project Coordinator who will keep it on file. Additional copies may be requested by the public or FHWA. Requests for copies are normally made at the time of the hearing.

5.13 Environmental Studies

FHWA policy states “to the fullest extent possible, all environmental investigations, reviews, and consultations are coordinated as a single process, and compliance with all applicable environmental requirements be reflected in the environmental document.” (23 CFR 771.105(a))

Two of the fundamentals of the NEPA decision-making process are the examination and disclosure of potential environmental impacts and mitigation (*if necessary*). Gathering information through studies, analysis, consultation, and careful consideration is crucial to evaluating alternatives while considering the social, environmental and economic aspects of an alternative with respect to its impacts. NEPA requires that a systematic interdisciplinary approach be implemented which will ensure the use of the natural and social sciences in planning and decision making. An interdisciplinary approach provides a broad perspective on all interrelated issues affecting the project decision. The level of effort in each of the topics is project and classification specific.

5.13.1 Determining the Study Area

The study area should be established so that the area studied is sufficient enough to analyze impacts of all reasonable alternatives that meet the project purpose and need as well as accommodate engineering solutions or alternatives to impacting or minimizing impacts to resources. The goal is to establish a study area that serves as the basis of environmental studies from project conception to detailed design. Having an appropriate study area for a project, early in the process, helps to reduce project delays, unexpected costs, and additional studies and minimizes the potential for reevaluation of the environmental studies and the environmental document.

The boundary should be large enough to allow for flexibility in the development during the detailed design phase. The study area should be established so that the area studied is sufficient enough to analyze impacts of all viable alternatives meeting purpose and need as well as accommodate engineering solutions or alternatives to impacting or minimizing the impact to the area of avoidance.

Careful examination should include identification of obvious environmental constraints or areas of environmental sensitivity such as, but not limited to, wetland areas, drainage basin (*watershed*) or sub-basins, archaeological resources, historic districts and neighborhoods, historic properties, local population of individual species, and gas stations. Design parameters such as: slopes, tapers, turn lanes, or areas of difficulty such as possible poor soils should also be identified. The LPA with NDOR and FHWA needs to discuss how the project study areas is defined and seek comments on whether certain studies, to determine and assess indirect impacts or cumulative impacts, should define areas outside that project study area. It is important for the LPA to consider impacts within the study area that are short and long term as well as direct, indirect, and cumulative.

In summary, the LPA with cooperation with NDOR and FHWA will reach concurrence on the location of the boundary of study area at the scope meeting. The LPA will complete environmental studies for the area, as well as provide preliminary design (*typically 30% design*) of the proposed project within those limits to evaluate the impact of the proposed project. If the study area is modified during the development of the proposed project, it may result in the need for either additional studies or a reevaluation of the environmental document. A change in the study area after the scoping meeting may result in a delay in project delivery.

5.13.2 Resource Consultation, Analysis and Evaluation

The LPA, in consultation with NDOR, must coordinate with resource agencies to determine potential impacts and mitigation measures. Due to the potential varied nature of projects, it is not uncommon for multiple seasons or years to be needed to adequately complete the field work and analysis in a study area. Acknowledging this before setting a project schedule will aid in the creation of project milestones. The number and type of resources impacted could affect the project schedule, making this a crucial phase in the NEPA process.

5.13.3 Water Resources

Federal, State and local laws, statues and regulations, require all projects to consider, research, and field test a number of aspects of water quality and water uses during the preparation of the NEPA document. Throughout the study phase, focus on water quality issues must consider short and long term impacts. Those short-term impacts caused during construction such as water running off the site that may be muddy or contaminated and long term impacts that are permanent until modified during future construction efforts.

The Fish and Wildlife Coordination Act (FWCA) requires coordination for each project with proposed water resource development (*for example: impounding water, diverting water, deepening channels, or other modifications impacting navigation or drainage*) that would require a permit or license. Early coordination should be reflected during the permitting phase with exception of project or policy changes. For additional information, see the following resource:

<http://www.environment.fhwa.gov/guidebook/vol1/doc17g.pdf>

As noted above, FWCA applies to projects that receive federal funding. If a project is coordinated under FWCA, and either USFWS or the State Wildlife Agency makes a report or recommendations for wildlife mitigation or enhancement, the report or recommendation may be:

- implemented in its entirety;
- partially implemented; or
- not implemented.

Failure to fully consider a report or recommendation made by USFWS or State Wildlife Agency could jeopardize either FHWA funding for the project or receipt of any required permits from USACE. Decisions on implementation of reports or recommendations must be fully described in the project environmental documents. If reports or recommendations are partially or completely rejected for implementation, the environmental document must contain a justification that is satisfactory to FHWA.

5.13.4 Streams, Channels and Wetlands - Clean Water Act (Section 404 & 401)

It is important for the LPA to note that FHWA has entered into a formal merger of Section 404 of the Clean Water Act with the US Army Corps of Engineers (USACE). The purpose for the merger of NEPA and Section 404 is to expedite project development and decision-making and, from the LPA point of view, ensure timely and orderly obligation of Federal-aid construction funds.

Merging the common elements of the NEPA and Section 404 processes helps make a single overall public interest decision through early and continued participation by all responsible agencies. The merger process will accommodate concurrent environmental documentation regardless of classification. By addressing the requirements of the Section 404 permit process during the NEPA phase of project development, significant time savings, avoidance of prolonged controversy and minimization of potential re-work are possible.

Coordination with the USACE is important because they have jurisdiction to review and analyze actions which result in impacts caused by filling and/or excavating in the "Waters of the United States". Waters of the US are administratively defined as follows:

- The traditional "navigable waters of the US" including adjacent wetlands;
- All interstate waters including interstate wetlands;

- All other waters such as interstate lakes, rivers, streams (*including intermittent streams*), prairie potholes, mudflats, playa lakes, etc.;
- All impoundments of these waters;
- Tributaries of the above listed waters;
- Wetlands adjacent to the above waters; and
- Arroyos.

Generally, the following waters will require a more lengthy (*fact-specific analysis*) prior to determining jurisdiction:

- Non-navigable tributaries that are not relatively permanent;
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent; and
- Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary.

The USACE is also required to coordinate with the USFWS, EPA and NDEQ. The LPA needs to assure comprehensive coordination involving agencies and entities in this process to minimize work effort and maximize timeliness of responses.

When coordinating with the USACE, the LPA will be required to submit detailed drawings which clearly show the scope, size, and the location of the project in relation to wetlands, creeks, rivers, or other water bodies. The environmental document should indicate if any streams are present and whether they will be impacted (*i.e., work will occur below ordinary high water level*). The stream name, quality designation, and the type and nature of the impact should be described. If a stream is present but no impacts are expected, the documentation should state why there is no impact. If stream impacts occur, discuss what type of structure(s) are proposed versus what is currently in place and quantify the impacts. If stream work will be extensive, the discussion should include mapping and/or site plans to aid in the impact interpretation. Impacts to fish and wildlife resulting from the loss, degradation, or modification of aquatic or terrestrial habitat should also be discussed. The discussion should also include what coordination has taken place to date and any commitments or design issues resulting from the coordination.

The LPA must coordinate with State and local entities that have responsibility for impacts to water and ensure that the project complies with Executive Order 11990 Protection of Wetlands. The Order requires Federal agencies, in planning their actions, to avoid to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative. If avoidance is not possible, agencies need to minimize impacts to wetland sites and mitigate the impacts affecting a wetland.

When a proposed alignment or project impacts wetlands, documentation must:

- Identify the type, quality, and function of wetlands involved;
- Describe the impacts to the wetlands;
- Evaluate alternatives which would avoid these wetlands; and
- Identify practicable measures to minimize harm to the wetlands.

Wetlands should be identified by using the definition of [33 CFR 328.3\(b\)](#) which requires the presence of hydrophytic vegetation, hydric soils, and wetland hydrology. Exhibits showing wetlands in the project impact area in relation to the alternatives should be provided.

The wetlands analysis should be sufficiently detailed to provide an understanding of the following elements:

- The importance of the impacted wetland(s); and
- The severity of this impact.

In evaluating the importance of the wetlands, the analysis should consider such factors as:

- The primary functions of the wetlands (*e.g., flood control, wildlife habitat, ground water recharge, etc.*);
- The relative importance of these functions to the total wetland resource of the area; and
- Other factors such as uniqueness that may contribute to the wetlands importance.

In determining the wetland impact, the analysis should show the project's effects on the stability and quality of the wetland(s). This analysis should consider the short and long-term effects on the wetlands and the importance of any loss such as:

- Flood control capacity;
- Water pollution abatement capacity; and
- Fish and wildlife habitat value.

The methodology developed by FHWA and described in reports numbered FHWA-IP-82-23 and FHWA IP-82-24, "A Method for Wetland Functional Assessment Volumes I and II," is recommended for use in conducting this analysis (See [FHWA Technical Advisory T6640.8A, Guidance for Preparing and Processing Environmental and Section 4\(f\) Documents, dated October 30, 1987](#)). Knowing the importance of the wetlands involved and the degree of the impact, the LPA will be in a better position to determine the mitigation efforts necessary to minimize harm to these wetlands. Mitigation measures which should be considered include preservation and improvement of existing wetlands and creation of new wetlands (*consistent with 23 CFR 777*). Project mitigation measures shall be listed as environmental commitments in the document.

If the preferred alternative is located in wetlands, to the fullest extent possible, the documentation needs to contain the finding required by [Executive Order 11990](#) that there are no practicable alternatives to construction in wetlands. The finding should be included in a separate subsection entitled "Wetland Finding" and should be supported by the following information:

- A reference to Executive Order 11990;
- An explanation why there are no practicable alternatives to the proposed action;
- An explanation why the proposed action includes all practicable measures to minimize harm to wetlands; and
- A concluding statement that: "Based upon the above considerations, it is determined that there is no practicable alternative to the proposed construction in wetlands and that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use."

If an LPA has a proposed project that impacts the waters of the US, a permit must be obtained from the USACE.

5.13.5 Navigable Waters – Rivers and Harbor Act (Section 10)

An LPA will have to coordinate with the USACE and U.S. Coast Guard (USCG) on proposed projects that cross navigable waters of the US. **The LPA must take measures to prohibit the obstruction or alteration of these navigable waters. If the LPA proposed project is construction, maintenance and/or operations of a bridge or approaches over navigable waters, consultation and coordination with the USCG is required. The USCG is also responsible for security along rivers. If an LPA is proposing work within 250 feet of the Missouri River shoreline, authorization by the Coast Guard Captain of the Port, St. Louis or designated representative is mandatory (e.g., Fort Calhoun and Brownville, Nebraska).** Section 10 also addresses non-Federal actions and might apply to LPA projects.

If an LPA has a proposed project that crosses navigable waters of the US, a permit must be obtained from the USACE.

5.13.6 Surface Water

The NE Department of Natural Resources (DNR) has jurisdiction over all matters pertaining to surface water, rights for storage, irrigation, power, manufacturing, in stream flows, and other beneficial uses. Any proposed project which may impact, divert, and/or use the waters of a natural stream or lake must first get a permit or water right from the DNR. In water short areas of the state, the process for receiving a permit may include a formal hearing. These hearings are subject to review by the Nebraska Court of Appeals.

5.13.7 Platte River Recovery Implementation Program

The purpose of this program is to provide ESA compliance for water users in the Platte River basin, while managing certain land and water resources to provide benefits for those species. Through this program, the States and the Federal government will provide land, water, and scientific monitoring and research to evaluate program benefits for the target species.

However, an important benefit of the program for individual water-related projects in the Platte River basin is a streamlined process for addressing depletion-related impacts to the target species and whooping crane critical habitat. The four Federally-listed species that have been the focus of recovery efforts (*the “target species”*) are:

- The whooping crane (*Grus americana*);
- The northern Great Plains population of the piping plover (*Charadrius melodus*);
- The interior least tern (*Sternula antillarum*); and
- The pallid sturgeon (*Scaphirhynchus albus*).

Streamlined consultation is made possible by the programmatic biological opinion of June 16, 2006, which determined that the Program, including the continuation of existing and certain new water-related activities in the Platte River basin, is likely to neither jeopardize the continued existence of the four target species nor adversely modify designated critical habitat in Nebraska.

Therefore, when an individual project is “covered by the Program”, its flow-related effects are considered already addressed under this 2006 Programmatic Biological Opinion (*PBO*), which evaluated likely actions and effects included in the FEIS. As a result, the often laborious process of developing a stand-alone biological opinion (*BO*) addressing individual project impacts can be completed by a much simpler boilerplate “tiered BO” confirming that the relevant water uses are covered.

For water-related activities along the Platte River (*includes all watershed entering the Platte River such as the South Platte, North Platte, and the river basins of the Loup River*) which require a Federal action and/or involve Federal monies, the LPA and NDOR, working with the lead Federal agency in the consultation process, needs to coordinate with FWS and NE NDR to take steps to be “covered by the Program”. Upon satisfactory completion of these steps, the service can issue a “tiered biological opinion” to the lead Federal agency documenting that the project’s existing water-related activities are covered by the program and are not likely to jeopardize the continued existence of the target species nor adversely modify critical habitat.

If the new water-related activity is one for which a permit is required from the Nebraska DNR or from a Natural Resource District with land that is subject to the Nebraska Plan, the lead Federal agency must confirm that the corresponding entity has been granted a permit.

5.13.8 Floodplain Management (Executive Order 11988)

Floodplain management is the operation of a community program of corrective and preventative measures for reducing flood damage. These measures take a variety of forms and generally include requirements for zoning, subdivision or building, and special-purpose floodplain ordinances. FHWA has a responsibility to evaluate the potential effects of any actions it may take in a floodplain.

Protection of floodways and floodplains is required under 23 CFR 650A, which is explained in [FHWA's policy guide on assessing floodplain impacts](http://www.fhwa.dot.gov/legsregs/directives/fapg/cfr0650a.htm) that can be found at <http://www.fhwa.dot.gov/legsregs/directives/fapg/cfr0650a.htm>. Protection of floodplains and floodways is also required by Executive Order 11988 Floodplain Management and USDOT Order 550.2 Floodplain Management and Protection.

The LPA will determine whether the proposed project will occur in a floodplain. A preliminary analysis is needed in the NEPA phase to determine whether a project alternative will encroach on any base (*100-year*) floodplain and/or regulatory floodway, and if so the “worst-case” amount of encroachment. That is, the amount of encroachment (*generally in acres*) if no structures are built to span part or all of an area. The first step in the analysis is for the LPA to consult the National Flood Insurance Program Flood Insurance Rate Maps if such maps exist for the subject community. Information of community participation in National Flood Insurance Program is available through the website of the [FEMA](http://www.fema.gov). The flood insurance rate maps, aerial photographs, and USGS quadrangle maps are needed to conduct the analysis.

The environmental document should identify the locations and sizes of floodplains. If applicable, the document should state that “no significant encroachments of the floodplain are anticipated that would result in a potential for interruption of a transportation facility which is needed for emergency vehicles or provides the community’s only evacuation route; a significant risk; including property loss or hazard to life; or a significant adverse impact on the natural and beneficial floodplain values.”

If an LPA proposes to, conduct, support, or allow an action to be located in a floodplain, the LPA will consider alternatives to avoid adverse effects and incompatible development in the floodplains. If the only practicable alternative consistent with the law and with the policy set forth in this Order requires proposed work in a floodplain, the LPA, with NDOR and FHWA concurrence will prior to taking action, design or modify its action in order to minimize potential harm to or within the floodplain, consistent with regulations.

5.13.9 Wild and Scenic Rivers

The Wild and Scenic Rivers Act protects the free-flowing waters of many of our nation's most spectacular rivers. The Act is notable for safeguarding the special character of these rivers, while also recognizing the potential for appropriate use and development. These living landscapes are uniquely managed to protect the public's enjoyment of these heritage resources for present and future generations. The managing agencies also try to accommodate and reflect community and landowner interests. The Act purposefully strives to balance river development with permanent protection for the country's most outstanding free-flowing rivers. To accomplish this, the Act prohibits federal support for actions, such as the construction of dams or other in-stream activities that would diminish the river's free flow or outstanding resource values. Designation neither prohibits development nor gives the Federal government control over private property. The Act specifically:

- Prohibits dams and other Federally-assisted water resources projects that would adversely affect river values;
- Protects outstanding natural, cultural, or recreational values;
- Ensures water quality is maintained; and
- Requires the creation of a comprehensive river management plan that addresses resource protection, development of lands and facilities, user capacities, and other management practices necessary to achieve purposes of the Act.

The LPA must analyze potential direct and indirect effects of the project. Potential effects include alternation of the free-flowing nature of the river, alteration of the setting, or deterioration of the water quality. If adverse effects are identified, the LPA in consultation with NDOR and the National Park Service (*NPS*) would make every effort to avoid or reduce adverse impacts for any proposed improvement, realignment and/or new construction. If a proposed project would have a negative impact on river values, the administering/managing Federal agency will work with the LPA to modify the proposal. A presidential directive requires each Federal agency, as part of its normal planning and environmental review processes, to take care to avoid or mitigate adverse effects on rivers identified as Wild and Scenic.

Therefore, proposed projects must be examined for conformance to the Wild and Scenic Rivers Act of 1968. A determination of whether the proposal would invade the river area or unreasonably diminish the wild, scenic, recreational, and fish and wildlife values present in the area is required. Consultation will be initiated by the LPA when the project:

- Would be in close proximity of the river;
- Involves withdrawing water from the river or discharging water to the river via a point source; or
- Would be visible from the river.

Wild and scenic rivers in Nebraska include, but may not be limited to, northern portions of the Missouri River and Niobrara River. Contact the National Park Service if the project is within one mile of a protected river area, or is under consideration for inclusion in the system, to determine potential effects, approval of actions or recommend measures to eliminate adverse effect. For more information go to: <http://www.rivers.gov/> and to see the list of rivers in Nebraska, go to: <http://www.nps.gov/ncrc/programs/rtca/nri/states/ne.html>.

The NPS has compiled and maintains a Nationwide Rivers Inventory (*NRI*), a register of river segments that potentially qualify as national wild, scenic, or recreational river areas. Further, all agencies are required to consult with the NPS prior to taking actions which could effectively foreclose wild, scenic or recreational status for rivers on the inventory. Study rivers within Nebraska are found on the [Nationwide Rivers Inventory](#).

Publicly-owned waters of designated wild and scenic rivers are protected by Section 4(f). Additionally, public lands adjacent to a wild and scenic river may be subject to Section 4(f) protection. An examination of any adopted or proposed management plan for a listed river should be helpful in making the determination on applicability of Section 4(f).

5.13.10 Nebraska Ground Water Management and Protection Act

The LPA shall refer to the [Nebraska Department of Natural Resources](#) for information on: Nebraska state law, State moratorium on impacts, well protection and the protection of ground water/aquifers.

5.13.11 Protected, Threatened, and Endangered, Invasive and Noxious Species **Protected, Threatened, and Endangered Species**

Section 7 of the Endangered Species Act (ESA) of 1973, as amended, and the Fish and Wildlife Coordination Act requires that each federal agency confer with the USFWS on any action which is likely to jeopardize the continued existence of any protected species or result in the destruction or adverse modification of critical habitat. FHWA guidance may be found at:

<http://www.fhwa.dot.gov/environment/ecosystems/esalegalhccmem.htm>.

Nebraska Protected Species

The NGPC will consult with the LPA and NDOR on individual projects and will check the Nebraska Natural Heritage Database for a list of protected species pursuant to Neb.Rev.Stat. Section 37-807(3) of the Nongame and Endangered Species Conservation Act (*NESCA*) provides protection to those species of wildlife and plants normally occurring within Nebraska which are determined to be threatened or endangered. The document described below will be reviewed by NDOR for impacts to species listed under NESCA and consultation will be initiated with NGPC, if needed.

FHWA shall ensure the project does not jeopardize the listed Nebraska Protected Species.

For the ESA, the following are important items regarding baseline effects and cumulative effects:

- The total effects of all past activities, including effects of the past operation of the project, current non-Federal activities, and Federal projects with completed Section 7 consultations, form the environmental baseline; and
- To this baseline, future direct and indirect impacts of the project, including effects of any interrelated and interdependent activities, and any reasonably certain future non-Federal activities (*cumulative effects*), are added to determine the total effect on listed species and their habitat.

Whether the project is located in a developed or a less developed area where land is still mostly in a natural state, endangered species or their habitats may be encountered. Generally, this applies to assisted activities that propose new construction, conversion of land use, major rehabilitation of existing buildings and/or the acquisition of undeveloped land. The LPA should utilize the [Technical Assistance Letter](#) to determine if the project area is known to contain State or Federally-listed rare, threatened or endangered species or designated critical habitat. This information will enable the LPA to draft a [Biological Evaluation \(BE\)](#) using the BE template. This template and the Technical Assistance Letter can be found in the appendix of this chapter or obtained from the NDOR LPD Project Coordinator. The LPA must submit the BE to NDOR for review and submittal to the USFWS, through FHWA, and NGPC.

NDOR will submit the following information, on behalf of the LPA, to the USFWS (*through FHWA*) and NGPC:

- The BE provided to NDOR by the LPA;
- A determination form stating the final effect determination;
- Relevant reports, including any environmental impact statement, environmental assessment, or biological assessment prepared; and
- Any other relevant available information on the action, the affected listed species, or critical habitat.

As mentioned in the second bullet, for each listed species in the project area, an evaluation is needed to determine how the proposed project is expected to affect it. The determination will be made by NDOR, with consultation by FHWA, and will result in one of the following:

- The action will have “no effect” on the species;
- The action “may affect, not likely to adversely affect” the species; and
- The action “may affect, likely to adversely affect” the species.

If the proposed action “may affect, likely adversely affect” the species, then formal consultation with USFWS is required.

It is important to note, with or without the three-state Platte River Recovery Implementation Program, Federal-nexus projects in the Platte River basin must undergo Section 7 ESA consultation with the USFWS for actions that may affect Federally-listed species, including potential effects of project-related depletions. This requirement under the ESA does not change with implementation of the Program.

Region: <http://www.fws.gov/mountain-prairie/>

State: <http://www.fws.gov/mountain-prairie/ne.html>

Bald and Golden Eagle Protection Act

In 1940, to prevent the species from becoming extinct, Congress passed the Bald Eagle Protection Act. The Act was extremely comprehensive, prohibiting the take, possession, sale, purchase, barter, or offer to sell, purchase, or barter, export or import of the bald eagle at any time or in any manner.

In 1962, Congress amended the Eagle Act to cover golden eagles, a move that was partially an attempt to strengthen protection of bald eagles, since the latter were often killed by people mistaking them for golden eagles. The golden eagle, however, is accorded somewhat lighter protection under the Act than the bald eagle.

If eagles or their nests are within the area of potential effect, NDOR, in coordination with the LPA, shall coordinate with the USFWS and NGPC.

Responsibilities to Protect Migratory Birds (*Executive Order 13186*)

The Migratory Bird Treaty Act (*MBTA*) provides that it is unlawful for any person or agency to pursue, hunt, take, capture, kill, possess, sell, purchase, barter, import, export, or transport any migratory bird, or any part, nest, or egg or any such bird, unless authorized under a permit issued by the Secretary of the Interior. Some regulatory exceptions apply. Take is defined in regulations as: “pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect.” The MBTA has no provision for incidental take. All take prohibitions refer to direct take of birds, bird parts, or eggs. The MBTA has no requirement for protection of habitat. The MBTA protects over 800 species of birds that occur in the US For more information and to check species lists, visit:

<http://www.fws.gov/migratorybirds/intrnltr/mbta/mbtintro.html>

or

<http://www.fws.gov/laws/lawsdigest/resourcelaws.htm>

or

CITES (*the Convention on International Trade in Endangered Species of Wild Fauna and Flora*):

www.cites.org.

The LPA shall consult with USFWS on this issue. The Migratory Bird treaty act can be found at:

<http://www.fws.gov/migratorybirds/>

Noxious Weeds and Invasive Species (*Executive Order 13112*)

The term "weed" means different things to different people. In the broadest sense, it is any plant growing where it is not wanted. Weeds can be native or non-native, invasive or non invasive, and noxious or not noxious. Legally, a noxious weed is any plant designated by a Federal, State or local government as injurious to public health, agriculture, recreation, wildlife, or property. A noxious weed is also commonly defined as a plant that grows out of place (*i.e., a rose can be a weed in a wheat field*) and is "competitive, persistent, and pernicious."

Invasive plants include not only noxious weeds, but also other plants that are not native to this country. Plants are considered invasive if they have been introduced into an environment where they did not evolve. As a result, they usually have no natural enemies to limit their reproduction and spread. Some invasive plants can produce significant changes to vegetation, composition, structure, or ecosystem function.

Invasive weeds:

- Destroy wildlife habitat;
- Reduce opportunities for hunting, fishing, camping, and other recreational activities;
- Displace many threatened and endangered species;
- Reduce plant and animal diversity because of weed monocultures-single plant species that over run all others in an area;
- Disrupt waterfowl and neo-tropical migratory bird flight patterns and nesting habitats; and
- Cost millions of dollars in treatment and loss of productivity to private landowners.

The LPA also needs to consider and be aware of introducing unwanted species into a proposed project. Recent spread of invasive species that can be harmful to native species may require additional assurances and management practices in the NEPA document and required specifications to limit spread of these species. USFWS and NGPC may include recommendations to minimize impact during consultations. Examples of possible projects that may result in these additional measures can be a borrow site or bridge project utilizing barges.

Invasive plants can dominate and often cause permanent damage to natural plant communities. If not eradicated or controlled, noxious weeds will jeopardize the health of the public lands and the myriad of activities that occur on them.

Federal Noxious Weed Act

Congress passed the Federal Noxious Weed Act of 1974 and the President has signed an Executive Order (13112) to avoid and minimize their spread. The Federal Noxious Weed Act can be found at <http://www.fws.gov/laws/lawsdigest/FEDNOX.HTML>.

Each Federal agency whose actions may affect the status of invasive species shall identify such actions and subject to the availability of appropriations, and within budgetary limits:

- Prevent the introduction of invasive species;
- Detect and respond rapidly to and control populations of such species in a cost-effective and environmentally sound manner;
- Monitor invasive species populations accurately and reliably;
- Provide for restoration of native species and habitat conditions in ecosystems that have been invaded; and
- Not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the US or elsewhere unless, pursuant to guidelines that it has prescribed, the agency has determined and made public its determination that the benefits of such actions clearly outweigh the potential harm caused by invasive species; and that all feasible and prudent measures to minimize risk of harm will be taken in conjunction with the actions.

In cooperation with stakeholders and through public involvement and the NEPA process, the LPA shall make accommodations to consider and control noxious weeds.

Both the Federal and State agencies responsible for overseeing the noxious weed program can identify species of concern. The list created by the U.S. Department of Agriculture, Bureau of Plant Industry, can be found at: <http://plants.usda.gov/java/noxiousDriver#state>.

Nebraska Noxious Weed Control Act

The failure to control noxious weeds on lands in this state is a serious problem that is detrimental to the production of crops and livestock and to the welfare of residents of this state. Noxious weeds may devalue land and reduces tax revenue (*Neb. Rev. Stat. 2-945.02(1)*). Provisions of the Noxious Weed Control Act include:

- Section 2-954 of the Nebraska Noxious Weed Control Act requires each weed control authority to establish a coordinated program for the control of noxious weeds within the county;
- Per Section 2-946.02 of the Act, all cities and villages in this state shall provide for the control of noxious weeds within their jurisdiction and may appropriate money for and make the necessary expenditures for noxious weed control. The director shall advise cities and villages concerning noxious weed control; and

- Per Section 2-956, the cost of controlling noxious weeds on all land, including highways, roadways, streets, alleys and ROW, owned or controlled by a State department, agency, commission, or board, or a political subdivision shall be paid by the State department, agency, commission, or board in control thereof or the political subdivision out of funds appropriated to the State department, agency, commission, or board or budgeted by the political subdivision for its use.

In addition to the Federal list, the Nebraska Department of Agriculture develops a list that can be found at: <http://www.agr.state.ne.us/division/bpi/nwp/nwp1.htm>. The Nebraska Director of Agriculture determines which plants are to be deemed as "noxious" and the control measures to be used in preventing their spread. At the time of publication, the following weeds have been designated as noxious in Nebraska:

- Canada thistle (*Cirsium arvense* (L.) Scop.);
- Leafy spurge (*Euphorbia esula* L.);
- Musk thistle (*Carduus nutans* L.);
- Plumeless thistle (*Carduus acanthoides* L.);
- Purple Loosestrife (*Lythrum salicaria* L. and *L. virgatum* - including any cultivars and hybrids);
- Spotted and diffuse knapweeds (*Centaurea maculosa* Lam. and *C. diffusa* Lam.); and
- Saltcedar (*Tamarix ramosissima* Ledeb) and (*Tamarix parviflora* DC).

Other provisions of the Noxious Weed Control Act include:

- County Board: The Noxious Weed Control Act defines county board as being a board of commissioners or supervisors. The duties of the County Board, as stated in the Noxious Weed Control Act, include:
 - Employing one or more weed control superintendents
 - Establishing a tax levy each year for the purpose of paying the expenses authorized to be paid from the noxious weed control fund.
 - Providing for a hearing for any person who is dissatisfied with the amount of any charge made against him or her by a control authority for control work performed.
- Control Authority: The Noxious Weed Control Act defines control authority as being the county weed district board or the County Board of commissioners or supervisors. The Noxious Weed Control Act establishes a procedure for the voters of each county to determine if they want the Noxious Weed Control Act to be administered by the County Board or by an independently elected body, referred to as the county weed district board. Duties of the control authority include:

- Administering the Noxious Weed Control Act at the county level.
 - Establishing a coordinated program for control of noxious weeds within the county.
 - Providing for a public hearing for any landowner who has been served an individual notice who questions the existence of an uncontrolled noxious weed infestation on such landowner's property.
 - Causing proper control methods to be used on noxious weed-infested land when the landowner fails to control such noxious weeds.
 - Issuing individual notices to landowners.
 - Notifying the county attorney when the landowner fails to take action on controlling the noxious weeds on the specified property.
 - Causing notice to be filed with the register of deeds of possible unpaid weed control assessments against the property upon which control measures were used.
- County Weed Superintendent: The county weed superintendent duties include: examining all lands under the jurisdiction of the control authority to determine if the Noxious Weed Control Act and the rules and regulations are being complied with and ascertaining and tabulating the approximate amount and location of land infested with noxious weeds in the county, annually.

5.13.12 Roadside Environment

NDOR has developed [The Plan for the Roadside Environment](#) which will create a roadside that can better overcome the disturbances of construction, withstand the rigors of the Nebraska climate, and perform the landscaping objectives that contribute to safe and maintainable roadsides that complement the surrounding landscape. The Plan provides information basic to the understanding of transportation needs and environment, in all defined landscape regions and roadway corridors of Nebraska. Information is presented in the form of regional maps and text for each of the six (6) landscape regions in Nebraska. Five (5) roadway corridor types are defined which can occur in all regions, with landscape objectives identified for each corridor type.

The LPA with NDOR assistance can evaluate the potential impacts of the project and work through the process and plan accordingly.

5.13.13 Historical, Archeological, and Traditional Cultural Properties Preservation - National Historic Preservation Act (Section 106)

The National Historic Preservation Act requires all Federal agencies to consider historic properties in their actions or undertakings and to afford the Advisory Council on Historic Preservation or the State Historic Preservation Officer as their agent, an opportunity to comment. This means that coordination and consultation with the State Historic Preservation Office or Officer (*commonly referred to as the SHPO*) on individual projects is necessary. The Federal Official (*FHWA for transportation projects*) is responsible under the Act to consult with the SHPO and concur with or not object to the agency's decisions about the preservation of historic properties. LPA coordination with SHPO is directed through NDOR.

The SHPO serves as the focal point for historic preservation planning and acts as a central statewide repository of collected information about historic properties and surveys. The LPA must provide NDOR the project information so that NDOR may consult with the SHPO under the terms of the Programmatic Agreements (PAs) in place, or submit the necessary documentation to FHWA to use in consultation in the event PAs do not apply. If a proposed project may cross or impact tribal trust lands or areas identified as important by a tribe, even though the tribe is no longer a resident in Nebraska, then FHWA, with the help of NDOR, must also consult with the tribal government. NDOR will assist the LPA in determining whether tribal consultation is required and if so, with which tribal governments. Some tribes have a Tribal Historic Preservation Office and Officer or THPO as the point of contact. However, many tribes do not have a THPO, and it is up to the LPA to provide project information to NDOR so that project information may be forwarded to the Tribal government. It may also be necessary to coordinate with tribes that historically used areas or traditional cultural properties that have religious or cultural importance to them.

Traditional Cultural Properties: <http://www.nps.gov/history/nr/publications/bulletins/nrb38/>

Nebraska State Historic Preservation Office: <http://www.nebraskahistory.org/histpres/index.htm>

Archeology and Historic Preservation: *Secretary of the Interior's Standards and Guidelines* can be found at http://www.nps.gov/history/local-law/arch_stnds_0.htm.

Federal Review and Compliance Defined - Section 106

Section 106 of the National Historic Preservation Act requires the LPA to take into account the effect of their undertakings on historic properties, seek ways to avoid or reduce adverse effects their projects may have on historic properties, and afford the Federal Advisory Council on Historic Preservation an opportunity to comment on the project and its effects on historic properties.

The regulations that govern the "Section 106 process," as it is known, also require that the federal agency consult with the State Historic Preservation Office (*SHPO*) to:

- Identify historic properties in the project area;
- Assess the effects a project may have on historic properties located in the project area; and
- Seek ways to avoid or reduce adverse effects the project may have on historic properties.

Section 106 regulations identify the Federal Official, (*FHWA for transportation projects*), as the agency responsible for decisions on identifying and evaluating the eligibility of historic properties, what effects the project would have on historic properties, and if properties are affected, how to resolve adverse effects. The role of the SHPO is to offer information, advice, and to either concur in or object to FHWA findings of eligibility, effect, and ways to resolve adverse effects.

For example, if the FHWA, through NDOR and the LPA, contemplates construction of a project, it must contact the SHPO for assistance in determining whether any sites or structures listed on or eligible for listing on the National Register are located in the project area. (*A list of National Register properties is available on this website under the title [National Register of Historic Places](#). While this provides an inventory of properties currently listed in the National Register, it is not a substitute for a survey of additional potentially eligible resources in the Area of Potential Effect*). If properties that meet the National Register criteria are found, the FHWA (*or NDOR, when designated under the PAs*) must consult with the SHPO to avoid or reduce any harm the project might cause to the property. Note that a property need not actually be listed on the Register, only eligible. The Section 106 process must take place early enough in the planning process to allow for alternatives to be developed that would avoid adverse effects to historic properties. In the example above, the modification of a project's ROW could avoid an archeological site or historic barn.

Public participation in this process is vital. The Section 106 process requires the Federal agency to seek views of the public and interested parties on the identification and evaluation of historic properties, and if adverse effects to historic properties may occur, on the manner in which those adverse effects might be resolved. The SHPO examines information provided by the LPA and NDOR, the Nebraska Historic Buildings Survey, and the National Register, but often the most valuable information comes from comments provided by the public. Section 106 of the 1966 National Historic Preservation Act (*as amended*) is intended to lead Federal agencies to consider historic and cultural properties when planning Federal actions; it is also a law that requires agencies to involve the public and to consider their concerns.

Section 106 calls for meaningful coordination with interested parties to develop a project in a manner that avoids and/or minimizes impacts to historic and cultural resources. As such, initiation of the Section 106 process should occur as early as possible in the planning process to allow for alternatives that would avoid adverse effects to historic properties. It is suggested that consideration of the following process occur as early as during the preparation of the project NEPA document.

The provisions of the National Historic Preservation Act are satisfied if a finding can be made that the project does not have potential to affect historic properties.

If the proposed project has the potential to affect historic properties, the LPA must determine the Area of Potential Effects (*APE*), analyze the potential impacts of their project on cultural and historic resources, and provide NDOR/FHWA with the materials needed to consult with SHPO, tribes, and any other interested parties, as appropriate.

The LPA will submit documentation containing the following information to the NDOR LPD Project Coordinator, in order to initiate the Section 106 process:

- Description of the APE, including the legal description(s), detailed maps and photos of the project site;
- A description of the steps taken to identify historic properties;
- A draft recommendation of effect determinations;
- Justification for the effect determination including efforts to avoid, minimize and mitigate impacts; and
- Summary of coordination efforts with the public, SHPO, and other interested parties. Remember, consultation regarding eligibility of sites and effects to historic resources with the SHPO, tribes, and other agencies is completed by NDOR/FHWA.

Section 106 of the NEPA requires FHWA to make a determination of effect from the undertaking on any historic and/or cultural resource. Depending on the evaluation and the extent of the project's impacts, the effect determination will be one of the following conclusions:

- No historic properties affected (*or no effects to historic properties*);
- No adverse affect (*or no historic properties adversely affected*); and
- Adverse affect (*or historic properties are adversely affected*).

No Historic Properties Affected

This is the appropriate conclusion if the project will not impact any historic and/or cultural resources or if no resources are present within the APE. If this conclusion is appropriate, the local agency will provide documentation of this finding, including the information outlined in the sections above. The NDOR LPD Project Coordinator will transmit the documentation to the NDOR Environmental Unit for review. This review typically requires three (3) to four (4) weeks and may require more than one revision, prior to NDOR's or FHWA's approval. By law, SHPO and consulting agencies are allowed thirty (30) days to respond to a request for consultation.

No Adverse Affect

This conclusion is appropriate when historic properties are present and an undertaking may impact those properties, but the impacts do not meet the criteria for an adverse affect as summarized at the beginning of this section.

The LPA may propose a finding of no adverse affect when the impacts of the undertaking do not meet the criteria for an adverse affect or the undertaking is modified (*through coordination with SHPO, area Tribes, and interested consulting parties*) to prevent or mitigate an adverse affect on any historic or cultural resources.

If this conclusion is appropriate, the LPA will provide all documentation for this finding to the NDOR LPD Project Coordinator for transmittal to the NDOR Environmental Unit and FHWA for review. This review typically requires three to four weeks and may require more than one revision, prior to final approval.

Once satisfied with the survey's findings, the NDOR Environmental Unit will forward a copy of the survey to either FHWA (*if the PAs do not apply*) or to SHPO, area tribes, and any other interested consulting parties for review and comment. If SHPO or any consulting party disagrees with the LPA findings, within the thirty (30) day review period, the party shall specify the reasons for disagreeing with the findings and forward their response to the NDOR Environmental Unit or FHWA. NDOR will then coordinate, as appropriate, with FHWA, the NDOR LPD Project Coordinator, and the LPA to resolve the objections.

If resolution is not achieved, NDOR may request FHWA elevate the matter to the Advisory Council for Historic Preservation (ACHP). The ACHP will review the finding and notify FHWA of its determination within fifteen (15) days of receiving the documentation from FHWA. The LPA must proceed in accordance with the ACHP's determination. If the ACHP does not respond within fifteen days of receipt of the finding, FHWA may assume concurrence with the finding and proceed accordingly.

Adverse Affect

An adverse effect determination is appropriate when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that is on or eligible for the National Register of Historic Places in a manner that diminishes the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Adverse effects on historic properties include, but are not limited to:

- Physical destruction of or damage to all or part of the property;
- Alteration of property, including restoration, rehabilitation, repair,
- Maintenance, etc. that is not consistent with the Secretary's Standards for the Treatment of Historic Properties ([36 CFR Part 68](#)) and applicable guidelines;
- Removal of the property from its historic location;
- Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance; and
- Introduction of visual or audible elements that diminish the integrity of the property's significant historic features.

If this conclusion is appropriate, the LPA will provide documentation for this finding including the information outlined in this section to the NDOR LPD Project Coordinator for transmittal to the NDOR Environmental Unit for review. This review typically requires three (3) to four (4) weeks and may require more than one revision, prior to NDOR's approval. Once satisfied with the survey's findings, NDOR will forward a copy of the survey to FHWA for review and comment.

The NDOR, and FHWA will consult with SHPO, area tribes, and any other interested consulting party to seek opportunities to avoid, minimize, or mitigate the adverse effect. At the same time, FHWA will notify the Advisory Council on Historic Preservation and determine whether or not they will participate in the resolution of adverse effects. If agreement is reached between all parties on how the adverse effects will be resolved, all appropriate parties will execute a Memorandum of Agreement (MOA). The FHWA will submit a copy of the executed MOA to the ACHP, prior to approving NEPA.

In situations where any party does not concur with the proposed resolution for any adverse affects, the MOA may be executed so long as FHWA, NDOR, and the SHPO or the ACHP agree with the proposed resolution. If the project occurs on Indian tribal trust land, the affected Indian tribe must also agree.

5.13.14 Tribal Land

If tribal lands are present within the proposed project limits, study area or will be impacted by the proposed project, coordination efforts must occur with the tribe(s) and be documented. Even though the project sponsor is an LPA, because the project is a Federal undertaking due to the use of Federal funding. FHWA will consult with them rather than the LPA. FHWA is obligated by law to consult with Federally recognized Indian tribes. Topics to be coordinated by the LPA include:

- Coordinate new development with ongoing land use planning by the tribe;
- Coordinate related tribal programs and clarify areas where regulations overlap or leave gaps that affect the environment such as land use plans, water quality regulations, fish and wildlife protections, building codes, solid waste codes, preservation of historic sites, preservation of spiritual sites, and cemetery preservation;
- Facilitate public participation in planning and development decisions through public hearings and comments on proposed projects;
- Provide procedures for tribes to monitor ongoing development projects for consistency with permits and plans; and
- Coordinate tribal compliance with Federal environmental laws as they apply to tribal lands, and provide a framework for compliance with both Federal and tribal environmental requirements.

The LPA must consider traditional cultural properties as sacred and historic land use. Also, information disclosed to the LPA about locations that a tribe has attached religious and cultural importance must be treated as confidential. Care needs to be taken to protect that information from inadvertent disclosure and may be addressed by keeping reports of that information stored at the FHWA office.

5.13.15 Air Quality – Clean Air Act

The Clean Air Act Amendments of 1990, Titles I, III, and V contain guidance for air quality issues. They cover the provisions for attainment and maintenance of ambient air quality standards, the reduction of hazardous-air-pollutant emissions and new operating permits for all major sources of these emissions.

An air quality analysis is required by law for Federally funded projects and required by State policy for other funded projects that:

- Involve construction of new roadway;
- Significantly change the horizontal or vertical alignment of an existing roadway; or
- Increase the number of through traffic lanes on an existing roadway.

Generally, recipients must refrain from projects that either increase air pollution or expose residents to excessive levels of air pollution. Projects that involve installation of large fuel burning equipment, demolition, sandblasting or paint removal, spray painting, etc., must be evaluated to determine applicable requirements and compliance methods.

In addition, at the Federal and State level, a wide variety of asbestos regulations and guidelines have been established that require training and licensing of contractors and inspectors, and abatement actions.

Contact the Department of [Environmental Quality](#) or NDOR to determine compliance with Nebraska Air Quality Standards.

5.13.16 Noise Analysis and Abatement

A traffic noise analysis is required by law for Federally funded projects and required by State policy for other funded projects that:

- Involve construction of new roadway;
- Significantly change the horizontal or vertical alignment of an existing roadway; or
- Increase the number of through traffic lanes on an existing roadway.

It is important for the LPA to consider not only long-term noise impacts resulting from a proposed project in an alternative analysis but the temporary impacts caused by construction necessary to build the alternative. See the [NDOR Noise Analysis and Abatement Policy](#) and [23 CFR 772](#) for regulations and information concerning project applicability.

For projects including acquisition for residential or noise sensitive use, conversion of land use to residential, substantial rehabilitation, or new construction for residential or other noise sensitive uses, a noise assessment must be prepared if the site is located within 1,000 feet of a major highway or busy road, 3,000 feet of an active railroad line, five (5) miles of a civil airport, or fifteen (15) miles of a military airfield, or 1,000 feet from any other noise generating source such as an industrial plant. Regulations state that noise attenuation measures shall be “strongly encouraged” in substantial rehabilitation projects where the average ambient Day-Night Noise Level (DNL) exceeds sixty-five (65) decibels (dB).

For new construction of residential or other noise sensitive use projects, construction techniques must provide sufficient noise attenuation in any building to reduce the exterior noise level of sixty-five (65) dB or less to an interior noise level of forty-five (45) dB or less. Additional window-wall attenuation or other mitigation action is required to reduce exterior DNL from the sixty-five (65) to seventy-five (75) dB zone to interior level of forty-five (45) dB. Areas in which exterior noise levels exceed DNL seventy-five (75) are considered unacceptable.

If the project will include any of the preceding triggers, identify and describe any potential noise receptors within the project area and subsequent impacts to those noise receptors. If impacts are identified, describe significance and proposed mitigation measures. Attach a copy of the noise study, if applicable.

Visual Impacts

The Highway Beautification Act (*HBA*) of 1965, as amended limits the erection of new off-property outdoor advertising signs to zoned and unzoned commercial and industrial areas. Therefore, when considering such signs in areas zoned commercial or industrial, it is essential that the zoning be consistent with the intent of the HBA. When application for a zoning change is made for the purposes of erecting outdoor advertising signs, any commercial or industrial zoning enacted as a result should be considered as an attempt to circumvent the intent of the HBA and applications for sign permits in these areas should be denied.

5.13.17 Hazardous Waste

Stringent Federal and State environmental laws and regulations dictate an LPA's full responsibility for cleanup and proper disposal of hazardous materials. There are also several laws and regulations that deal with hazardous waste for both underground and aboveground storage tanks. Properties containing hazardous and nonhazardous solid wastes are frequently encountered in ROW acquisitions. Early identification and planning will allow selection of feasible alternatives. In addressing hazardous and solid wastes, the goals are to:

- Avoid unacceptable cleanup and legal liability; and
- Comply with federal and state laws and regulations regarding cleanup.

LPAs shall evaluate proposed corridors for hazardous waste such as abandoned gas stations and solid waste sites such as landfills and shooting ranges. Investigations must be current at the time the NEPA determination is made, with a mitigation measure to "check again" to see if conditions have changed before bid letting. Coordination with the NDOR will help determine liability, regulatory requirements, and potential cleanup costs. Any unknown sites found during project construction shall be handled in accordance with Federal and State laws and regulations. Below is a list of possible sources to help assist in identifying possible hazardous waste areas:

- Federal Comprehensive Environmental Response, Compensation, and Liability Information System (*CERCLIS*): <http://www.epa.gov/superfund/sites>;
- EPA Envirofacts: http://www.epa.gov/enviro/index_java.htm;
- Nebraska Department of Natural Resources: <http://www.dnr.ne.gov/>;
- Leaking Underground Storage Tank (*LUST*) Solid Waste Facilities/Landfill and Surface Spill Site Information in Nebraska: <http://www.ndeq.state.ne.us/>;

- RCRA National Priorities List (*NPL*) documents sites, which have been identified for priority remedial action under the Superfund Program by EPA. The Resource Conservation and Recovery Act Information System (*RCRIS*) is a compilation by the EPA and the NDEQ of reporting Facilities that generate or transport hazardous waste or facilities that treat, store or dispose of hazardous waste.

<http://www.epa.gov/superfund/sites/npl/hrsres/>; and

- State Fire Marshall: <http://www.sfm.state.ne.us/>.

In addition, a visual inspection of the project area is necessary to determine if unreported contaminants may be present within the project footprint.

5.13.18 Social Impacts

Where there are foreseeable impacts to a community or group of people, the LPA should analyze and document the level of impacts to the extent they are distinguishable:

- Changes in the neighborhoods or community cohesion for the various social groups as a result of the project;
- Changes in travel patterns and accessibility to vehicular traffic, bicycles, or pedestrians;
- Direct impacts to school districts, churches, police, and fire protection;
- Impacts to overall public safety; and
- General social groups specifically impacted by the project such as the elderly, handicapped, transit-dependent, and minority/ethnic groups.

The LPA's documentation shall address the severity of possible impacts and identify the mitigation measures to avoid or minimize any adverse effects.

Community Impacts

The LPA must consider a Community Impact Assessment (*CIA*) as an important part of transportation planning and project implementation. The inclusion of *CIA* allows for a community's concerns (*mobility, safety, employment effects, relocation, isolation, etc.*) to be addressed in transportation decision-making. Various laws, publications, and events have impacted the development of *CIA* policies and measures. The history of *CIA* in transportation began with the National Environmental Policy Act of 1969 and the process continues to develop.

More recently, the FHWA, at the request of AASHTO, began efforts to refocus transportation professionals and enhance their expertise on addressing community impact issues. *Community Impact Assessment: A Quick Reference for Transportation* outlines the community impact assessment process, highlights critical issues, identifies tools and sources, and heightens awareness of the impacts of proposed transportation actions on communities, neighborhoods, and people.

For more information on CIA: <http://www.ciatrans.net/>

Reference documents related to CIA can be found at:

http://www.ciatrans.net/cia_resources.html#important

Zoning

LPA needs to consult with local counties, cities, and towns in the immediate area to ensure that the proposed project is consistent with local zoning.

5.13.19 Relocation Impacts

The relocation information provided by the LPA shall be summarized in sufficient detail for all proposed alternatives to adequately explain the relocation situation including anticipated problems and proposed solutions. Where a proposed project will result in displacements, the following information regarding households and businesses should be discussed:

- An estimate of the number of household to be displaced, including the family characteristics such as: minority, ethnic, income level, large family, elderly, and owner/tenant status;
- A discussion comparing available (*decent, safe, and sanitary*) housing in the area with the housing needs of the displaces;
- A discussion of any affected neighborhoods, public facilities, non-profit organizations, and families with needs which may require special relocation considerations; and
- A discussion of the measures to be taken where the existing housing inventory is insufficient, does not meet relocation standards, or is not within the financial capability of the displacees.

For more information concerning relocation, see Chapter 7.

5.13.20 Environmental Justice, and Title VI

Executive Order 12898 - Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations

Executive Order 12898, Federal Actions to Address Environmental Justice (*EJ*) in Minority Populations and Low-Income Populations (2/11/94), requires all Federal agencies, to the extent allowed by law, to administer and implement its programs, policies, and activities that affect human health or the environment so as to identify and avoid “disproportionately high and adverse” effects on minority and low-income populations.

LPAs must evaluate projects for disproportionate impacts to minority and low income populations. If the potential for impacts to minority and low-income populations is present, attach documentation that will illustrate the impacts were identified and evaluated to determine if

they are disproportionate; coordination that occurred; the opportunities provided for community input; and mitigation measures.

FHWA Order 6640.23 provides the following definitions:

Low income means a household income at or below the US Department of Health and Human Services poverty guidelines. Low-Income Population means any readily identifiable group of low-income persons who live in geographic proximity to the study area, and, if circumstances warrant, geographically dispersed/transient persons (*such as migrant workers or Native Americans*) who would be similarly affected by a proposed FHWA program, policy, or activity;

- Black (*having origins in any of the black racial groups of Africa*);
- Hispanic (*of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin*) regardless of race;
- Asian American (*having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands*); or
- American Indian and Alaskan Native (*having origins in any of the original people of North America and who maintain cultural identification through tribal affiliation or community recognition*).

Adverse Effects means the totality of significant individual or cumulative human health or environmental effects, including interrelated social and economic effects, which may include, but are not limited to: bodily impairment, infirmity, illness or death; air, noise, and water pollution and soil contamination; destruction or disruption of manmade or natural resources; destruction or diminution of aesthetic values; destruction or disruption of community cohesion or a community's economic vitality; destruction or disruption of the availability of public and private facilities and services; vibration; adverse employment effects; displacement of persons, businesses, farms, or nonprofit organizations; increased traffic congestion, isolation, exclusion or separation of minority or low-income individuals within a given community or from the broader community; and the denial of, reduction in, or significant delay in the receipt of benefits of FHWA programs, policies, or activities.

Disproportionately High and Adverse Effect on Minority and Low-Income Populations means an adverse effect that:

- Is predominately borne by a minority population and/or a low-income population; or
- Will be suffered by the minority population and/or low-income population and will be appreciably more severe or greater in magnitude than the adverse effect is that will be suffered by the nonminority population and/or non-low income population.

TITLE VI AND ENVIRONMENTAL JUSTICE APPLY TO ALL TRANSPORTATION DECISIONS.

Concern for EJ should be integrated into every transportation decision from the first thought about a transportation plan to post-construction operations and maintenance. **The *US DOT Order* applies to all policies, programs, and other activities that are undertaken, funded, or approved by the FHWA, the Federal Transit Administration (FTA), or other US DOT components:**

- Policy Decisions;
- Systems Planning;
- Metropolitan and Statewide Planning;
- Project Development and Environmental Review under NEPA;
- Preliminary Design;
- Final Design Engineering;
- ROW;
- Construction; and
- Operations and Maintenance.

FHWA will administer its governing statutes so as to identify and avoid discrimination and disproportionately high and adverse effects on minority populations and low-income populations by having the LPA coordinate these activities:

- Identifying and evaluating environmental, public health, and interrelated social and economic effects of FHWA programs, policies, and activities;
- Proposing measures to avoid, minimize, and/or mitigate disproportionately high and adverse environmental and public health effects and interrelated social and economic effects, and providing offsetting benefits and opportunities to enhance communities, neighborhoods, and individuals affected by FHWA programs, policies, and activities, where permitted by law and consistent with [EO 12898](#);
- Considering alternatives to proposed programs, policies, and activities, where such alternatives would result in avoiding and/or minimizing disproportionately high and adverse human health or environmental impacts, consistent with EO 12898; and
- Providing public involvement opportunities and considering the results thereof, including providing meaningful access to public information concerning the human health or environmental impacts and soliciting input from affected minority and low-income populations in considering alternatives during the planning and development of alternatives and decisions.

At the heart of planning, design, construction, and operations and maintenance projects across all travel modes, NDOR has a large role within environmental justice. They allocate resources from various Federal-aid programs. NDOR will integrate Title VI and environmental justice into their activities when they:

- Develop the technical capability to assess the benefits and adverse effects of transportation activities among different population groups and use that capability to develop appropriate procedures, goals, and performance measures in all aspects of their mission;
- Ensure that STIP findings of statewide planning compliance and NEPA activities satisfy the letter and intent of Title VI requirements and environmental justice principles;
- Enhance their public involvement activities to ensure the meaningful participation of minority and low-income populations; and
- Work with Federal, State, local, and transit planning partners to create and enhance intermodal systems, and support projects that can improve the natural and human environments for low income and minority communities.

5.13.21 Airport Hazards

If the project is within fifteen (15) miles of a civil airport or military airfield, compliance is required with the NEPA process. For properties located within 2,500 feet of a civil airport or 15,000 feet from the end of a runway at a military airfield, the LPA must include a written finding made by the airport or airfield operator stating whether or not the property proposed for assistance is located within a runway CZ (*civil airport*) or CZ or APZ (*military airfield*).

If the proposed project includes any assistance for purchase or sale of properties located in a Runway Clear Zone, the LPA must advise the buyer of the implications of choosing this location, including safety risks, and the potential that the property may be acquired by the airport operator at a later date. The buyer must sign a statement acknowledging receipt of this information.

5.13.22 Section 4(f)

The purpose of Section 4(f) is to preserve public parks and recreation lands, wildlife and waterfowl refuges, and historic sites by limiting their use by transportation projects. Section 4(f) of the Department of Transportation Act of 1966 prohibits FHWA from approving the use of land from these resources unless a determination is made that:

- There is no feasible and prudent alternative to the use of land from the property (*except in the case of DeMinimis*); and
- The proposed action includes all possible planning to minimize harm to the property resulting from such use.

Section 4(f) applies to all historic sites, except for most criterion eligible sites. Historic sites are historic or prehistoric properties on or eligible for the National Register of Historic Places. Section 4(f) also applies to all publicly owned parks, recreation areas, and wildlife and waterfowl refuges. Section 4(f) substantially limits “use” of these protected properties for actions funded or approved by the US DOT. Three conditions exist under which a “use” occurs:

- When Section 4(f) property is acquired outright for a transportation project;
- When there is occupancy of property that is adverse in terms of the preservationist purposes of Section 4(f); and
- When the proximity impacts of a project on Section 4(f) property, even without the acquisition of the property, are so great that the purposes of the property that qualify the resource for protection are substantially impaired.

“Use” also falls into one of four types:

- Fee simple: An acquisition of ROW through direct purchase, permanently converting the property to a transportation use;
- Permanent easement: acquisition of an easement for maintenance or utility access;
- Temporary easement or temporary use: An easement or use that is only needed on a short-term basis, for construction, for example, and then is restored to its original condition; and
- Constructive use: Occurs when the project does not physically incorporate land from the resource into the project, but is so close that it severely impacts the resource’s activities, and FHWA determines that the project “substantially” impairs the resource. An example of constructive use could be the expansion of a roadway next to an outdoor amphitheater within a public park. If the noise associated with the improved roadway facility impacts the use of that amphitheater, even though the amphitheater is not physically touched, this would be a constructive use.

SAFETEA-LU Section 6009(a) amended the existing Section 4(f) legislation at 23 U.S.C. 138 and 49 U.S.C. 303 to simplify the processing and approval of projects that have only *de minimis* impact on lands protected by Section 4(f). Under the new provisions, once the FHWA determines that a transportation use of Section 4(f) property results in a *de minimis* impact, analysis of avoidance alternatives is not required. The determination of *de minimis* impacts require concurrence that the project would not adversely affect the protected activities, features, or attributes of the 4(f) property from the officials with jurisdiction over the park, recreation area, or wildlife or waterfowl refuge, or in the case of a historic resource, concurrence from the SHPO and other consulting parties. All avoidance, minimization, mitigation, or enhancement measures that are required to be implemented as a condition of the agreement in the finding of “no adverse effect” must be incorporated as a part of the project. There is also a required public involvement component in the DeMinimis process, which must be completed prior to the agency with jurisdiction’s written concurrence with the use of DeMinimis. FHWA issued on December 13, 2005 a memorandum (*Guidance for Determining DeMinimis Impacts to Section 4(f) Resources*), which can be found at: <http://environment.fhwa.dot.gov/projdev/pd5sec4f.asp>.

FHWA is the responsible agency to determine whether or not a proposed project has a 4(f) impact, including DeMinimis. The LPA with NDOR review the proposed projects impacts and draft a recommended 4(f) analysis for FHWA review and approval. If a project impacts a section 4(f) resource, a Section 4(f) finding is required regardless of the NEPA class of action (*CE, EA or EIS*) and varies from simple statements to complex documents. While the NEPA and 4(f) processes can and should be coordinated, recognize that one does not supersede the other.

The LPA needs to identify whether Section 4(f) resources exist in the study area. A resource’s Section 4(f) status is determined not by its name, but by the criteria that define it. As discussed above, there are four main categories of Section 4(f) resources: park and recreation areas, wildlife refuges, cultural resources (*historic sites*), and other considerations. Parks and recreation areas must be publicly owned and opened to the public, its primary purpose must be for recreational activity, and it must be significant as a park or recreation area. Wildlife refuges must also be publicly owned, its major purpose must be that of a refuge, and it must be significant as a refuge. Significance is determined by FHWA and by the agency with jurisdiction over the property. Historic resources do not have to be in public ownership for Section 4(f) to apply. In order to qualify for protection under Section 4(f), a historic resource must meet the following criteria:

- It must be of national, state, or local significance; and
- Listed on or eligible for the NRHP, or its protection must be considered appropriate by the FHWA.

The items in the group of “other considerations” may or may not be Section 4(f) resources, depending on certain conditions. Some of them may fit into multiple categories - parks and refuges, for example, while others may fit into one category or another, depending on how they are used. The list of other considerations may include:

- Wildlife Management Areas;
- School Playgrounds;
- Fairgrounds;
- Public Multiple-Use Land Holdings;
- Wild & Scenic Rivers;
- Bodies of Water;
- Planned Facilities;
- Bikeways;
- Trails; and
- Scenic Byways.

Types of Section 4(f) Analysis

De Minimis Use

The passage of SAFETEA-LU offers an option to address potential Section 4(f) impacts. The option essentially affords the FHWA the opportunity to determine that certain uses of a Section 4(f) resource will not result in an adverse effect on the resource. This determination is based on the impacts of the proposed project on the resource, as well as consideration of any proposed mitigation measures to minimize the impacts of the proposed project.

De minimis impacts are defined as those that do not "adversely affect the activities, features, and attributes" of the Section 4(f) resource. The LPA, in requesting that FHWA agrees a *de minimis* finding is appropriate, needs to rigorously examine the activities, features, and attributes of the Section 4(f) resource. The LPA needs to show that some portion of the 4(f) resource is used by the project and whether that use adversely affects the activities, features, or attributes of the 4(f) resource. The following steps are used to document a *de minimis* finding.

- Provide a summary statement of the proposed action's purpose and need;
- Describe the existing activities, features and attributes of the Section 4(f) resource (*the no build*). In describing the Section 4(f) resource, the following content is expected to be provided;

- A detailed map or drawing of sufficient scale to identify the relationship of the alternatives to the Section 4(f) property, (*include sidewalks and roadway design features, etc.*).
- Size (*acres or square feet*) and location (*maps or other exhibits such as photographs, sketches, etc.*) of the affected Section 4(f) property.
- Ownership (*city, county, State, etc.*) and type of Section 4(f) property (*park, recreation, historic site, etc.*).
- Function of or available activities on the property (*walking trail, ball playing, etc.*).
- Description and location of all existing and planned facilities (*length of trail, landscaping, proposed improvements, etc.*).
- Access (*pedestrian, vehicular*) and usage (*approximate number of users/visitors, and where they are coming from, etc.*).
- Relationship to other similarly used lands in the vicinity.
- Applicable clauses affecting the ownership, such as lease, easement, covenants, restrictions, or conditions, including forfeiture.
- Unusual characteristics of the Section 4(f) property (*flooding problems, terrain conditions, or other features*) that either reduce or enhance the value of all or part of the property.
- Significance and primary use of the Section 4(f) property.
- Following the description of the Section 4(f) resource, establish the impacts of the action (*the build action(s)*). Discuss the impacts on the Section 4(f) property for each alternative (*e.g., amount of land to be used, facilities and functions affected, noise, visual, duration of impact, walking trail, landscaping, setting, access, etc.*). Impacts should be quantified where possible. Other impacts which cannot be quantified should be described (*availability of other sites in area for walking and recreation while site use is unavailable, etc.*). Identify and evaluate location and design alternatives which would avoid or minimize the Section 4(f) property impacts. Design alternatives should be in the immediate area of the property and consider minor alignment shifts, a reduced facility, retaining structures, etc. individually or in combination, as appropriate;
- Discuss all possible measures which are available to minimize the impacts of the proposed action on the Section 4(f) property, (*reconstruct trail in kind and in length, landscaping, access improvements, minimization time the facility will be unavailable to users, minimization of construction work limits, etc...*). In addition, discuss possible enhancement measures (*park benches, access, shading, etc.*);

- Next, establish the impacts of the transportation project on the Section 4(f) resource are *de minimis*. The agency must establish, based upon a comparative assessment of the build vs. no build condition, that the transportation use of the Section 4(f) resource, together with any impact avoidance, minimization, and mitigation or enhancement measures incorporated into the project, do not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f).
- The official with jurisdiction over the property must be informed of FHWA's and the State's intent to make a *de minimis* impact finding, based upon the assessment within the letter, and they must concur in writing that the project will not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f). They must also concur with mitigation established to offset the impacts to the Section 4(f) property. The owning jurisdiction may be asked to sign the letter as currently provided for; and
- In order for the FHWA to ultimately determine the impact to the Section 4(f) resource to be *de minimis*, the LPA will need to allow the public an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource. A summary statement supporting the *de minimis* impact finding will need to be included in the NEPA document prepared for the project. The public involvement requirements related to the NEPA document and process will be sufficient to satisfy the public notice and comment requirements for the *de minimis* impact finding, providing the NEPA public involvement disclosed the De Minimis impact and allowed the public to comment on the impact and associated mitigation measures and efforts to minimize harm. Again, the public involvement component must be completed before the agency with jurisdiction concurs with the use of DeMinimis.

Programmatic 4(f) Evaluations

There are five national Programmatic 4(f) Evaluations that apply to resource and "use" type. These are generally used for projects where the "use" is considered minor, either in size or in level of effect for resources. If the LPA has a proposed project that falls into one of the categories, they should discuss the option of using a programmatic 4(f) evaluation with NDOR and FHWA. FHWA can use Programmatic 4(f) Evaluation for one of the following:

- Independent Walkway and Bikeways Construction Project;
- Historic Bridges;
- Minor Involvements with Historic Sites;
- Minor Involvements with Parks, Recreation Areas and Waterfowl, and Wildlife Refuges; and
- Net Benefits to a Section 4(f) Property.

The FHWA and NDOR have developed forms for each of these programmatic 4(f) evaluations that will reduce processing time and streamline approval. If more than one Section 4(f) property is involved in the undertaking (*park, historic site, bridge, etc*), multiple Programmatic Section 4(f) forms may be completed to address the circumstance. That is, a form should be completed for each resource covered under a separate Programmatic Section 4(f) Evaluation and submitted or presented together. If the same Programmatic 4(f) Evaluation applies to multiple resources, a single form can be used. Under this circumstance, adequate documentation should be attached to explain how each resource/use meets the criteria outlined in the form.

FHWA is responsible for review of each transportation project for which this programmatic evaluation is contemplated to determine that it meets the criteria and procedures of this programmatic evaluation. It is important to note the Programmatic Section 4(f)'s are not available for EISs. The information and determination will be included in the applicable NEPA documentation and administrative record. This programmatic evaluation will not change any existing procedures for NEPA compliance, public involvement, or any other applicable Federal environmental requirement. For more information, Nationwide Section 4(f) Programmatic Evaluations can be found at:

<http://environment.fhwa.dot.gov/projdev/4fnspeval.asp>.

Individual Section 4(f) Evaluation

Whenever there is a use of at least one property that does not conform to the criteria specified in a Programmatic Section 4(f) Evaluation allowance (*or the de minimis criteria*), an Individual Section 4(f) Evaluation must be prepared, circulated for review, and a determination made by FHWA. A project undertaking necessitates an Individual Section 4(f) Evaluation regardless if one or more property(s) falls within the parameters of the Programmatic Section 4(f) Evaluation (*or the de minimis criteria*).

The individual Section 4(f) Evaluation is completed in two steps. First, the LPA prepares a Draft Section 4(f) Evaluation. The draft evaluation must include the following information:

- Proposed Action - Where a separate Section 4(f) evaluation is prepared, describe the proposed project and explain the purpose and need for the project;
- Section 4(f) Property - Describe each Section 4(f) resource which would be used by any alternative under consideration. The following information should be provided:
 - A detailed map or drawing of sufficient scale to identify the relationship of the alternatives to the Section 4(f) property;
 - Size (*acres or square feet*) and location (*maps or other exhibits such as photographs, sketches, etc.*) of the affected Section 4(f) property;
 - Ownership (*city, county, State, etc.*) and type of Section 4(f) property (*park, recreation, historic, etc.*);

- Function of or available activities on the property (*ball playing, swimming, golfing, etc.*);
 - Description and location of all existing and planned facilities (*ball diamonds, tennis courts, etc.*);
 - Access (*pedestrian, vehicular*) and usage (*approximate number of users/visitors, etc.*);
 - Relationship to other similarly used lands in the vicinity;
 - Applicable clauses affecting the ownership, such as lease, easement, covenants, restrictions, or conditions, including forfeiture; and
 - Unusual characteristics of the Section 4(f) property (*flooding problems, terrain conditions, or other features*) that either reduce or enhance the value of all or part of the property.
- Impacts on the Section 4(f) Property(s) - Discuss the impacts on the Section 4(f) property for each alternative (*e.g., amount of land to be used, facilities and functions affected, noise, air pollution, visual, etc.*).

Where an alternative (*or alternatives*) uses land from more than one Section 4(f) property, a summary table would be useful in comparing the various impacts of the alternative(s). Impacts (*such as facilities and functions affected, noise, etc.*) which can be quantified should be quantified. Other impacts (*such as visual intrusion*) which cannot be quantified should be described;

- Avoidance Alternatives - Identify and evaluate location and design alternatives which would completely avoid the Section 4(f) impacts. Detailed discussions of alternatives in an environmental document need not be repeated in the Section 4(f) portion of the document, but should be referenced and summarized. However, when alternatives (*avoiding Section 4(f) resources*) have been eliminated from detailed study, the discussion should also explain whether these alternatives are feasible and prudent and, if not, discuss the reasons why by addressing each of the criteria specified in 23 CFR 774.17;
- Measures to Minimize Harm - Once it has been established that no alternative completely avoids impacts to the Section 4(f) resource, the LPA must analyze and determine which alternative results in the least overall harm by applying the factors specified in 23 CFR 774.3. Discuss all possible measures that are available to minimize the impacts of the proposed action on the Section 4(f) property(s). Detailed discussions of mitigation measures in the environmental document may be referenced and appropriately summarized, rather than repeated;

- Coordination - Discuss the results of preliminary coordination with the public official having jurisdiction over the Section 4(f) property; and
- Generally, the coordination should include discussion of avoidance alternatives, impacts to the property, and measures to minimize harm. In addition, the coordination with the public official having jurisdiction should include, where necessary, a discussion of significance and primary use of the property.

Upon completion of the draft evaluation, the LPA will forward two copies of the report to the NDOR LPD Project Coordinator for transmittal to the NDOR Environmental Unit for review. Upon completion of NDOR's review, the document will then be forwarded on to FHWA for further review. Upon agreement with findings, FHWA will forward a copy of the evaluation to their legal counsel for a thirty (30) day review. Upon completion of FHWA's review, the evaluation is transmitted to the U.S. Department of Interior (DOI) in Washington, D.C. and, as appropriate, the Departments of Agriculture (USDA) and Housing and Urban Development (HUD). DOI is afforded a minimum forty-five (45) day review. Upon receipt of FHWA's and DOI's comments, NDOR will notify the LPA of the comments and the need to complete the final Section 4(f) evaluation. The final Section 4(f) Evaluation must contain the following information:

- All the information required in the draft evaluation;
- A discussion of the basis for concluding that there are no feasible and prudent alternatives to the use of Section 4(f) land. The supporting information must demonstrate that "there are no unique problems or unusual factors involved in the use of alternatives that avoid these properties or that the cost, social, economic, and environmental impacts, or community disruption resulting from such alternatives reaches extraordinary magnitudes" (23 CFR 774.17). This language should appear in the document together with the supporting information;
- A discussion of the basis for concluding that the proposed action includes all possible planning to minimize harm to the Section 4(f) property. When there are no feasible and prudent alternatives that avoid the use of Section 4(f) land, the final Section 4(f) evaluation must demonstrate that the preferred alternative is the feasible and prudent alternative with the least harm on the Section 4(f) resources after considering mitigation to the Section 4(f) resources;
- Concluding statement as follows, "Based on the above considerations, there is no feasible and prudent alternative to the use of land from the (*identify Section 4(f) property*) and the proposed action includes all possible planning to minimize harm to the (*Section 4(f) property*) resulting from such use.", and
- A summary of the formal coordination and concurrence by DOI. Copies of all formal coordination comments.

Upon completion of the final evaluation, the LPA will forward two copies of the final 4(f) evaluation to the NDOR LPD Project Coordinator for transmittal to the NDOR Environmental Unit for final review. Upon completion of NDOR's review, NDOR will forward the document on to FHWA for final review and approval.

For more information, see the links to the following resources:

<http://environment.fhwa.dot.gov/projdev/pd5sec4f.asp>

<http://www.environment.fhwa.dot.gov/projdev/4ffiveminute.asp>

<http://www.environment.fhwa.dot.gov/projdev/4fpolicy.asp#intro>

5.13.23 Land and Water Conservation Fund Act - Section 6(f)

The Land and Water Conservation Fund Act (*LWCF*) of 1965 (*16 USC 4601-4 to 4601-11*) was enacted to establish a funding source to assist the states and Federal agencies in meeting present and future outdoor recreation demands and needs. Federal funds from the LWCF are authorized to the states for the planning, acquisition, and/or development of needed land and water or utilized, directly, by Federal agencies for the ROW acquisition and development of "certain lands" such as:

- Wildlife refuges;
- Waterfowl refuges;
- Fish hatcheries;
- Bird sanctuaries; or
- State recreational areas.

Administration of the LWCF Act is by the NPS which, in turn, delegates many of the roles and responsibilities to the NGPC.

Section 6(f) of the Act contains provisions to protect the Federal investment and the quality of resources developed with LWCF assistance. The Act requires that all properties "acquired or developed, either partially or wholly, with LWCF funds" must be maintained as such in perpetuity. Section 6(f) states that those properties acquired or developed with LWCF funds shall not be converted to a use other than public outdoor recreation without the approval of the Secretary of the Department of the Interior, acting through the NPS and at the request of the State delegate/State Liaison Officer. If a project uses a Section 6(f) property, it must be replaced with land equal or greater value than the property taken. **This is a very costly and time consuming process and these impacts should be avoided.**

For projects carried out with Federal or State funds by NDOR that may change the usage of a property acquired or developed with LWCF funds, appropriate steps should be taken to comply with the law.

When it has been determined that a project will require the use of 6(f) property, the LPA must coordinate with the recreational site owner, whether it is State or local government. This coordination is intended to make them aware of the potential project impacts, to get their input on the project and its impacts, to determine the significance of the resource, and to determine if there are any restrictions or covenants attached to the park land. For example: "Was LWCF grant money used to develop the facility?"

Once the LPA receives the comments from the site owner, the LPA should draft and send a letter to NGPC stating that the project may take land from an LWCF recreational site. The letter should summarize the coordination that has occurred with the entity that has jurisdiction over the park. The project location, in relation to the park and its boundaries must be depicted on a map that accompanies this letter.

In its comments, NGPC will inform the LPA or confirm whether the park has been wholly or partially developed with LWCF grant monies. The involvement could range from planning activities, to the installation of playground equipment, to the development of a new park.

If the park has been developed at any funding level with LWCF monies, during the draft NEPA document stage, the LPA must coordinate with NGPC on the issue of locating replacement land for the land to be taken, if NGPC is in agreement with proceeding with the project in that manner. Once an agreement has been reached, the LPA must obtain from the owner an agreement in writing to relinquish the 6(f) property and to accept the replacement property, if approved by the NGPC.

The LPA must work with the NDOR ROW Division staff to identify land that is suitable and to identify the monetary value of the land to be replaced and possible replacement land. The LPA must submit to NGPC one original and one copy of an appraisal report prepared by a licensed appraiser and establishing the fair market value of the property to be converted (*taken*). The replacement property must be of at least equal fair market value as the conversion property. The correspondence must also include documentation describing the entity responsible for the costs associated with obtaining the appraisals and the land replacement. A statement indicating that the property proposed for replacement is of reasonably equivalent usefulness and location as that being converted must also be included.

Upon concurrence by the NGPC, the LPA will submit the final conversion package to the NGPC and/or NPS for final approval. A letter requesting approval of the conversion and noting that all other alternatives have been evaluated and rejected on a sound basis must accompany the conversion request package.

5.13.24 Farmlands Protection Policy Act

The purpose of the Farmlands Protection Policy Act (*FPPA*) of 1981 (*7 USC 42014209*) is to minimize impacts on farmlands and maximize compatibility with state and local farmland programs. Farmlands are classified as prime, unique, or of statewide or local importance. Farmland subject to FPPA requirements does not have to be currently used for cropland. It can be forestland, pastureland, cropland, or other land, but not water or urban built-up land. Proposed projects are subject to FPPA requirements if they:

- May irreversibly convert farmland (*directly or indirectly*) to nonagricultural use; and
- Are completed by a Federal agency or with assistance from a Federal agency.

A project funded with Federal dollars may be subject to FPPA if it impacts one of the examples from the above list. The following types of land are exempt under the FPPA:

- Soil types not suitable for crops (*such as rocky terrain and sand dunes*);
- Urban sites where the ROW required for a project is wholly within a delineated urban area and the project requires no property from prime or unique farmlands or farmlands of statewide or local importance; and
- Farmland that has already been converted to industrial, commercial, residential, or recreational activity.

If the project has the potential to convert important farmland to non-farm use, the LPA must contact the local office of the Natural Resources Conservation Service (*NRCS*) or USDA Service Center. NRCS uses a Land Evaluation and Site Assessment (*LESA*) system to establish a farmland conversion impact rating score on proposed sites. This score is used as an indicator for the project sponsor to consider alternative sites if the potential adverse impacts on the farmland exceed the recommended allowable level.

The assessment is completed on USDA Form AD-1006, Farmland Conversion Impact Rating. The LPA completes the site assessment portion of the AD-1006, which assesses non-soil related criteria such as the potential for impact on the local agricultural economy if the land is converted to non-farm use and compatibility with existing agricultural use. The LPA will send the AD-1006 Form, together with a copy of all maps showing the locations of project alternatives to the NRCS State office. The NRCS has forty-five (*45*) days to make a determination.

If farmland involvement is indicated on the form by the NRCS, then the LPA must undertake the assessment needed to complete Part VI of the AD-1006 form. This task will require review of aerial photographs and quad maps, or possibly even a field review. In-depth directions for this task are on the NRCS website shown below. Then, Part VII must be completed to determine the level of significance of the farmland involvement. Projects receiving a total score of less than 160 points require only minimal level of consideration for protection and no alternatives are

required to be evaluated. For sites scoring 160 or higher, the LPA must consider alternatives that convert less farmland or convert farmland of lower value.

A copy of the completed AD-1006, if needed for the project, should be included in the NEPA document. The NEPA document should summarize the steps taken to comply with the FPPA and the results of the coordination. Any steps taken to reduce the amount of farmland impacts should also be discussed.

Additional information can be found at: <http://www.nrcs.usda.gov/programs/fppa/>.

Contacts for each county can be found at:

<http://offices.sc.egov.usda.gov/locator/app?service=page/CountyMap&state=NE&stateName=Nebraska&stateCode=31>

LINCOLN SERVICE CENTER

8000 S 15th Ste C
Lincoln NE 68512
(402) 423-9683
Fax: (402) 423-7614

The Central National Technology Support Center (CNTSC) for the USDA Natural Resources
PO Box 6567
Fort Worth TX 76115
Fax: (817) 509-3337

5.13.25 Federal Lands

Approximately 30% of the US is Federal and Indian lands. In Nebraska, some of these lands include National Wildlife Refuges, Indian Reservations, National Forests, National Monuments, Army Corps of Engineers Recreational Lakes, Military Reservations or Bases. If a proposed LPA project may impact Federally-owned or tribal lands, it is strongly recommended to begin coordinating with the responsible agency and their officials (*such as the individual tribal councils, USFS – Forest Supervisors, NPS - Superintendents, USFWS – Refuge Manger*) as early in the process as possible. Officials should be consulted if a proposed project will impact their property permanently or temporarily, modify access, interrupt access, or visitor services due to construction. LPAs must carefully consider high-use times, such as Opening Days of hunting and fishing seasons or Holiday weekends (*Memorial Day, 4th of July, Labor Day*), when discussing and planning construction sequencing. This contact would not preclude any of the previously mentioned documentation or consultation (*such as impacts to 4(f) or Section 7 consultation*) but would be additional coordination with regards to traffic and construction phases. Typically, these contacts will not be the same as the contacts for permitting or other regulatory consultations. For additional information, see the following link:

<http://www.fhwa.dot.gov/flh/facts/ne.htm>

5.13.26 State Owned Lands

Similar to federal lands, the State of Nebraska has jurisdiction over numerous State parks, forests, or lakes. Officials should be consulted in addition to their regulatory responsibilities if a proposed project will impact their property permanently or temporarily, modify access, or interrupt access due to construction.

5.13.27 Scenic Byways Coordination

America's Byways is a distinctive collection of American roads, their stories and treasured places. They are roads to the heart and soul of America. The FHWA promotes the collection of National Scenic Byways or All-American Roads as the America's Byways.

The National Scenic Byways Program is part of the US DOT, FHWA. The program is a grass-roots collaborative effort established to help recognize, preserve, and enhance selected roads throughout the US. The US Secretary of Transportation recognizes certain roads as All-American Roads or National Scenic Byways based on one or more archeological, cultural, historic, natural, recreational, and scenic qualities. There are currently no National Scenic Byways or All-American Roads in Nebraska but new roads are identified regularly.

However, there are Nebraska roads that are designated as State Scenic Byways. Emphasizing the history and natural beauty of the state, Nebraska's program is in the development stages. If the project impacts a designated Nebraska Byway, the LPA will need to coordinate with the State and the local byway group, and possibly mitigate impacts once consultations are concluded. Recognizing that state designation can be the first step in the process to Federal designation, this may be an area that LPAs need to watch.

For more information, contact the Nebraska State Byway Coordinator at (402) 479-4881.

5.13.28 Bicycles and Pedestrian Trails Coordination

FHWA considers non-motorized modes of transportation to be an integral part of their mission and a critical element of the local, regional, and national transportation system. To varying extents, pedestrians and bicycles will be present on many transportation facilities, and it was the intent of TEA-21 that all new and improved transportation facilities be planned, designed, and constructed with this in mind. The passage of SAFETEA-LU has not altered the intent of TEA-21. "Due consideration" of bicycle and pedestrian needs should include, at a minimum, a presumption that bicyclists and pedestrians will be accommodated in the design of new and improved transportation facilities. In the planning, design, and operation of transportation facilities, bicyclists and pedestrians should be included as a matter of routine, and the decision to not accommodate them should be the exception rather than the rule. There must be exceptional circumstances for denying bicycle and pedestrian access either by prohibition or by designing highways that are incompatible with safe, convenient walking, and bicycling. The LPA needs to contact NDOR for any proposed project impacts to bicycle or pedestrian trails.

5.13.29 Environmental Studies Summary

This section has attempted to identify numerous topics to consider during the environmental and NEPA phase of research, consultation, and documentation. It is important to remember that other topics also need consideration and overlay each of those mentioned such as consideration of ADA, visual impacts, construction impacts, short and long-term impacts, secondary and cumulative, economic and business impacts, social/community impacts, and energy consumption. The next section will detail the actual permissions necessary to complete preliminary engineering, advertisement and construction of the project.

5.14 Permits & Concurrences

Proposed transportation projects may require numerous federal, state, and local permits, approvals, or concurrences. The following is NOT an exhaustive list but a representation of what an LPA can expect to consider. **The LPA must recognize that obtaining permits can be a lengthy and time consuming process depending on a number of factors.** If a proposed action may need a permit, appropriate project scheduling will be necessary and time should be added to the process. Early coordination during scoping and continued coordination through the study phase should minimize re-work and additional information during the permitting phase. It is best if permit application and coordination occurs concurrently. Copies of all permits must be kept at the project construction site and made available to regulatory inspectors upon request.

NEPA Phase Permits in Project Development Process

Prior to beginning archaeological field work on State or Federally-owned or managed lands, the LPA or its archaeological subconsultants must apply for and secure a State Archaeological Permit or Federal Permit (*ARPA*). At the expiration of the permit, the applicant must surrender all artifact materials and all project records. Federal regulations govern the disposition of all archaeological resources removed or excavated.

Post NEPA Phase Permits in Project Development Process

The post-NEPA permitting process, undertaken by the LPA, essentially begins after the NEPA-related technical studies have been completed. The process begins after the final NEPA document is approved and during the design phase at the point where plans are completed to the level required for permit review by permitting agencies. The LPA obtains the permits required for their projects prior to the advertisement of construction contracts so that the permit requirements are included in the contract book, construction plans, and specifications and on-site at projects.

First, the LPA should conduct an assessment of permits needs. They must also obtain completed technical studies and agency letters and copies of the project plans. If the plans are insufficient for the permit application to be made or, if the plans would present problems in securing a permit, the plans will need to be revised. Once the plans are sufficient, the LPA prepares an application for the needed permits. **Permit application shall be made only after approval of the NEPA document and six to seven months prior to contract letting.**

5.14.1 Streams, Channels, and Wetlands – Section 404 and 401 Permits

The Section 404 Permit is obtained from the USACE for projects that have the potential to discharge dredged or fill materials into waters of the US, including wetlands. The legal reference is Section 404 of the Water Pollution Control Act of 1972, as amended by the Clean Water Act (1977 and 1987). The purpose of the law is to restore and maintain the chemical, physical, and biological integrity of waters of the US through prevention, reduction, and elimination of pollution. The permit application allows the USACE to review the project plans and potential impacts to waters of the United States and to ensure that the project is designed to prevent or reduce harm to these waters. In addition to USACE, the USFWS, the National Marine Fishery Service (NMFS), and the EPA may also be involved in Section 404 permitting. NOTE: These agencies review the 404 Permit application through the 404 public notice process and comment to the USACE. Their comments may include recommendations to incorporate into permit conditions.

To improve interagency coordination on Federal-aid projects, emphasize innovative and cost-effective approaches, and integrate the NEPA and Section 404 Permit processes, the FHWA worked with other Federal regulatory agencies to merge the NEPA and 404 processes. The intent was to improve compliance with the regulation and streamline the 404 Permit compliance process without diminishing protection of the nation's valuable aquatic resources. Both the NEPA and Section 404 processes involve the evaluation of alternatives, the assessment of impacts to resources, and the balancing of resource impacts and project need. All involved agencies recognize the need to avoid duplication and process inefficiencies. LPA and NDOR are responsible to understand the NEPA/404 merger agreement dated March 22, 2001 and abide by the decisions generated.

A USACE Permit must be obtained for projects and support activities (*borrow area*) which result in filling and/or excavation, stream crossings, or wetland impacts in the "Waters of the US" (*jurisdictional waters*). More information on this topic can be found in Section 5.13.3 of this chapter.

The two types of Section 404 Permits are:

1. Nationwide Permit (*NWP*) – for temporary/minor/moderate impacts. Nationwide permits are a type of regional or general permit issued on a pre-discharge basis for minor activities with minimal impacts. There are several types of nationwide permits and the particular activity must meet all general, regional, and special terms and conditions of the specific nationwide permit.
2. Individual Permit – for more severe impacts, typically one-half acre or more of impacts to waters of the US. If jurisdictional waters do not fall within the NWP program, an individual permit is required. The NDEQ must issue a Section 401 Permit/Water Quality Certification before this permit is issued. This permit requires a thirty (30) day public notice period.

The LPA will prepare an application to the USACE furnishing the following:

- Completed USACE Application Form 4345;
- Location map;
- Preliminary plan sheets or sketches of project; and
- Aerial or field photographs.

The USACE will evaluate the application and the other information provided to determine if the authorization for the work may be issued under a NWP. If the scope of the project allows the use of a NWP(s), then a permit will be issued.

Individual Permits – Section 401 Permits

Any project that exceeds the requirements of an applicable NWP or other regional or general permit requires the LPA to obtain an Individual Permit (*IP*). The LPA will be notified of the need for an IP and additional information may be requested at this time. Following the permit application, the USACE will solicit comments through the public comment process from adjacent landowners, and appropriate Federal, State, agencies on the LPA's behalf. The NDEQ is one of those agencies notified by the USACE. An individual 401 Permit may be needed for the following:

- Dredging, excavation, widening, or straightening of a channel;
- Discharge (*fill*) into a special aquatic site, including wetlands;
- Bank sloping or stabilization;
- Channel relocation;

- Water diversions or withdrawals;
- Construction or repair of dams, weirs, dykes, or levees; and
- Flooding, excavating, draining and/or filling of a wetland.

The NDEQ will issue a 401 Water Quality Certification for the project if appropriate conditions are met. Once the comment period has elapsed, the LPA will be notified by the USACE, and the comments forwarded. The LPA must send a response letter, addressing the comments received. The LPA response will be evaluated by the USACE.

If the LPA response is found to be acceptable, a decision document will be prepared and the 401 Permit will be issued. If the LPA's response is not acceptable, the USACE will deny the 401 Permit or request the LPA response to be revised or provide additional information. The 401 conditions are incorporated into the 404 Permit by attachment.

The USACE may be contacted at:

U.S. Army Corps of Engineers
Nebraska Regulatory Branch-Wehrspan
8901 S 154th St Ste 1
Omaha NE 68138-3621
Ph (402) 896-0723
www.nwo.usace.army.mil

U.S. Army Corps of Engineers
Nebraska Regulatory Branch
1430 Central Ave Ste 4
Kearney NE 68847-6856
Ph (308) 234-1403
www.nwo.usace.army.mil

5.14.2 National Pollution Discharge Elimination System (NPDES)/Storm Water Runoff Permit

The responsibility for issuing permits under the National Pollutant Discharge Elimination System (NPDES) has been delegated by the EPA to NDEQ. The legal reference of the NPDES is Section 402 of the Federal Water Pollution Control Act of 1972, as amended by the Clean Water Act (1977 and 1987). The NPDES storm water permitting program is intended to improve the quality of the nation's rivers, lakes, and streams by reducing pollution from non-point sources.

Storm water discharges generated during construction activities can cause an array of physical, chemical, and biological water quality impacts that impair aquatic biological communities or other beneficial uses of waters such as fishing and swimming. Water quality impairments result when ground disturbing activities dislodge excess sediments (*clean, chemical-laden, and/or nutrient-laden*) and excess organic material that are carried to river, streams, wetlands, and lakes via storm water.

Any LPA engaged in construction-related roadway or bridge activities (*meaning any manmade change of the land surface, including removing vegetative cover that exposes the underlying soil, excavating, filling, transporting, and grading*) that disturb one (1) or more acres of land will be required to obtain a storm water runoff permit from the NDEQ.

These permits establish pollution control and monitoring requirements. General permits for construction activities require development and implementation of a Storm Water Pollution Prevention Plan (*SWPPP*) to help control erosion, sedimentation, and other project-generated waste. FHWA, NDOR, NDEQ, or NCRS should be available to assist with development and/or review of soil erosion and sediment control plans.

The NDEQ may be contacted at:

Nebraska Department of Environmental Quality
Water Quality Division
Storm Water Program
Ste 400, The Atrium
1200 "N" St
PO Box 98922
Lincoln NE 68509-8922
(402) 471-2186 or 1-877-253-2603
www.deq.state.ne.us

5.14.3 Floodplain Permit

The LPA must obtain a Floodplain Permit for Federal-aid projects that meet either of the following criteria:

- The project is situated in a City or County that participates in the National Flood Insurance Program; or
- The project involves placing an obstruction in an unnumbered "A" zone, an "AE", "AO", or "AH" zone as identified on the Federal Emergency Management Agency (*FEMA*) Flood Insurance Rate Maps.

The Nebraska Department of Natural Resources does not issue floodplain permits. This is done by a local Floodplain Management Agency. To obtain information on the application process, submittal requirements, fees, and local rules, and regulations, the LPA must contact the local Floodplain Management Agency.

The Nebraska Department of Natural Resources does provide assistance to LPAs regarding the identity of Cities and Counties participating in the Natural Flood Insurance Program. Contact information for local Floodplain Management Authority's FEMA Flood Insurance Rate Maps are available online at their website at:

<http://dnrdata.dnr.ne.gov/floodplain/ManagementAdministrators.aspx>.

The Nebraska Department of Natural Resources may be contacted at:

Nebraska Department of Natural Resources
Floodplain Management Section
301 Centennial Mall South
PO Box 94676
Lincoln NE 68509
(402) 471-2363
www.dnr.state.ne.us

5.14.4 Navigable Waters – Section 10 Permit

Section 10 of the Rivers and Harbors Act of 1899 requires authorization from the Secretary of the Army, acting through COE, for the construction of any structure in or over any navigable water of the US. Structures or work outside the limits defined for navigable waters of the US require a Section 10 Permit if the structure or work affects the course, location, or condition of the water body. The law applies to any dredging or disposal of dredged materials, excavation, filling, rechannelization, or any other modification of a navigable water of the US, and applies to all structures, from the smallest floating dock to the largest commercial undertaking. It further includes, without limitation, any wharf, dolphin, weir, boom breakwater, jetty, groin, bank protection (*e.g. riprap, revetment, bulkhead*), mooring structures such as pilings, aerial or subaqueous power transmission lines, intake or outfall pipes, permanently moored floating vessel, tunnel, artificial canal, boat ramp, aids to navigation, and any other permanent, or semi-permanent obstacle or obstruction. The LPA must take measures to prohibit the obstruction or alteration of these navigable waters. When coordinating with the USACE, the LPA will be required to submit detailed drawings which clearly show the scope and size of the project and the location of the project in relation to wetlands, creeks, rivers, or other water bodies.

The USACE can authorize activities by a standard individual permit, letter-of-permission, nationwide permit, or regional permit. The USACE will determine what type of permit is needed based on the information provided by the LPA and issue the permit if the proposed project falls within the criteria.

The project may also affect threatened or endangered species or their designated critical habitat as described under the Endangered Species Act. If so, the USACE must consult with the USFWS before they make a permit decision. The LPA will be required to submit a Biological Evaluation describing the species in the area, the impact the project may have on the species and measures the LPA will take to minimize impacts to these species and their habitat.

Processing time for individual permits can range from six (6) to twenty-four (24) months. Nationwide permits are usually processed within three (3) to six (6) months, though it can take up to twelve (12) months. The timeframe is dependent on the complexity of the impacts on aquatic resources, endangered species, archeological or tribal concerns, and workload.

5.14.5 Navigable Waterways - Section 9 Permit

If applicable, it is the LPA's responsibility to obtain a Section 9 Permit as required by the USCG for construction, modification, replacement, or removal of any bridge or causeway over a navigable waterway. The legal reference is Section 9 of the Rivers and Harbors Act of 1899, as amended. Its purpose is to ensure that a project will not interfere with navigation on the US's navigable waterways. This permit is obtained for construction of projects along portions of the Missouri River.

5.14.6 Surface Water

The NE DNR has jurisdiction over all matters pertaining to surface water, rights for storage, irrigation, power, manufacturing, in stream flows, and other beneficial uses. Any person or agency that wishes to divert and use the waters of a natural stream or lake must first get a permit or water right from the DNR. In water short areas of the state, the process for receiving a permit may include a formal hearing. These hearings are subject to review by the Nebraska Court of Appeals. Holders of water rights must use the water in accordance with the provisions written on the permit. Failure to so use the water will result in the DNR conducting a hearing to cancel or annul the permit. This process is "adjudication" and is subject to review by the Nebraska Court of Appeals.

Currently, there are no specific requirements for Nebraska Rivers other than the Platte River. However, the Republican or Niobrara Rivers are being studied and new programs may be created to minimize harm on these or other rivers. If an LPA project is in the vicinity of a river, it is in their best interest to contact the DNR to ensure compliance with all federal and state water regulations.

Platte River Basin Depletions

The States of Nebraska, Wyoming, and Colorado and the US DOI signed a Cooperative Agreement on July 1, 1997, to address several Endangered Species Act (*ESA*) issues affecting water development in the Platte River Basin. The initiative has two main purposes:

1. To develop and implement a Platte River Recovery Implementation Program to maintain, improve, and conserve habitat for four (4) threatened and endangered species that use the Platte River in Nebraska are whooping crane, piping plover, interior least tern, and pallid sturgeon.
2. To enable existing and new water uses in the Platte River Basin to proceed without additional *ESA* requirements for the four target species.

For water-related activities along the Platte River (*includes all watershed entering the Platte River such as the South Platte, North Platte, and the river basins of the Loup River*) which require a Federal action and/or involve Federal monies, the LPA and NDOR, working with FHWA in the consultation process, needs to take the following steps to be 'covered by the Program:

1. Coordinate with NE DNR, get letter sent to LPA and cc's USFWS
2. Develop Biological Assessment (*BA*). It describes the proposed project including estimated amounts, timing, and locations of depletions to the Platte River that will be caused by the proposed project. Provide to NDOR/FHWA for review prior to submitting to USFWS. The "Template Biological Assessment and Request for Formal Section 7 Consultation" should be used:

<http://www.fws.gov/platteriver/Documents/Nebraska%20Template%20BA%20Aug2007.doc>.

This *BA* must describe the water sources and water uses associated with the action. Questions regarding information needed for this *BA* may be directed to NDOR, FHWA, or the USFWS.

Upon satisfactory completion of these steps, the USFWS can issue a "tiered biological opinion" to the lead Federal agency documenting that the project's existing water-related activities are covered by the Program and are not likely to jeopardize the continued existence of the target species nor adversely modify critical habitat.

5.14.7 USFWS and Incidental Take Permit or Statement

Regional USFWS offices administer endangered and threatened species permits/statements under the Endangered Species Act. Permits may be issued to qualified applicants for the following types of activities:

- Enhancement of survival associated with Safe Harbor Agreements and Candidate Conservation Agreements with Assurances;
- Incidental take associated with Habitat Conservation Plans, recovery;
- Interstate commerce; and
- Other projects which will not result in jeopardy to a listed species.

These offices may also administer permit activities involving bald and golden eagles, as authorized by the Bald and Golden Eagle Protection Act and migratory birds (*Migratory Bird Treaty Act*).

Through consultation with the USFWS, clarify whether or not additional documentation, permitting, or information is required. In the event that a project would require a permit, an incidental take permit/statement is the most likely take authorization/permit that the LPA would need. It is important to remember that the USFWS consider a “take” very seriously regardless of the word “incidental” and that take is defined as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb." Incidental take permits can only be obtained by going through a Formal Section consultation under the Endangered Species Act. Such a consultation must be completed at a Federal to Federal level, meaning that the consultation must take place by FHWA. Due to the number of projects and the workload created by transportation projects, a point of contact has been identified solely for LPA, NDOR, and FHWA Federal-aid projects. Contact the US Fish and Wildlife Service at 203 West 2nd St, Grand Island, NE 68801, (308) 382-6468.

The proposed project may also require a state permit. The LPA should contact NGPC for additional information. Obtaining a USFWS permit is contingent upon obtaining any required state permit.

Endangered species permits authorize actions that can potentially impact a species' recovery. Before issuing a permit, USFWS invites the public to comment on it. Federal Register announcements soliciting public comment on permit applications can be found in the USFWS centralized library of Federal Register notices in the “Notices” section of each year.

LPAs should note that the USFWS Endangered Species Program issues permits through its Regional office in Denver, Colorado for take of species listed under the Federal Endangered Species Act. Additional time and effort are needed to obtain a permit if take of such species is likely to occur. Also, if an incidental take permit is required, the LPA and NDOR need to notify FHWA to initiate formal consultation process with USFWS.

State Species and Process

NGPC does not currently have a take provision. However, it is imperative that the LPA work with NDOR and NGPC to avoid or minimize and mitigate impacts if a proposed project may affect a species to obtain a “no affect” determination.

5.15 Environmental Commitments

Environmental commitments are promises that are made to coordinating resource agencies by an LPA in return for approval of the project. All environmental must be included and detailed in all applicable NEPA environmental documents.

Mitigation measures are design commitments made during the environmental evaluation and study process that serve to moderate or lessen negative impacts of the proposed action. Prior to committing to any mitigation efforts, the LPA must assure constructability. Failure to follow through with the project environmental commitments could result in the revocation of the NEPA document approval by FHWA, federal funding, and/or revocation of the permit by the COE.

The NDOR Local Project Section Green Sheets are environmental documents used to record and communicate environmental project commitments made by local project sponsors throughout project development. All projects which require a NEPA Determination Form to be completed must include a Green Sheet in the final Plans, Specification, and Estimates package (*PS&E package*). The Green Sheet is required to document that all required coordination materials, NEPA documents, and environmental permits have been acquired. The NEPA document preparer is required to submit a final version of the Green Sheet after all the environmental NEPA forms have been signed by the FHWA, all permits have been acquired, and all plans are finalized.

The LPA RC will create the final Green Sheet which will be incorporated into the contract documents at the time of PS&E submittal. It is suggested the RC be familiar with the [Green Sheet Protocol](#) to accurately prepare the Green Sheets. There are four (4) [Green Sheet Templates](#) the RC will pick from to use. There is one for: Urban projects, Secondary Road (*Rural*) Projects, SRTS projects and TE projects. The RC uses the Green Sheet template that corresponds to the project type.

5.16 Environmental Assurance

The LPA is responsible for assuring that all commitments made in the NEPA document and all stipulations agreed to among agencies throughout the environmental phase are completed, addressed, accomplished through the construction contracts, and/or included in the PS&E contract. The LPA is also responsible for coordinating and tracking these commitments through design, construction, and maintenance. NDOR also ensures that this is accomplished by their project oversight and review of documentations and contracts. FHWA may also review and audit projects to ensure that these commitments are followed through.

Failure by the LPA to comply with permit stipulations or commitments made will result in permit violations by the federal, state, or local regulatory agency. Violations result in delay of construction, work stopping, fines, and/or possible criminal actions. It is also a possibility that federal monies may have to be returned if a project does not comply with regulations.

5.17 Chapter Summary

NDOR and LPA can achieve significant benefits by incorporating environmental and community values into transportation decisions early in project development. The environmental and public involvement phase is crucial to a successful context sensitive design and construction project, and it is critical to ensuring participation in funding and partnerships with FHWA. By carrying these considerations through project development and delivery, a LPA project will yield benefits such as the following:

- **Relationship-building benefits:** By enhancing inter-agency participation and coordination efforts and procedures, transportation agencies can establish more positive working relationships with resource agencies and the public. This pays dividend on future phases of the immediate project, as well as future projects within the program.
- **Process efficiency benefits:** Improvements to inter-agency relationships may help to resolve differences on key issues as transportation programs and projects move through the development phases (*planning, environmental, design and implementation*). Reduce duplication of work, leading to reductions in costs and time requirements, thus moving through the project development process faster and with fewer issues.
- **On-the-ground outcome benefits:** When transportation agencies conduct activities equipped with information about resource considerations and in coordination with resource agencies and the public, they are better able to manage transportation projects that serve the community's transportation needs more effectively. This leads to smaller negative impacts and incorporates more effective environmental stewardship. Long-term these efforts aid in better transportation programs.

Finally, NDOR and LPA can maintain success throughout the remaining developmental phases by incorporating environmental and community values into design and construction. NDOR and LPA are responsible to ensure public involvement and consultations continue and that all commitments are taken care of through the construction project phase and mitigation monitoring if required.

5.18 Federal Laws, Regulations, and Guidance Materials

Nebraska Agreements

- FHWA Nebraska Division: Non-Federal Designated Representative Letter; and
- Programmatic Agreement under Section 106, National Historical Preservation Act, as amended, among FHWA, Nebraska Historical Commission, Advisory Council on Historical Preservation and NDOR (*Dated December 1995*).

General

- Council on Environmental Quality Regulations;
- National Environmental Policy Act of 1969, as amended, 42 U.S.C. 4321 et seq.;
- Department of Transportation Act of 1966, Section 4(f);
- Federal-Aid Highway Act of 1970, 23 U.S.C 109 , particularly section (h) - Economic, Social, and Environmental Effects;
- Intermodal Surface Transportation Efficiency Act (*ISTEA*) of 1991;
- Transportation Efficiency Act for the 21ST Century (*TEA-21*), P.L. 105-178;
- Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (*SAFETEA-LU*), P.L. 109-59; and
- Freedom of Information Act.

Physical Environment

- Clean Air Act Amendments of 1990 (*CAAA*);
- Clean Water Act of 1977 and 1987;
- Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (*CERCLA*);
- Federal Water Pollution Control Act of 1972 (*see Clean Water Act of 1977 & 1987*);
- Federal Insecticide, Fungicide, and Rodenticide Act;
- Federal Land Policy and Management Act of 1976 (*Paleontological Resources*);
- Hazardous and Solid Waste Amendments (*HSWA*) of 1984 (*see Resource Conservation and Recovery Act of 1976*);
- Noise Control Act of 1972;
- Pollution Prevention Act of 1990;
- Resource Conservation and Recovery Act of 1976 (*RCRA*);

- Safe Drinking Water Act of 1944, as amended;
- Solid Waste Disposal Act (*see Resource Conservation and Recovery Act of 1976*); and
- Superfund Amendments and Reauthorization Act (SARA) of 1986.

Natural Environment

- Emergency Wetlands Resources Act of 1986;
- Endangered Species Act of 1973;
- Executive Order 11990, Protection of Wetlands;
- Executive Order 12962, Recreational Fisheries;
- Executive Order 13112, Invasive Species;
- Executive Order 13186, Migratory Birds;
- Fish and Wildlife Coordination Act of 1934, as amended;
- Marine Mammal Protection Act of 1972, as amended;
- Marine Protection Research and Sanctuaries Act of 1972, as amended;
- Migratory Bird Treaty Act;
- Water Bank Act Wetlands Mitigation Banks, ISTEA 1991, Sections 1006-1007; and
- Wildflowers, Surface Transportation and Uniform Relocation Act of 1987 Section 130.

Special Status Land Use

- Coastal Zone Management Act of 1972;
- Coastal Zone Management Act Reauthorization Amendments of 1990;
- Executive Order 11988, Floodplain Management;
- Flood Disaster Protection Act;
- Land and Water Conservation Fund Act of 1964, as amended Section 6(f);
- National Trails System Act;
- Rivers and Harbors Appropriation Act of 1899, Sections 9 and 10;
- Wild and Scenic Rivers Act of 1968, as amended; and
- Wilderness Act of 1964.

Community

- American Indian Religious Freedom Act of 1978;
- Executive Order 12898 - Environmental Justice;
- CEQ Guidance - Environmental Justice (1997b);
- Executive Order 13166 - Improving Access to Services for Persons with Limited English Proficiency;
- Farmland Protection Policy Act of 1981;
- Public Hearings, 23 U.S.C. 128;
- Title VI of the Civil Rights Act of 1964, as amended; and
- Uniform Relocation Assistance and Real Property Acquisition Act of 1970, as amended.

Cultural Resources

- Act for the Preservation of American Antiquities (1906);
- Archaeological and Historical Preservation Act of 1974;
- Archeological Resources Protection Act of 1979;
- Executive Order 11593 - Protection and Enhancement of Cultural Environment (1971);
- Executive Order 13007 - Indian Sacred Sites (1996);
- Executive Order 13287 - Preserve America (2003);
- Historic Bridges, Surface Transportation and Uniform Relocation Act of 1987 Section 123(f);
- Historic Sites and Buildings Act of 1935;
- National Historic Preservation Act of 1966, as amended (Section 106);
- Native American Graves Protection and Repatriation Act of 1990; and
- Reservoir Salvage Act of 1960.

Appendix

NEPA Determination Form with Guidelines

Categorical Exclusion Documentation Form with Guidelines

Guidance for Completing the Project Description for NEPA Documents

Example Template for LPA Biological Evaluation

USFWS Technical Assistance Letter

Status of Environmental Commitments (*Green Sheet*)

Guidelines for Completing Green Sheets

Listing of Environmental & Planning Reference Materials

***National Environmental Policy Act Determination Form
for Federal-Aid Projects***

Project Sponsor (NDOR or Local Public Agency) complete the following:

Project Sponsor:	Project Contact (include name, address, and phone):
NDOR District:	
Project No:	Control No:
Project Name and Location (Attach location map. Include county, municipality, etc.):	
Latitude: and/or	Section:
Longitude:	Township:
Limits of Work:	Range:
Start:	
End: Total Length:	
Project Description (Include narrative to describe general project scope of work.):	
Environmental Study Area:	
Project Purpose & Need:	
Special Project Information:	
Cost Estimate: Engineering: \$ Construction: \$ ROW: \$ Utilities: \$	

Date of Inclusion in STIP/TIP:		
Answer the following questions:	NO	YES or Unknown
Type of Construction – Does the proposed action include any new construction or widening of the existing roadway?	<input type="checkbox"/>	<input type="checkbox"/>
Change of Use – Does the proposed action increase through lane capacity, convert a local street into a higher classification roadway, or include a bypass?	<input type="checkbox"/>	<input type="checkbox"/>
Travel Pattern - Will the proposed action have an impact on permanent community travel patterns or community cohesiveness?	<input type="checkbox"/>	<input type="checkbox"/>
Traffic Management – Will the proposed action include the use of a temporary road, detour or ramp closure?	<input type="checkbox"/>	<input type="checkbox"/>
Access Control - Will the proposed action physically change access control rights of the existing transportation facility?	<input type="checkbox"/>	<input type="checkbox"/>
Easements – Will the proposed action require more than minor amounts of right of way acquisition or permanent easement for construction?	<input type="checkbox"/>	<input type="checkbox"/>
Relocations – Will the proposed action displace people, businesses or farms?	<input type="checkbox"/>	<input type="checkbox"/>
Cultural Resources – Will the proposed action impact listed or potential historic property, excavate undisturbed or minimally disturbed areas, or is there existing records or inventories of cultural resources in the study area?	<input type="checkbox"/>	<input type="checkbox"/>
Section 4(f) – Will there be a use of any existing or planned publicly owned parks, wildlife refuges, historic properties, historic bridges, recreational areas, bikeways, or trails in the study area?	<input type="checkbox"/>	<input type="checkbox"/>
Section 6(f) – Will the proposed action convert park or recreational property that used Land & Water Conservation Funds to acquire the property or assist in its development?	<input type="checkbox"/>	<input type="checkbox"/>
Air Quality – Is the proposed action in a non-attainment or maintenance area?	<input type="checkbox"/>	<input type="checkbox"/>
Noise – Will the project involve construction on new location or the physical alteration of an existing highway which changes the number of through traffic lanes, the shielding effect of existing roadways, or the vertical or horizontal alignment?	<input type="checkbox"/>	<input type="checkbox"/>
Wetlands – If wetlands are within the proposed action area, will the project permanently impact more than one-tenth (1/10) acre of wetlands?	<input type="checkbox"/>	<input type="checkbox"/>
Streams – Will the proposed action include a permanent impact on a perennial stream?	<input type="checkbox"/>	<input type="checkbox"/>
Floodplain –Will the proposed action permanently encroach a regulatory floodplain?	<input type="checkbox"/>	<input type="checkbox"/>
Rivers – Is the proposed action located within ½ mile of a Wild and Scenic or National Recreational River, or listed on the National Rivers Inventory or on the first 1.5 miles of a stream tributary to the designated river?	<input type="checkbox"/>	<input type="checkbox"/>
Threatened and Endangered Species – Will the proposed action affect federal or state listed threatened or endangered species or critical habitat?	<input type="checkbox"/>	<input type="checkbox"/>
Environmental Justice – Does the study area contain higher than average concentrations of low-income or minority populations when compared to the area surrounding the study area or the city or county as a whole?	<input type="checkbox"/>	<input type="checkbox"/>
Farmlands – Will the project convert prime or unique agricultural land to a different use or impact agricultural properties?	<input type="checkbox"/>	<input type="checkbox"/>

Hazardous Materials –Will the project activities affect or be affected by known contamination?	<input type="checkbox"/>	<input type="checkbox"/>
Public Interest – Is there known public controversy concerning or opposition to the proposed action?	<input type="checkbox"/>	<input type="checkbox"/>
Permits <input type="checkbox"/> Yes <input type="checkbox"/> No US Army Corps of Engineers 404 Nationwide Permit <input type="checkbox"/> Yes <input type="checkbox"/> No US Army Corps of Engineers 404 Individual Permit <input type="checkbox"/> Yes <input type="checkbox"/> No National Pollutant Discharge Elimination System (NPDES) / Storm Water Run-off <input type="checkbox"/> Yes <input type="checkbox"/> No Floodplain Permit <input type="checkbox"/> Yes <input type="checkbox"/> No US Army Corps of Engineers Section 10 Permit <input type="checkbox"/> Yes <input type="checkbox"/> No US Coast Guard Section 9 Permit <input type="checkbox"/> Yes <input type="checkbox"/> No US Fish & Wildlife Incidental Take Permit <input type="checkbox"/> Yes <input type="checkbox"/> No NE Dept. of Environmental Quality Title 117 Letter of Opinion Special Provisions: Public Interest <input type="checkbox"/> Yes <input type="checkbox"/> No Platte River Depletion (requires coordination with NDNR) <input type="checkbox"/> Yes <input type="checkbox"/> No Wellhead Protection Special Provision		
Additional Comments:		

Project Sponsor Staff or Consultant Signature

Prepared By: _____ (print) _____ (sign) Date: _____

Organization & Title: _____

Phone: _____ Email: _____

Project Sponsor Signature [LPA = County or City Representative – other than Consultant]

This document accurately reflects the scoping of this project.

Prepared By: _____ (print) _____ (sign) Date: _____

Organization & Title: _____

**Guidelines for Completing the
NEPA Determination
Form**

Guidelines for Completing the NEPA Determination Form

Consistent with Federal Highway Administration (FHWA) and Nebraska Department of Roads (NDOR) procedures, this document provides guidance in completing the NEPA Determination Form to ensure that all potential environmental impacts are being considered, and compliance with all applicable laws, regulations and executive orders are being properly documented.

The NEPA Determination Form was developed by the Nebraska Department of Roads (NDOR) and the Federal Highway Administration (FHWA) to assist project sponsors in gathering and organizing materials for environmental analysis required under the National Environmental Policy Act (NEPA). **All federal-aid projects** developed or reviewed by the Nebraska Department of Roads (NDOR) must have a NEPA Determination Form completed. These Guidelines provide general guidance and information to assist the project sponsor in the completion of the NEPA Determination Form.

Completion of the NEPA Determination Form will establish the type of NEPA documentation required to complete the project and meets criteria identified in Title 23, Code of Federal Regulations, Section 771. The types of NEPA documentation are: Categorical Exclusion (CE), an Environmental Assessment (EA) or Environmental Impact Statement (EIS). These procedures apply to projects that involve FHWA funding or approvals and do not apply to state or locally funded actions.

Regardless of NEPA determination, a proposed action must:

- 1) Connect logical termini and be of sufficient length to address environmental matters on a broad scope;
- 2) Have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made;
- 3) Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

NEPA

Many projects do not result in significant social, economic, and environmental impacts and are processed as Categorical Exclusions (CE) as described in 23 CFR771.117. The level of Categorical Exclusion is determined by the responses provided in this form and by criteria contained in the current Programmatic Categorical Exclusion Agreement (PA) between FHWA and NDOR. The determination is based on the type of project being proposed and its effects on the environment. Projects with the potential for “significant” impacts require preparation of an Environmental Assessment (EA) or an Environmental Impact Statement (EIS).

The NEPA documentation process is a stepped process with incremental reviews and approvals as the project moves forward. If the proposed action is to be classified as a categorical exclusion, the approval process will consist of an initial review by NDOR to determine that the action qualifies as a CE. This initial review may result in a determination that additional documentation is needed for compliance with other federal or state regulations. This additional documentation will use the CE Documentation Form and will need to be completed prior to approval of the CE.

At any time during the development of a proposed action, if a change in the project scope or the project limits occurs, the NDOR Environmental Section must be contacted to evaluate potential impacts.

Construction activities, right-of-way acquisition, and final design may not begin until the NEPA approval process is complete. However, appropriate environmental studies (e.g., scoping field

reviews, technical studies) and developing preliminary engineering details to gain adequate information to complete NEPA documentation may occur.

NOTE: NEPA determination does not constitute compliance with other environmental regulations such as those associated with the Clean Water Act, the Historic Preservation Act, the Endangered Species Act, or other applicable agency regulations. Regulatory letters providing concurrence on an agency resource do not preclude other actions the project sponsor must carry out such as 404 permit, best management practices, minimization of impacts, and similar environmental commitments.

Agency Coordination

Early coordination with other federal, state, and local agencies is an essential ingredient in the NEPA process. It is important that project sponsors notify resource agencies that they have a proposed project. This allows resource agencies to be aware of actions that may have environmental concerns in the proposed action area. Interagency coordination with resource agencies provides essential information about the natural, cultural and historic context of the environment encompassing the project. This coordination provides a mechanism for those with jurisdictional responsibilities an opportunity to discuss the outcome of the transportation decisions and solutions. The project sponsor initiates the early coordination process with resource agencies to provide them with project information and to receive specific information regarding the probable impacts of the various alternatives so they can complete this form. Early coordination helps in determining the appropriate level of documentation, developing the project's purpose and need, determining alternatives, identifying issues of concern and the scope of environmental resources that would be affected by the project etc. **Early coordination must occur before conclusion of the NEPA process as part of the early project development process.**

To ensure that the proposed action will comply with the requirements of NEPA, the Endangered Species Act, the National Historic Preservation Act, the Clean Water Act, and other applicable Federal and State laws, the project sponsor will solicit comments from all resource agencies applicable to the project, including the agencies listed below, and attach that correspondence to the form. This contact is to begin the NEPA process and not the application process for permits. Applying for permits is initiated after NEPA approval.

1. U.S. Fish and Wildlife Service (for comment on the possibility of impacting federally-listed threatened and endangered species and/or critical habitat, Migratory Bird Treaty Act, Fish & Wildlife Coordination Act, and Bald & Golden Eagle Act).
2. U.S. Army Corps of Engineers (for comment on the possibility of impacting wetlands and other Waters of the U.S.)
3. Nebraska Game and Parks Commission (for comment on the possibility of impacting state-listed threatened and endangered species).
4. Nebraska State Historical Preservation Office (SHPO) (for comment on the possibility of impacting cultural resources).
5. Nebraska Department of Environmental Quality (for comment on the possibility of impacting water quality, stormwater runoff permit, or hazardous waste compliance).
6. U.S. Environmental Protection Agency (USEPA) (for comment on protection of human health, and the natural environment, including land, air and water resources).
7. Nebraska Commission on Indian Affairs (for comment on potential Tribal impacts).

Requirements for NEPA Documentation Preparation

The project sponsor must insure that NEPA documentation is prepared by qualified staff or consulting firms. The principal author must have three years qualified experience and a bachelor's degree or two years qualified experience with a master's degree within the field of environmental science, planning, engineering or a closely related field.

Qualifying experience is considered to be work and training having to do with the preparation and coordination of acceptable NEPA documents. "Acceptable" means documents that have been formally accepted by NDOR/FHWA and must be approved documents with minimum comments or revisions. Documents that require multiple revisions and re-submissions will not be considered acceptable for meeting prequalification requirements. Qualifying experience must also include successfully completing NDOR's Categorical Exclusion (CE) class.

Upon authorization to proceed, the project sponsor shall submit to NDOR a detailed description of each preparer's education and experience. This description shall include the following:

- Resume of key professionals authoring NEPA documentation.
- List of other experience with technical writing and/or specific environmental studies prepared.
- Certification of completion of NDOR's Categorical Exclusion (CE) Class.

NEPA Determination Form

Describe the following components:

Project Sponsor: Identify the organization (e.g., NDOR, county, local agency) that formally proposes the project and is responsible for project funding, project implementation, project evaluation, or a combination thereof.

Project Contact: Provide the name of the contact person for the proposed project, including street address, telephone number(s), and email address.

NDOR District: Provide the NDOR district where the proposed action will be located.

Project Name and Location: Give a brief description of location, including city, county, highway/roadway name, highway number, beginning and ending mileposts, and if necessary, give the distance to nearest landmark (e.g., 15 miles north of local airport). Attach maps identifying the vicinity, project's location, and surrounding land uses. The vicinity map can be created using a county map as the base, highlighting the study area, and showing a north arrow, scale, project name, and county. A project location map uses a USGS map or other mapping in an urban area and shows the proposed logical termini, the existing facility, north arrow, and scale.

Latitude / Longitude: Provide the latitude and longitude of the proposed project site, and/or provide the Section, Township, and Range the project is located in.

Limits of Work: Provide the locations of the beginning and ending points of work. Start and End locations can be Mileposts, Stations, or brief description. This will be used when reviewing the logical termini description. (Logical termini for project development are defined as (1) rational end points for a transportation improvement, and (2) rational end points for a review of the environmental impacts. Logical termini may need to be longer than a proposed project's construction termini due to specific analysis that needs to be considered.)

Project Description: Give a brief description of the project setting (e.g., urban, rural) and existing conditions. Describe project activities and include such information as locations, length, logical termini, type of improvement/construction, distinct project features, etc.. Provide information relating if the project is in a rural or urban setting. Describe existing roadway facilities (Sidewalks, shoulders,

guardrail, etc.). Note any critical resource areas (historic, cultural or environmental) or sensitive noise receptors (schools, hospitals, churches, residences, etc).

Environmental Study Area: An environmental study area will be established based on the area estimated to be potentially impacted by the project (i.e., the area of potential effect). The study area is established and confirmed by being documented on this form. At any time during the development of a proposed action, if a change in the project scope or the project limits occurs, the environmental study area will be reevaluated. This may result in the need for either additional studies or a reevaluation of the environmental document. For more information, see Chapter 5, Determining the Study Area, in the LPA manual.

Purpose and Need: Clearly identify and describe the underlying problem or deficiency (e.g., congestion, safety, system linkage). In addition, explain why the project is necessary (e.g., provide system continuity, capacity improvement, correct safety or roadway deficiencies). A clear, well-justified purpose and need statement explains why the expenditure of funds is necessary and worthwhile. The statement length and complexity will vary with the scope of the proposed project. For more explanation see Chapter 5, Defining the Purpose and Need, in the LPA Manual.

Special Project Information: Special design, environmental information or commitments, in addition to any permits which are anticipated, should be listed here. Although detail design is usually not available at this stage of the project development, estimations on a project's design criteria must be made as a basis to weigh the project's potential impacts to the environment. Such information may include: design speed, traffic volumes, typical section, structure type (culvert or bridge) and dimensions, design exceptions, etc...

Cost Estimate: Provide the preliminary estimates for engineering, construction, ROW, and Utilities.

Date of Inclusion in STIP/TIP: Provide date of inclusion in an approved State Transportation Improvement Program (STIP) and Transportation Improvement Program (TIP).

Questions

If a project sponsor has difficulty answering these questions, they are encouraged to review the appropriate section in the LPA manual and contact NDOR for assistance.

Type of Construction: New Construction/reconstruction includes but it is not limited to:

- Construction of a new road or interchange
- Relocating an existing route on a new alignment
- Upgrading roadway to current geometric standards. This work would require physical alternation of the existing cross-section. This could include the addition of shoulders, rehabilitation of existing main lanes, or adding center turn lanes in median.
- Widening an existing road (i.e., added through capacity of an existing facility, widening within existing ROW, and addition of travel lanes). Any addition of a turning lane that exceeds the length needed for a single turning movement (total of the entering taper, deceleration length, and storage length)" should be considered a widening project.
- Reconstruction of an existing route on approximately the old alignment where the old pavement structure is removed and replaced. This would include any project where the limits of construction expands beyond the existing roadway surface and includes such items as subgrade, adjacent foreslope, and ditch work.
- Widening, realigning, raising or relocating a bridge that requires placement outside of the existing right-of-way.
- Construction of new grade separation interchanges
- Realignment of intersections

Guidelines for NEPA Determination Form

- Changes to horizontal or vertical alignments
- Roadside work including shaping fillslopes, foreslopes and ditches. It does not include reshaping existing gravel surfaced roads and shouldering along paved roadways.
- Construction of new bicycle and pedestrian lanes, paths or facilities
- Railroad grade separation to replace existing at grade crossings.
- Construction of safety rest area

Routine repair and maintenance of existing facilities such as mill and overlay is not considered new construction.

Change of Use: An increase to through lane capacity can be described as: physically adding traffic lanes, removing traffic bottlenecks, straightening curves, grade separation for either roads or railroads, or adding turn/auxiliary lanes long enough to function as a through traffic lane and or increase capacity. Also auxiliary lanes that are added between interchanges to improve operational efficiency that are at least 1.5 miles long or are made continuous through a series of successive interchanges will be considered change of use. In general any project intended primarily to increase traffic carrying capacity of the highway system

Travel Patterns: Examples of permanent changes to community travel patterns are closures, new intersections, bypasses, or converting a road to a higher classification.

Traffic Management: The project sponsor will select “**Yes**” if temporary road, bridge, ramps, causeway, detours or closure will occupy a location more than 3 days. (Note: Traffic management schemes will have an environmental impact, either beneficial or adverse, as a result of the changes in driver behavior. In addition the public's perception of traffic management schemes may be influenced by factors such as disruption encountered during the construction phase, visual intrusion caused by, for example, extra traffic signs, severance and perceived danger.) Detours must be included in the footprint of environmental surveys and environmental analyses.

If the project sponsor selects “**No**”, provisions must be made for access by local traffic and so posted, through traffic dependent business must not be adversely affected, the temporary road, detour or ramp closure must not substantially change the environment consequences of the action, and there must not be any substantial controversy associated with the use of temporary road, detour, or ramp closure. If these conditions cannot be accomplished, the project sponsor must select “**Yes**”.

Access Control: Access is defined as a means of vehicle ingress or egress between a highway and abutting property or an intersecting local public road or street. Access is also defined as entrances or driveways from properties to a public road system. The project sponsor will select “**Yes**” if the project proposes to add access or if the proposed relocation of existing access will not meet recommended spacing standards.

Right of Way (ROW): If more than 1.5 acres per linear mile of ROW acquisition or permanent easement is needed for the proposed project, the project sponsor will select “**Yes**”. Consider construction easements and utility relocations and partial or full takes of right of way.

Relocations: If residential or business displacements are anticipated, the project sponsor will select “**Yes**”.

Cultural Resources: The project sponsor would select “**Yes**” if there are possible impacts to listed or potential historic properties, archaeological sites or traditional cultural properties. A listed historic resource refers to the National Register of Historic Places (NRHP). Properties listed in the Register include buildings, highway bridges, irrigation ditches, railroads, mines, trails and wagon roads,

roadway features and landscapes that are significant in American history, architecture, archeology, engineering, and culture. A potential historic property includes structures 50 years or older, archaeology sites, cultural sites, etc. that have not yet been placed on the list.

Excavations of 6 inches or more may require clearances for archaeology. Sites that have been disturbed over time are less likely to have any serious impacts, but intact archaeological deposits may exist in any location, regardless of prior earth disturbances. Permitted professional archaeologists must investigate undisturbed or minimally disturbed areas, on federally funded transportation projects.

Section 4(f): The project sponsor would select “**Yes**” if there are Section 4(f) properties present and possible impacts could occur. Section 4(f) properties are publicly owned park, recreation area, or wildlife and waterfowl refuge, or any significant historic site (includes historic bridges and eligible for NRHP listing) officially designated as such by a Federal, State or local agency. Per regulations (23 CFR 771.135), FHWA may not approve the use of these lands unless a determination is made that: 1) there are no feasible and prudent alternatives to the use of land from the property; and 2) the action includes all possible planning to minimize harm to the property resulting from such use.

A “use” of a Section 4(f) resource, as defined in “Title 23, Code of Federal Regulations, Part 771.135(p),” occurs: 1) when land is permanently incorporated into a transportation facility; 2) when there is a temporary occupancy of land that is adverse in terms of the statute’s preservationist purposes; or 3) when there is a constructive use of land. A constructive use of a Section 4(f) resource occurs when the transportation project does not incorporate land from a Section 4(f) resource, but the project’s proximity impacts are so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired. For example, a constructive use can occur when the projected noise level increase, attributable to the project, substantially interferes with the use and enjoyment of a noise-sensitive facility of a resource protected by Section 4(f). The finding of constructive use is extremely rare.

Even if a project sponsor has agreement from the official(s) with jurisdiction over that property that they are in approval of the impacts or improvements of the proposed action, the project sponsor would still select “**Yes**” if there is a use of the property.

Section 6(f): If the project converts land acquired or developed with Land and Water Conservation Funds, the project sponsor must select “**Yes**”. The NE Game and Parks Commission can assist in determining if L&WCF funds were used.

Air Quality: Currently all areas within Nebraska are within containment. However, some areas within the state are nearing the threshold. Project sponsors should be aware of this requirement and conduct an inquiry to ensure that the proposed action location is not within a maintenance or non-attainment area.

Noise: The project sponsor will also select “**Yes**” if an auxiliary lane is added between interchanges that is at least 1.5 miles long or made continuous through a series of successive interchanges. Consideration should also be given when the proposed action involves pile driving, structure demolition, blasting, etc...

Wetlands: The project sponsor will select “**Yes**” if the amount of wetland permanently impacted has the potential to be more than one-tenth (1/10) of an acre or activities will modify as defined by the 1987 Corps of Engineers Wetland Delineation Manual.

Federal regulations require that impacts to wetlands be avoided and minimized to the greatest extent practicable. Thereafter, unavoidable impacts must be mitigated.

Wetlands are determined by reviewing a copy of relevant NWI maps, county soils maps, field notes from a site visit, and photographs. Maps and photos should show relative location of wetlands to proposed action by delineating the proposed construction area. If wetlands are present on federally funded transportation projects impacts greater than 500 square feet requires a Wetland Finding. Several permits may be required for wetland impacts.

Floodplain: The project sponsor will select “**Yes**” if the project will modify the topography as a result of either placement or removal of materials which results in more than a one foot rise or the locally regulated maximum in the 100 year water surface elevation.

Streams: A perennial stream is defined as a stream that flows continuously during both wet and dry times.

Rivers: Project sponsor will compare the location of the proposed action to the Wild and Scenic or National Recreational River list, the Study Rivers, and the National Rivers Inventory. Designation protects river and a 0.25 mile corridor from development. It also includes a corridor 1.5 miles up or downstream of stream tributaries to the designated river.

Threatened & Endangered Species: The project sponsor will select “**Yes**” if federal or state listed species or critical habitat is known to exist in the study area. In order to determine if a proposed action has the potential to affect federal or state listed threatened or endangered species or critical habitat, the project sponsor can contact the USFWS and NGPC, visit <http://www.fws.gov/mountain-prairie/ne.html>, or request NDOR to access and review the Nebraska Natural Heritage Database.

Environmental Justice: The project sponsor will select “**Yes**” if the areas in which these populations are located are subject to disproportionate impacts. Some questions to consider in making this determination are: Will the proposed project increase traffic in low-income and minority neighborhoods? Will minority owned businesses that serve a minority or low-income population be impacted by the project? Will access from minority or low-income neighborhoods to various services or cultural destinations (church, parks, community center) be affected by the proposed project? Will the project require displacement of any minority or low-income residences?

Farmlands: The project sponsor needs to determine if farmland will be acquired for the proposed action or if the proposed action will indirectly lead to the conversion of farmland. Farmland subject to protection requirements does not have to be currently used for cropland. It can be forest land, pastureland, cropland, or other land, but not water or urban built-up land. Right-of-way that is clearly not farmland (rocky terrain, sand dunes, etc.) and the project will not indirectly convert farmland are not covered by FPPA.

“Prime farmland” is defined as land that has the best combination of physical and chemical characteristics for producing food, and other agricultural crops.

“Unique farmland” is land other than prime farmland that is used for production of specific high value food and fiber crops as determined by the Secretary of Agriculture.

Soil survey maps depicting soil types meeting prime and unique farmland criteria are available from NRCS. Where mapping is incomplete the NRCS should be consulted.

Hazardous Waste/Materials: Stringent environmental laws and regulations expose the project sponsor to full responsibility for proper handling and disposal of hazardous materials whether the original source is from project sponsor activities, from a tenant, or inherited when property is acquired. Every

federal project requires the project sponsor to scope and identify properties, particularly those located along the right-of-way, that have documented or potential contamination based on current or historical information. This work is done in order to identify potential contamination sources that may affect project design and construction relative to property acquisition and worker/public health and safety. Projects that have grading or excavation below the existing toe-of-slope should include details regarding the extent of contamination and the status of enforcement actions. The assessment should include details regarding the extent of contamination and the status of enforcement actions at the individual properties if known. Federal and State regulatory database sources should be used.

Projects located in rural settings with little or no planned excavation or demolition often does not require the hazardous materials assessment described above. A memorandum detailing the justification for not developing the assessment will suffice. Provide as an attachment results of database reviews and corridor site visits (if needed for projects with scope that may encounter contaminated soils or water).

If the assessment indicates potential contaminate sources, the project sponsor will select **“Yes”**.

Public Interest: Consider whether there is substantial interest (from a community standpoint) in the proposed action, or in environmental resources surrounding the project. Controversy on projects is typically not on minor, routine, or ongoing undertakings. Effects on the quality of human environment such as local opposition to the action, environmental protection or special interest groups, competing commercial interests, or expert disagreement are indicators of potential controversy. There should be no substantial opposition from any organized groups or agencies.

Permits and Special Provisions:

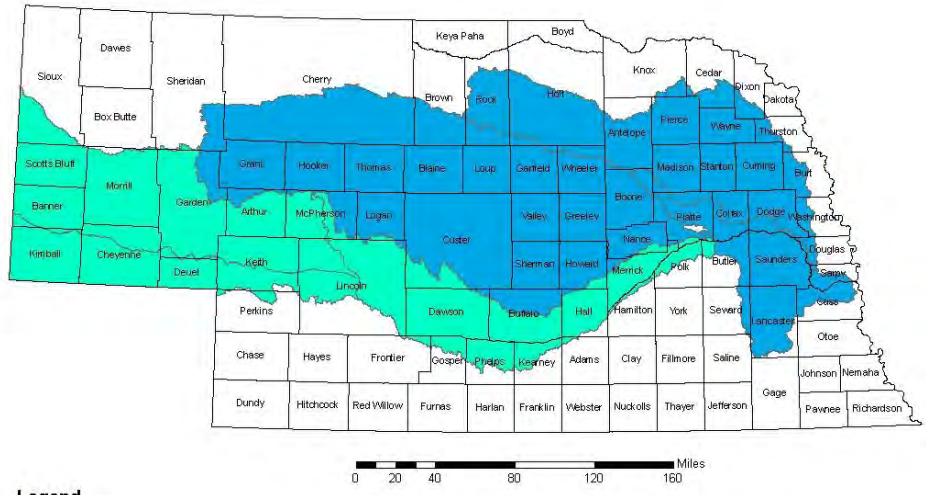
There are several environmental permits that may be required before a project can go to advertisement. Considering the information provided above, identify those permits that appear to be appropriate at this time for the proposed action.

Wellhead Protection Areas: The project sponsor will select **“Yes”** if adjacent water resources may be affected by proposed construction activities. The Nebraska Department of Environmental Quality oversees the Wellhead Protection Area(s) in Nebraska and will be able to assist in locating wellheads within the proposed study area. NDOR special provisions will be included in the contract to address these protected areas.

Platte River Depletion: The project sponsor will select **“Yes”**, if the proposed action may require the development of an on-site or new borrow site with exposed surface water, inclusion of detention basins that retain water longer than 72 hours, or the temporary withdrawal of groundwater within the basins of the Platte River. Additional coordination will be required with the Nebraska Department of Natural Resources. See map below to determine if the project is located within Platte River basins of concern.

Guidelines for NEPA Determination Form

Basins that have potential to impact Platte River Flows (depletion concerns).



Legend

- Basins Associated with the Lower Platte
- Platte River Implementation Recovery Area

Note: The Lower Platte Basin has been identified to be in a state of jeopardy. Individual consultation with the U.S. Fish and Wildlife Service would apply for Platte River depletions.

Additional Comments

The project sponsor is responsible to provide any additional information or potential impacts not addressed above that may assist in determining NEPA classification.

Preparer Information and Sign-off

In summary, the project sponsor is responsible for clearly stating the proposed project's purpose and need, describing the proposed project, answering the questions, and inclusion of all data that supports these statements.

Review, Certification, and Approval

NDOR will review responses and visit the proposed project site. During their review if NDOR has questions, they will contact the project sponsor for additional information and clarification. Once approvals are completed by NDOR and if necessary FHWA, NDOR will provide a copy of the signed NEPA Determination form to the project sponsor.

NOTE: Review/Certification and Approval cannot be performed by the same individual.

**CE Documentation Form
for
Federal Aid Projects**

CE Documentation Form for Federal Aid Projects

Complete the following form. Following a YES or NO response or where indicated, provide a description of the potential impact. Document all consultation with resource agencies. Attach all supporting documentation including descriptions of resources, type of impact expected, what measures were taken to avoid or minimize the impact, why the impact is not significant, and the source of information used to make these determinations. Use additional sheets to respond to questions, as needed.

Refer to the [Guidelines for Completing the CE Documentation Form](#) for further direction or additional information for each resource listed below. **Note: This form will be a permanent part of the NDOR and Project Sponsor project file along with supporting documentation.**

Block 1. Project Description and Design Information	
Date: _____	
Project No. _____	Control No. _____
Project Sponsor: _____	
Project Contact (include name, phone number, street address and email address): _____	
NDOR District: _____	
Project Name and Location (include county, township, municipality, etc.). Attach Project Vicinity map: _____	
Latitude: _____	Longitude: _____
Section: _____	Township: _____ Range: _____
Limits of Work: Start: _____ End: _____ Total Length: _____	
Project Description Include narrative to describe general project scope of work - include type of construction, logical termini, reasons why termini are "logical termini", setting, and distinct project features: _____	
Purpose and Need for Project: _____	

Design Criteria for Roadway:	
Functional Classification: _____	
Current ADT: _____ vpd	(20____)
Design Year ADT: _____ vpd	(20____)
DHV: _____ Trucks: _____ %	Directional Distribution _____ %
Design Speed: _____	
Posted Speed: _____	
Setting: <input type="checkbox"/> Urban <input type="checkbox"/> Suburban <input type="checkbox"/> Rural	
Topography: <input type="checkbox"/> Flat <input type="checkbox"/> Rolling <input type="checkbox"/> Other Explain: _____	

Roadway Character (Existing and Proposed):	Existing	Proposed
Number of Lanes:	_____	_____
Surface Type:	_____	_____
Roadway Width (ft):	_____	_____
Shoulder Width (ft):	_____	_____
Median Width (ft):	_____	_____
Clear zone (ft):	_____	_____
Average ROW Width (ft):	_____	_____
Design Exception Requested: <input type="checkbox"/> Yes <input type="checkbox"/> No		
If yes, explain:		

Design Criteria for Bridges / Culverts (if known):	Existing	Proposed
Bridge Number:	_____	_____
Sufficiency Rating:	_____	_____
Estimated Remaining Life:	_____	_____
Bridge Type:	_____	_____
Number of Spans:	_____	_____
Structure Length:	_____	_____
Weight Restriction (ton):	_____	_____
Height Restrictions (ft):	_____	_____
Curb to Curb Width (ft):	_____	_____
Shoulder Width (ft):	_____	_____
Under Clearance (ft):	_____	_____
Lateral Clearance (ft):	_____	_____
Design Exception Requested: <input type="checkbox"/> Yes <input type="checkbox"/> No		
If yes, explain:		
1a). STIP / MPO:		
Is the project in the State Transportation Improvement Program (STIP)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If yes: Phase: _____ Date: _____		
If no, contact NDOR Planning and Location Studies Manager.		
Is the project in the most current Metropolitan Planning Organization (MPO) Transportation Improvement Program (TIP)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If yes: Phase: _____ Date: _____		
If no, and within a metropolitan planning area, contact NDOR.		

Block 2. Alternatives Considered	
<p>2) Were other alternatives considered for the proposed action?</p> <p>If YES, describe all reasonable alternatives considered including a description of the preferred:</p> <p>Does the project impact wetlands, floodplains, Section 4(f) properties, or threatened and endangered species?</p> <p>If YES, describe all avoidance, minimization, and mitigation considered including a description of the preferred:</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
Block 3. Right-of-Way, Relocations, Utility Coordination	
<p>3a) Will the proposed action require new right-of-way (ROW) or easement or temporary construction easement?</p> <p>If YES, provide the following information:</p> <p>Approximate area of temporary ROW/easement: _____ acre(s)</p> <p>Approximate area of permanent ROW/easement: _____ acre(s)</p> <p>Approximate number of parcels for temporary ROW/easement: _____</p> <p>Approximate number of parcels of permanent ROW/easement: _____</p> <p>Reason for ROW/easement:</p> <p>Current Land Use:</p> <p>Are there any anticipated donations of ROW?</p> <p>Will the project use any Public Park ROW?</p> <p>Is it anticipated that construction will require a borrow site, construction staging area for batch plant or equipment, or a waste site outside the project area?</p> <p>Provide additional information for questions answered yes:</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>3b) Will the proposed action cause relocation of any residential homes, businesses, farms, or public institutions?</p> <p>NOTE: If relocations are anticipated, relocation services will need to be provided per the Uniform Relocation Assistance Act.</p> <p>If YES, indicate the following:</p> <p>Number of displacements:</p> <p>Residential: _____ Businesses: _____ Farms: _____ Public Institutions: _____</p> <p>Discuss displacements:</p> <p>Are there properties within the local area available for relocation? If YES, describe:</p> <p>Will the project induce impacts to economic activity that is not authorized for reimburseable under state eminent domain? If Yes, explain:</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>

<p>3c) Will the proposed action need to accommodate for utilities in the study area?</p> <p>If YES, state type of utilities and anticipated work involved (e.g., relocation, temporary disruption of service). Note if utility providers have been consulted.</p> <p>If known, indicate if utility crossing(s) will have the potential to impact stream, open water, or wetlands, or if the proposed action will require clearing and grubbing by utilities:</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>3d) Describe the involvement with any railroad (active or inactive) including all rail lines, crossing, bridges, or signals.</p>	
<p>Block 4. Socio-Economic</p>	
<p>4a) Are the anticipated environmental impacts resulting from the proposed action likely to fall disproportionately on the minority and/or low income populations, including populations with Limited English Proficiency (LEP)?</p> <p>Will the proposed project increase traffic in low-income and minority neighborhoods?</p> <p>Will minority owned businesses that serve a minority or low-income population be impacted by the project?</p> <p>Will access from minority or low-income neighborhoods to various services or cultural destinations (church, parks, community center) be affected by the proposed project?</p> <p>Will the project require displacement of any minority or low-income residences?</p> <p>Are there noise or air quality impacts to minority or low income populations?</p> <p>If YES, describe any potential adverse effects and the affected population (e.g., minority, low-income, elderly, or disabled), and describe proposed measures to mitigate for any adverse impacts:</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>4b) Will the proposed action require temporary and/or permanent access changes?</p> <p>If YES, describe the access changes (temporary or permanent) and impacts to businesses (disruption, loss or restricted parking), residential neighborhoods, or individual residents:</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>4c) Will the proposed action have an impact on travel patterns (e.g., does the action include a bypass or convert a local street into a higher order roadway)?</p> <p>If YES, describe any permanent traffic diversion or change of traffic patterns that would occur:</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>4d) Is the proposed action consistent with local land use plans?</p> <p>If YES, identify area plans and assess consistency:</p> <p>If NO, provide details of coordination with local government:</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>4e) Will the proposed action cause economic impacts (temporary or permanent, positive or negative) to the local economy (e.g., adjacent highway-related and other businesses, employment gains or losses, etc.), local tax base or property values?</p> <p>If YES, describe impacts and any proposed measures to minimize economic impacts:</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>4f) Will the proposed action result in impacts on fire, police, emergency services, health and educational facilities, school bus route, religious institutions, public transportation, or pedestrian and bicycle facilities?</p> <p>If YES, describe impacts and any proposed measures to minimize impacts:</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>

4g) Will the proposed action result in impacts to community cohesion (e.g., separation from community facilities or isolated portions of a neighborhood)? If YES, describe impacts and any proposed measures to minimize community division or separation:	<input type="checkbox"/> Yes <input type="checkbox"/> No
4h) Will the proposed action induce secondary growth? If Yes, explain:	<input type="checkbox"/> Yes <input type="checkbox"/> No
4i) Does the project incorporate bicycle or pedestrian facilities into the overall design or operations. If Yes, explain:	<input type="checkbox"/> Yes <input type="checkbox"/> No

Block 5. Historic and Cultural Resources (Section 106) (SHPO CONCURRENCE REQUIRED)

5) Will the proposed action have an effect on historic, cultural, burial, or archaeological resources, including historic bridges or roads (e.g., Old Lincoln Highway), that are eligible for or listed in the National Register of Historic Places (NRHP)? If YES: Describe properties or resources impacted by project:	<input type="checkbox"/> Yes <input type="checkbox"/> No
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NOTE: Project Sponsor will need to complete Section 106 consultation & documentation separately from the CE Process.

	Presence				Level of Effects		
	Not Present	Potentially Eligible Resource Present	Eligible Resource Present	Listed Resource Present	No Historic Properties Affected	No Adverse Effect	Adverse Effect
Cultural Resources	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Prehistoric Archaeology	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Historic Archaeology	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Historic Structure	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Historic District	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Historic Transportation Corridor	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes

Is SHPO Coordination Complete? Attach concurrence letter: Date received: _____ NOTE: If Section 106 consultation results in an "adverse effect" finding, then additional consultation will be needed.	<input type="checkbox"/> Yes <input type="checkbox"/> No
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Block 6. Section 4(f) and Section 6(f) (FHWA APPROVAL REQUIRED)

6a) Will the proposed action have a constructive use or a temporary or permanent occupancy of any Section 4(f) resource (publicly owned parks, recreation areas, and wildlife/waterfowl refuges, and NRHP eligible or listed historic properties)? Avoidance is always preferred. If YES, a Section 4(f) individual, programmatic, or <i>de minimis</i> evaluation will need to be prepared. Consult with NDOR / FHWA to determine appropriate 4(f) document. Describe all 4(f) mitigation alternatives, including variations in design, used to minimize impacts:	<input type="checkbox"/> Yes <input type="checkbox"/> No
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NOTE: Project Sponsor will need to complete all Section 7 consultation & documentation separately from the CE Process.

Block 8. Farmland

8) Does the proposed action involve acquisition of prime, unique, statewide or local important farmland or use of farmland that would be converted to non-agricultural use? Yes No

If YES, Indicate the size of area impacted:
 Farmland: _____ acres

Describe or attach:

- Farmland conversion impacts or coordination with the Natural Resources Conservation Service (NRCS)
- Farmland Conversion Impact Rating Sheet (Form AD-1006).

Block 9. Wetlands / Waters of the U.S. / Waters of the State (Title 117)

9a) If there are no wetlands, waters of the U.S. or waters of the State located within the study area, check "N/A": N/A

Individual/Organization that made the determination: _____

Date of Field Visit: _____

Are wetlands, waters of the U.S. or State present within the study area but will be avoided by construction? Yes No

Discussion:

9b) Does the proposed action involve impacts to wetlands (including isolated wetlands identified by NDEQ)? Yes No

If YES, what is the total wetland area impacted: _____ acre(s)

	Presence		Impacts	
	Not Present	Present	No	Yes
Wetlands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Open Water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vegetated				
Emergent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scrub Shrub	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Forested	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rain Water Basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Saline	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Western Alkaline	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

Documentation

Wetland Determination Memo

Yes No

Wetland Delineation Report

Yes No

Individual Wetland Finding

Yes No

USACE Jurisdictional Determination (if declaring isolated wetlands)

Yes No

Mitigation Plan

Yes No

Attach aerial photo map or plan showing wetland areas for the study area.

<p>9c) Are stream(s) present within the project area?</p> <p>If YES, will the stream(s) be impacted? (i.e., work will occur below ordinary high watermark)</p> <p>Name stream(s) impacted:</p> <p>Is the stream(s) identified as wild and scenic, national recreation, or listed on the National Rivers Inventory (NRI)?</p> <p>Is there impact(s) to navigable waters of the U.S (applicable to Missouri River only)?</p> <p>Is the stream(s) intermittent, ephemeral or perennial?</p> <p>Is this stream(s) designated as State Water Resource Class A?</p> <p>What is the length of stream channel impact (linear feet) _____</p> <p>Discussion:</p> <p>Are there other surface waters present within the project area?</p> <p>If YES, will the water body (s) be impacted?</p> <p>Name of water body:</p> <p>What type of water body (lake, pond, sand pit, or reservoir):</p> <p>What is the size of the water body impact:</p> <p>Discussion:</p> <p>Provide measures evaluated or proposed to avoid or minimize impacts to waters of the U.S or State:</p> <p>NOTE: Attach photos and plan sheets that show the location of the stream channel or water bodies. The photos should be taken up and down the impacted stream channel and of any adjacent ditches.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>9d) Will the proposed action require the following permits under the Clean Water Act?</p> <ul style="list-style-type: none"> • Section 404 Nationwide Permit (USACE) • Section 401 Individual Water Quality Certification (NDEQ) <p>Has coordination with USACE and NDEQ been initiated?</p> <p>If YES, attach any coordination with USACE, NDEQ, or other applicable resource agency.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>Water related permits such as Section 404 and 401 are acquired after approval of the CE during final design.</p>	

Block 10. Floodplains	
10a) Is the proposed action located within the 100-year base floodplain?	<input type="checkbox"/> Yes <input type="checkbox"/> No
10b) Will the proposed action cause an encroachment or impacts to the 100-year Zone A floodplain? If YES, describe potential impacts and include the Federal Emergency Management Agency (FEMA) map with the project location identified. Include any consultation with the local or county floodplain administrators or the NE Department of Natural Resources (DNR) for the project area: If there are substantial encroachment to the 100-year floodplain, FHWA must be consulted.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Block 11. Regulated Materials	
11a) Is there any known or potential contamination at the project site (e.g., previous land uses with possible hazardous waste involvement), or additional remediation work that has to be done regarding hazardous or contaminated material? Will a building (age) or insulated pipe possibly containing asbestos or lead based paint be removed as part of this project? If a bridge replacement is part of the proposed action, is there the potential that lead paint was used on the structure? Discussion: NOTE: If YES, and there is the potential for CERCLA, SARA, RCRA, TSCA, UST/LUST, lead, or asbestos issues on the project, notify and consult with NDOR and FHWA.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
11b) Will the project action impact any registered or known groundwater monitoring wells? If Yes, identify any groundwater monitoring wells in the right of way, in the adjacent right of way, and the owner of said wells.	<input type="checkbox"/> Yes <input type="checkbox"/> No
NOTE: Disposal of construction waste and debris must be handled as per Standard Specifications Sections 201, 202.02(4), 203.01, 203.02 and NDOR's Special Provision addressing unexpected discoveries of hazardous waste during construction.	
Block 12. Air Quality / Noise	
12a) Is the proposed action in an air quality non-attainment or maintenance area?	<input type="checkbox"/> Yes <input type="checkbox"/> No
12b) Will the project involve the addition of one or more through lanes? Will the project involve a change in vehicle mix or speed? Will the project involve a change in vertical or horizontal alignment? Will the project involve new roadways or change the shielding effect of existing roadways? If YES to any of the questions above, then a noise analysis is warranted, provided there are noise sensitive land uses in the project area. Attach Noise Analysis to CE Form.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
12c) If yes to any of the questions in 12b, are there possible sensitive noise receptors present? If Yes, how many noise sensitive receptors are within the proposed action area? _____ If Yes, what type(s) of noise sensitive receptors are present? List below: Attach a map of the sensitive noise receptors.	<input type="checkbox"/> Yes <input type="checkbox"/> No

<p>12d) If a noise analysis was performed, are the predicted noise levels approaching or exceeding noise abatement criteria stated in 23 CFR 772 Table 1 for the appropriate land use activity category?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>Will there be a substantial increase in decibels over existing level?</p> <p style="padding-left: 40px;">If YES, describe impacts and mitigation measures, if applicable.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>

NOTE: Mitigation for noise impacts has a public information component. Public meetings can contain multiple project topics and are independent of a LPA’s regular business meetings and held at convenient times and location(s) for the public affected by the project.

Block 13. Water Quality

<p>13a) Indicate if any of the groundwater resources, drinking and/or non-drinking water resources listed below are present in the project area:</p> <p style="padding-left: 40px;"><u>Groundwater Resources:</u></p> <p style="padding-left: 80px;">Well Head Protection Area</p> <p style="padding-left: 80px;">Community Wells</p> <p style="padding-left: 80px;">Residential Wells</p> <p style="padding-left: 40px;"><u>Drinking Water:</u></p> <p style="padding-left: 80px;">Surface water intake structures</p> <p style="padding-left: 40px;"><u>Non-Drinking water:</u></p> <p style="padding-left: 80px;">Agricultural groundwater wells and surface water intake structures</p> <p style="padding-left: 80px;">Irrigation re-use pit; Irrigation canal;</p> <p style="padding-left: 80px;">Storm water detention impoundments;</p> <p style="padding-left: 80px;">Agricultural waste impoundments;</p> <p style="padding-left: 80px;">Ground water connected wetlands & surface water</p> <p><u>Water Quality Impacts:</u></p> <p>For the resources marked Yes above, discuss the following.</p> <p style="padding-left: 40px;">If the resource is present but will not be impacted, state how the impact will be avoided.</p> <p style="padding-left: 40px;">If an impact to water quality will occur, indicate which water resource will be impacted and list any mitigation measures proposed to minimize impacts.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>13b) Does the proposed action require a NPDES storm water permit? (NPDES is required if disturbance areas is greater than 1 acre.)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>

Note: Water related permits such as NPDES can be acquired after approval of the CE during final design.

<p>13c) Will the project require connection to:</p> <p>Existing storm water culvert system?</p> <p>Existing combined storm water and sanitary sewer system?</p> <p>Will the project create a new storm water outfall into an existing channel?</p> <p>If yes, provide additional information and approximate location(s).</p> <p>Attach correspondence with NDEQ documenting compliance with water quality standards for project impacts to water resources.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>Block 14. Wild and Scenic Rivers / Nationwide Rivers Inventory</p>	
<p>14a) Will the project involve construction in, across, or adjacent to a river designated as a component of, or proposed for inclusion in the Wild and Scenic River System? (i.e. Is the project is within 1/2 mile of a protected river area)</p> <p>If YES, discuss or attach record of consultation with the responsible agency for managing the listed or study river:</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>14b) Will the project cross over a river or portion of river that is listed on the Nationwide Rivers Inventory (NRI)?</p> <p>If Yes, list in Block 18b the Best Management Practices or recommendations by NPS to be implemented to reduce impacts to these rivers.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>Block 15. Construction Impacts</p>	
<p>15a) Will the proposed action involve construction-related impacts such as detours, lane/road closures, loss of parking, air quality impacts (dust), etc.?</p> <p>If YES, provide details of proposed measures to minimize impacts (erosion control, Best Management Practices, dust abatement).</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>15b) Will the proposed action require temporary channel crossing structures such as shoofly, work platform, causeway, or crossing?</p> <p>If YES, provide details on temporary structure alternatives (type of structure, temporary impacts involved, how long needed, etc):</p> <p>Are impacts caused by the:</p> <p>Installation before or during active aquatic life migration periods?</p> <p>Impacts to streambed or width of channel?</p> <p>Flow characteristics of the stream – frequency and duration of flow?</p> <p>If impacts are YES, provide mapping and photos showing following information:</p> <ul style="list-style-type: none"> • Identify maximum limits of impacts below the ordinary high water mark. Identify ordinary high water mark on photos. • Identify maximum limits of impacts within the floodway. • Identify any fringe or adjacent wetlands. <p>Discussion:</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>

<p>15c) Maintenance of Traffic During Construction (if applicable)</p> <p>Is a temporary bridge proposed?</p> <p>Is a temporary roadway proposed?</p> <p>Will the project involve the use of a detour or require a ramp closure?</p> <p>Will provisions be made for access by emergency services?</p> <p>Will provisions be made for access by local traffic and so posted?</p> <p>Will provisions be made for through-traffic dependent of businesses?</p> <p>Will provisions be made to accommodate any local special events or festivals?</p> <p>Will the proposed Maintenance of Traffic substantially change the environmental consequences of the action?</p> <p>Is there controversy associated with the proposed method for maintenance of traffic?</p> <p>Are there impacts to bicycles or pedestrian routes?</p> <p>If YES to any of the above questions, provide additional discussion.</p> <p>List in Block 18b the commitments or recommendations for maintenance of traffic to be implemented to reduce impacts.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>15d) Detours Attach a detour map.</p> <p>Approximate length of detour: _____</p> <p>Select the best description of the planned detour:</p> <p><input type="checkbox"/> Detour will use local roads with no improvements.</p> <p><input type="checkbox"/> Detour will involve improvements to local roads with no resulting impacts on safety or the environment.</p> <p><input type="checkbox"/> Detour will involve improvements to local roads and will impact safety and/or the environment.</p> <p><input type="checkbox"/> Detour will use only state owned road</p> <p>Describe impacts:</p>	
<p>Block 16. Public Involvement</p>	
<p>16a) Will the project involve controversy concerning community and /or natural resource impacts?</p> <p>Discussion:</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>16b) Is a public information meeting held or tentatively planned?</p> <p>If YES, give Date & Location:</p> <p>Discussion:</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>NOTE: Project public meetings are independent of a LPA's regular business meetings and held at convenient times and location(s) for the public affected by the project.</p>	

Block 17. Aesthetics and other values	
17a) Will the project be visually intrusive to the surrounding environment? If Yes, discuss.	<input type="checkbox"/> Yes <input type="checkbox"/> No
17b) Will the project provide multiple use opportunities? If Yes, discuss.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Block 18. Permitting and Environmental Commitments	
18a) Indicate whether the proposed action is likely to require actions by agencies listed above or by other Agencies (e.g., permits, approval) and attach correspondence.	
USACE Section 404 Permit	<input type="checkbox"/> Yes <input type="checkbox"/> No
Floodplain Development Permit	<input type="checkbox"/> Yes <input type="checkbox"/> No
NDEQ Section 401 Water Quality Certificate / Title 117 approval	<input type="checkbox"/> Yes <input type="checkbox"/> No
NDEQ NPDES / SWPPP	<input type="checkbox"/> Yes <input type="checkbox"/> No
Section 106 – Historic and Culturally Significant Properties	<input type="checkbox"/> Yes <input type="checkbox"/> No
Section 4(f) – Parklands, Recreation Areas, Refuges, Historic	<input type="checkbox"/> Yes <input type="checkbox"/> No
Section 6(f) – Land & Water Conservation Funds	<input type="checkbox"/> Yes <input type="checkbox"/> No
Coast Guard Permit	<input type="checkbox"/> Yes <input type="checkbox"/> No
Local Building or Site Development Permits	<input type="checkbox"/> Yes <input type="checkbox"/> No
Local Clearing and Grubbing Permit	<input type="checkbox"/> Yes <input type="checkbox"/> No
Erosion and Sediment Control Plan	<input type="checkbox"/> Yes <input type="checkbox"/> No
18b) Environmental Commitments: Describe any measures, including Best Management Practices, recommended by resource agencies through informal consultation or those measures to be taken to mitigate project impacts. Include any environmental commitments agreed upon or those resources to be avoided. All commitments made and documented in this form are to be listed here.	

Block 19. Approval

Wetland Finding- In compliance with Executive Order 11990, "Protection of Wetlands," and with 23 CFR 771, 23 CFR 777, it is determined that there is no practicable alternative to the proposed new construction in wetlands and that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.

As a result of environmental review, NDOR finds that this action does not: induce significant impacts to planned growth or land use for the area; require the relocation of significant numbers of people or businesses; have a significant impact on any natural, cultural, recreational, historic or other resource; involve significant air, noise, or water quality impacts; have significant impacts on travel patterns or otherwise, either individually or cumulatively. All other environmental coordination, consultation, and requirements have been satisfied.

NDOR has determined that the proposed action has no significant impacts on the environment and that the proposed action is categorically excluded from the requirement to prepare an EA or EIS under the National Environmental Policy Act (NEPA).

Based on the evaluation of all alternatives, it has been determined that there is no practicable alternative to the proposed construction and it includes all practicable measures to avoid or minimize impacts to wetlands and related resources that may result from such an action.

Approvals:

Prepared By:

Name: _____ (print) _____ (sign) Date: _____

Organization & Title: _____

Phone: _____ Email: _____

Reviewed by Project Sponsor: *[LPA = County or City Representative – other than Consultant]*

Name: _____ (print) _____ (sign) Date: _____

Organization & Title: _____

Reviewed by: _____ (print) _____ (sign) Date: _____

Title: NDOR Environmental Documents Unit Manager

Approval: _____ (print) _____ (sign) Date: _____

Title: NDOR Environmental Section Manager

FHWA Approval: _____ (print) _____ (sign) Date: _____

Title: Transportation Engineer

Enclosed Attachments

- Project Vicinity Map (State, local, and project maps)
- State Historic Preservation Office (SHPO) letter(s) of concurrence
- FHWA Section 4(f) approval documentation
- Nebraska Game and Parks Commission letter(s) of concurrence
- U.S. Fish and Wildlife Service letter(s) of concurrence
- U.S. Army Corps of Engineers / Clean Water Act correspondence
- Nebraska Department of Environmental Quality correspondence
- Natural Resource Conservation Service Farmland Conversion Form AD1006
- Tribal consultation letter(s)
- Other Agencies (e.g., USEPA, DNR, NPS, FAA, NRD, USCG-Missouri River only)

Guidelines for Completing the CE Documentation Form

Guidelines for Completing the CE Documentation Form

Consistent with Federal Highway Administration (FHWA) and Nebraska Department of Roads (NDOR) procedures, this document provides guidance in completing the CE Documentation Form to ensure that all potential environmental impacts are being considered, and compliance with all applicable laws, regulations and executive orders is being properly documented.

Please refer to the attached Appendices for additional information and guidance links. The appendices are as follows:

- Appendix A: Agency Contact Information
- Appendix B: Categorical Exclusion (CE) Lists and Criteria
- Appendix C: Acronyms and Abbreviations
- Appendix D: Key Terms / Glossary
- Appendix E: On-line Reference Links
- Appendix F: CEQ and FHWA Regulations for Categorical Exclusions

NEPA Determination Form

The NEPA Determination Form was developed by the Nebraska Department of Roads (NDOR) and the Federal Highway Administration (FHWA) to assist project sponsors in gathering and organizing materials for environmental analysis required under the National Environmental Policy Act (NEPA). All federal-aid projects developed or reviewed by the Nebraska Department of Roads (NDOR) must have a NEPA Determination Form completed.

Completion of the NEPA Determination Form will establish the type of NEPA documentation required to complete the project. The types of NEPA documentation identified in Title 23, Code of Federal Regulations, Section 771 are: Categorical Exclusion (CE), an Environmental Assessment (EA) or Environmental Impact Statement (EIS).

NDOR and FHWA have developed a Categorical Exclusion (CE) classification system for projects where there is sufficient evidence that no significant impacts are associated with the proposed action. Project that meet the criteria for a Categorical Exclusion (CE) as identified in Title 23, Code of Federal Regulations, Section 771.117 (23 CFR 771.117) and the applicability criteria or threshold values set forth in the NEPA Determination Form are classified as a Programmatic CE. If the responses provided in the NEPA Determination Form yields the need for additional research and documentation, NDOR and FHWA will jointly decide the appropriate NEPA document needed for the action. The procedures apply to projects that involve FHWA funding or approvals and do not apply to state or locally funded actions.

NEPA Documentation Process

The NEPA documentation process is a stepped process with incremental reviews and approvals as the project moves forward. To classify the type of NEPA documentation for a proposed action will require the project sponsor complete the NEPA Determination Form. The project sponsor will be required to coordinate with the appropriate resource and regulatory agencies to insure all potential issues and impacts are clearly identified. The project sponsor will certify the information in the NEPA Determination Form to initiate NDOR's review to classify the type of NEPA documentation required. The initial review may result in a determination that additional documentation is needed for compliance with federal or state regulations and a CE, EA, or EIS may be required. NDOR will coordinate with FHWA and obtain concurrence in the classification.

Construction activities, right-of-way acquisition, and final design may not begin until the CE approval process is complete. However, appropriate environmental studies (e.g., scoping field reviews, technical studies) and developing preliminary engineering details to gain adequate information to determine the CE classification can be performed. Throughout project development, changes in the project scope or the project limits require the project sponsor to contact the NDOR Environmental Section to evaluate potential impacts.

CE Documentation Form

Block 1. Project Description and Design Criteria

Describe the following components:

Project Sponsor: Identify the organization (e.g., county, local agency) that formally proposes the project and is responsible for project funding, project implementation, project evaluation, or a combination thereof.

Project Contact: Provide the name of the contact person for the proposed project, including street address, telephone number(s), and email address.

NDOR District: Provide the NDOR district where the proposed action will be located.

Project Name and Location: Give a brief description of location, including city, county, highway/roadway name, highway number, beginning and ending mileposts, and if necessary, give the distance to nearest landmark (e.g., 15 miles north of local airport). Attach maps identifying the vicinity, project's location, and surrounding land uses. The vicinity map can be created using a county map as the base, highlighting the study area, and showing a north arrow, scale, project name, and county. A project location map uses a USGS map or other mapping in an urban area and shows the proposed logical termini, the existing facility, north arrow, and scale.

Latitude / Longitude: Provide the latitude and longitude of the proposed project site, and/or provide the Section, Township, and Range the project is located in.

Limits of Work: Provide the locations of the beginning and ending points of work. Start and End locations can be Mileposts, Stations, or brief description. This will be used when reviewing the logical termini description.

Project Description: Give a brief description of the project setting (e.g., urban, rural) and existing conditions. Describe project activities and include such information as locations, length, logical termini, type of improvement/construction, distinct project features, etc... Note any critical resource areas (historic, cultural or environmental) or sensitive noise receptors (schools, hospitals, churches, residences, etc).

Purpose and Need for Project: Clearly identify and describe the underlying problem or deficiency (e.g., congestion, safety, system linkage). In addition, explain why the project is necessary (e.g., provide system continuity, capacity improvement, correct safety or roadway deficiencies). A clear, well-justified purpose and need statement/section explains why the expenditure of funds is necessary and worthwhile. The statement length and complexity will vary with the scope of the proposed project.

Design Criteria for Roadway: List all of the relevant design criteria for the project, to the extent that they are known. Although detail design is usually not available at this stage of the project development, estimations on a project's design criteria must be made as a basis to weigh the project's potential impacts to the environment. In the "proposed" column, list what criteria are expected to be implemented if the design is still uncertain. If more than one roadway is impacted, attach additional

sheets as necessary. In the Remarks section, discuss how traffic projections were made and what assumptions were made. If Directional Distribution is unknown, then use the default of 55%.

Roadway Character: For ROW widths use the average width or list all known widths on an attached sheet if necessary.

Design Exception: If a design exception is anticipated for either roadway or bridges, it is critical that it be discussed with all parties early in the process in order to conduct a field review or additional analysis as needed to ensure approval.

Design Criteria for Bridges: Structure data should be entered using information available in the National Bridge Inventory System. List all of the relevant design criteria for the structure, to the extent that they are known. Although detail design is usually not available at this stage of the project development, estimations on a structure's design criteria must be made as a basis to weigh the project's potential impacts to the environment. In the "proposed" column, list what criteria are expected to be implemented if the design is still uncertain. If more than one structure is impacted, attach additional sheets as necessary. Structure length is defined as the centerline length between undercopings of abutments or spring lines of arches, or extreme ends of the openings for multiple boxes.

1a) *STIP / TIP*: Identify if the project is listed within the Statewide Transportation Improvement Program (STIP) or Metropolitan Planning Organization Transportation Improvement Program (TIP).

If a project is not the STIP/TIP, contact NDOR Planning and Location Studies Manager and the MPO.

Block 2. Alternatives Considered

Many projects will have only two alternatives, the "no-build" and the "build" alternatives. The "no-build" alternative normally includes short-term minor restoration types of activities (safety and maintenance improvements, etc.) that maintain continuing operation of the existing roadway. Project types such as intersection improvements and bridge replacements are typically designed to utilize the existing roadway alignment if the horizontal and vertical curvatures are within current design standards. Projects with replacement on existing alignment would rarely need to introduce alternative alignments.

The no-build alternative must always be considered for every CE level project and discussed in the alternatives section of the form.

In a few paragraphs briefly describe for each reasonable alternative:

- Evaluate all reasonable alternatives so reviewer may evaluate their comparative merits. Discussion should include the use of what criteria and what parties were involved in establishing the criteria for assessing alternatives and measures of effectiveness (consider such factors as meeting purpose and need, inconsistency with local land use plans, economic feasibility, and general acceptance by stakeholders).
- The reasons some alternatives were eliminated from the study. Being as specific as possible is also essential - if an alternative is eliminated from further consideration because it "does not meet the purpose and need," there should be adequate explanation of how or why it doesn't meet the purpose and need.
- Identify preferred alternative.

Alternatives Evaluation

If a project has the potential to impact certain resources, such as wetlands, floodplains, Section 4(f) properties, or threatened and endangered species, then avoidance, minimization and mitigation alternatives may be required by regulations applicable to these resources. In addition, if the preferred alternative will affect such resources, adequate justification must be provided to explain why avoidance alternatives were not selected, in accordance with the regulations applicable to the resource(s) involved. For the alternatives not selected, an explanation must be provided as to why they are not "feasible and prudent".

In a few paragraphs briefly describe for each resource involved:

- Any alignment shifts or design features, such as retaining walls or steeper side slopes, which would completely avoid the use of the Section 4(f) property, wetland or other resource having potential impact.

NOTE: If Section 4(f) resources are present on the project, refer to Block 6, Section 4(f)/Section 6(f) to see if a Section 4(f) alternatives analysis is needed for the project.

Block 3. Right-of-Way / Relocation Impacts / Utilities

Accurate right-of-way information is critical to producing a satisfactory CE, since this information is needed to identify the area in which environmental impacts will be evaluated. Changes to right of way should be monitored at the various review steps to identify changes quickly and resolve any additional investigation or documentation that may be needed.

3a) Right-of-Way (ROW): Right of way amounts, both permanent and temporary should be described in terms of acres/parcel and land use (e.g., new ROW to accommodate additional roadway, drainage easement to extend culvert). Indicate current land use (residential, business, etc...), and if ROW donations or public park ROW is anticipated. Indicate if construction will require borrow, or staging area for construction equipment or batch plant. Include the location area or if contractor provided.

3b) Relocations: Where a proposed project will result in the relocation of residences, businesses, farms, or institutions, the following information should be discussed:

- An estimate of the number of properties that will be relocated (include unoccupied buildings, including garages, barns, storage facilities, vacant commercial establishments, etc). If available, provide the appropriate plan sheets from the preliminary design plans that show where the properties are located.
- The family characteristics (e.g., minority, elderly, income level, owner/tenant status), and/or description and size of businesses (number of employees) to be displaced.
- Availability of replacement business or housing locations.
- Why this would not be a significant impact.

- If not displaced, potential impacts on residences and/or businesses within the proximity of the proposed project.
- Impacts to economic activity are described as potential impacts resulting from relocation where mitigation can be accomplished under NEPA that are generally non compensable under state eminent domain. Possible example may include a project that eliminates a business's on-street parking availability.

The acquisition and relocation program is conducted in accordance with the Uniform Act and with the NDOR Relocation Assistance Program.

NOTE: FHWA regulations regarding CEs state in 23 CFR Section 771.117(a) that **CEs “do not require the relocation of significant numbers of people”**. If the proposed project will generate the need for eight (8) residential or commercial relocations or more than 25 acres of permanent right of way, contact your NDOR representative. The context and intensity of the impact may require the CE to be elevated to the next level.

3c) Utility Coordination: NDOR has the authority and responsibility to regulate utility occupancy on all state highways. All work in the highway right-of-way will need a permit.

All other public roads and streets not designated as state highways are under the jurisdiction of the political subdivisions (e.g., counties). The project sponsor will coordinate with the affected utility company(s) and submit a Utility Agreement to NDOR for review.

Identify any utilities within the project area and whether they will require relocation. If utility work or impacts will occur, discuss the type of utility (electric, telephone, etc.) and the type of work involved (i.e., relocation, temporary disconnection of service, etc.). Indicate whether utility coordination has been conducted. Note who will do the work (local government, contractor, utility company, etc...).

3d) Railroad Coordination: Where a proposed project will cross or potentially impact railroad crossings, lines, or signals, additional coordination is required with the Railroad companies.

Block 4. Socio-Economic

Socio-economic impacts include, but are not limited to, population, employment, housing, services and utilities, and local tax revenue. In addition, the project sponsor should address whether any minority, low-income, or other special needs (e.g., disabled, elderly) populations are present in the proposed project area that may incur disproportionately high and adverse effects.

4a) Environmental Justice (Executive Order 12989): If effects will occur, determine if there are any protected populations. These populations include: (1) minorities, (2) low-income, (3) age, gender, and disability, and (4) Limited English Proficiency (LEP). The first step is to identify which group or groups may be impacted and potential solutions to adverse impacts. The second step in the analysis is to address the context and intensity of the impacts. The "context" is the setting . . . neighborhood characteristics, features, demographics, issues of importance, cohesion, degree of interrelatedness and co-dependence, social networks/capital, etc. and how these things are effected or will change compared to the effects/changes in non-EJ populations. You will need to describe how big/small the effects are, given a particular context (e.g. acquiring one auto parts store out of 70 in the city of

Omaha vs. acquiring the only panaderia serving the latino population the neighborhood). "Intensity" is the severity/greater magnitude portion of the question. The documentation will need to answer whether the adverse effects suffered by the EJ populations are more severe than the adverse effects suffered by the non-EJ populations.

Document the findings, including impacts, solutions, and commitments. Low income and minority communities must not bear a disproportionate amount of impacts from a project nor have benefits, reduced or delayed. Relocation of residents is not always considered adequate mitigation or compensation. Avoiding and minimizing impacts is essential for project development.

If there would be no impacts to the human population, including socioeconomics and environmental justice, or if the proposed project would not occur in an area that has a high proportion of minority, low-income, or special need residents, no further documentation is necessary.

4b) Temporary and Permanent Access: Discuss temporary and permanent impacts of access change, business disruption, parking restrictions, etc. (e.g., driveway relocated or closure, trail, sidewalks, ADA access to business district, ADA access to 1st floor elevation within business district. Address temporary and permanent impacts to residential neighborhoods or individual residents, and/or permanent changes in traffic service that may occur as a result of the project. The impacts could include non-vehicular access, such as pedestrians, and impacts to special events, such as fairs and parades.

4c) Travel Patterns: If the proposed project will not result in any permanent traffic diversions, then no additional documentation is needed.

If permanent traffic diversions will occur then describe why it will not result in a "significant impact on travel patterns". Include whether the existing roadways have adequate capacity to handle increased bus or other vehicular traffic, potential traffic and parking impacts, and connectivity to other transportation facilities and modes. Include a map or diagram if the project will modify existing roadway configurations.

4d) Land Use Plans: The land use discussion should assess the consistency of the proposed project with the comprehensive development plans adopted for the area and (if applicable) other plans used in the development of the transportation plan.

If the proposed project is not consistent with local or regional land use plans, provide documentation of any collaborative efforts with local or regional government that summarizes how the proposed project would be implemented in order to achieve land use compatibility.

4e) Economic Impacts: If the proposed project will have an impact on employment, local tax base and/or property values, discuss the following:

- Effects of the proposed project on employment and tax base (retail sales, opportunity for development, tax revenues, etc.)
- Changes in property values. (A transportation project, such as an elevated highway or viaduct, could also have negative localized effects on noise levels and views along its route. These effects could then reduce the attractiveness of locations along that route as a place

to live and work. Although the effect is manifested directly through reduced property values, it might also be a factor affecting businesses' decisions about remaining and expanding.)

- Impacts on the economic vitality of existing highway-related businesses (e.g., gasoline stations, motels, etc.) and impacts, if any, on the local economy.
 - Opportunities to minimize or reduce such impacts by the public and/or private sectors.
-

4f) Public Services and Facilities: Discuss any temporary or permanent impacts on school districts, recreation areas, churches, businesses, police and fire protection, etc. This should include both the direct impacts to these entities and the indirect impacts resulting from the displacement of households and businesses.

If the proposed project will not result in any impact to public services/facilities, then no additional documentation is needed.

4g) Community Cohesion: Where there are foreseeable changes in community cohesiveness, discuss any changes in the neighborhoods or community cohesion for the various social groups as a result of the proposed action. These changes may be beneficial or adverse, and may include splitting neighborhoods, isolating a portion of a neighborhood or an ethnic group, generating new development, changing property values, or separating residents from community facilities, etc.

If the proposed project will not result in any community disruption or separation of neighborhoods or social groups, then no additional documentation is needed.

4h) Secondary Growth: Where there are foreseeable opportunities for growth as a result of the proposed action, discuss any changes that may occur in the neighborhood or community. These may be beneficial or adverse changes and may include large box retail stores entering the area or new schools required.

4i) Pedestrian and Bicycle Facilities: Discuss temporary and permanent impacts to pedestrian and bicycle uses. State whether improvement to existing or new pedestrian or bicycle facilities are included in the proposed action.

Block 5. Historic and Cultural Resources (Section 106) / Historic Bridges & Roads

Discuss whether there is a use (through fee simple acquisition, permanent easement, temporary easement, work agreement, or constructive use) of land of a historic site of national, state or local significance as determined by the federal, state, or local officials having jurisdiction. Discuss if there is no prudent or feasible alternative to using that land and if the project includes all possible planning to minimize harm to the historic site resulting from the use. Check the appropriate Presence and Level of Effect box for each resource identified.

The Local Agency should provide the Nebraska State Historic Preservation Office (SHPO) with the project description, information regarding the resources present and how they would be impacted, proposed mitigation measures (if any), and the agency's determination of adverse effect. The signed coordination letter(s) with the SHPO and/or ACHP and/or FHWA will indicate the level of effects.

The SHPO is then asked for their comments on the agency's determination of adverse effect. Caution: this should not be the first time the SHPO hears about the project!

If the project would affect a resource *on* or *eligible* for the NRHP, a Memorandum of Agreement (MOA) may need to be developed between FHWA, SHPO, and the project sponsor. The MOA will identify required mitigation for impacting the historic resource.

Historic Bridges

For bridges listed on or eligible for the National Register of Historic Places (NRHP), coordinate with Nebraska Department of Roads in addition to SHPO.

Block 6. Section 4(f) and Section 6(f)

6a) Land from a Section 4(f) resource may be used indirectly through constructive use or directly, by permanent or temporary occupancy. Direct use converts the land to a transportation facility through permanent easement or purchase. Constructive use occurs if the proximity of the project to the Section 4(f) resource substantially impairs the activities, features, and attributes of the land that make it eligible for protection. Proximity impacts may include:

- Resources affected by noise levels.
- Aesthetic features of the resource compromised by the transportation facility.
- Access restricted, substantially diminishing the utility of the resource.
- Vibrations impair use of the resource and diminish the value of wildlife habitat.

If the proposed project has a direct or constructive use of a Section 4(f) resource, contact NDOR /FHWA to determine the appropriate type of 4(f) evaluation.

6b) Section 6(f) Land and Water Conservation Fund Act:

When it has been determined that a project will require the use of 6(f) property, the project sponsor must coordinate with the recreational site owner, whether it is state or local government. This coordination is intended to make them aware of the potential project impacts, to get their input on the project and its impacts, to determine the significance of the resource, and to determine if there are any restrictions or covenants attached to the park land. For example, "Was L&WCF grant money used to develop the facility?"

Once the project sponsor receives the comments from the site owner, the project sponsor should draft and send a letter to NGPC stating that the project may take land from an L&WCF recreational site. The letter should summarize the coordination that has occurred with the entity that has jurisdiction over the park. The project location, in relation to the park and its boundaries must be depicted on a map that accompanies this letter.

In its comments, NGPC will inform the project sponsor or confirm whether the park has been wholly or partially developed with L&WCF grant monies and if a Section 6(f) involvement will result. The involvement could range from planning activities, to the installation of playground equipment, to the

development of a new park. If NGPC is willing to consider approval of the conversion, then it is mandatory to acquire replacement land. Only land will satisfy the provisions of Section 6(f).

For Federally funded projects, Section 6(f) involvement automatically means a Section 4(f) document is also required. Preliminary approval of the 6(f) project NGPC is required for the 4(f) document. Section 6(f)(3) of the LWCF Act requires that property acquired or developed with LWCF assistance shall be converted to no other than public outdoor recreation uses without the approval of the NPS.

Block 7. Threatened and Endangered Species / Migratory Bird Treaty Act

7a) *T&E Species:* The project sponsor must consult with the U.S. Fish and Wildlife Service (USFWS) and the Nebraska Game and Parks Commission (NGPC) to determine if federally and/or state listed threatened and endangered (T&E) species and/or critical habitat are present within the project area.

If the USFWS and NGPC opinion is one of the following, then no further documentation is necessary (attach USFWS and NGPC concurrence letters):

- Protected species are not known to occur in the project area.
- Proposed project “will not adversely affect” any federal or state listed threatened or endangered species or critical habitat.

USFWS must also concur that proposed project “is unlikely to affect either the bald or golden eagle.

If the USFWS or NGPC has determined that T&E species/habitat, or bald/golden eagles are present and could potentially be affected, the project sponsor will follow up with the appropriate agency(s) to determine the effect of the action. This may involve field investigations by qualified personnel and identification of special precautions, seasonal restrictions on work activities and/or mitigative measures. Potential T&E habitat should be avoided to eliminate the need for time sensitive surveys and project delays. Threatened and Endangered Candidate species are also afforded special consideration because they can become listed as T or E and stop a project at any point during design or construction.

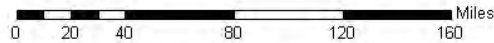
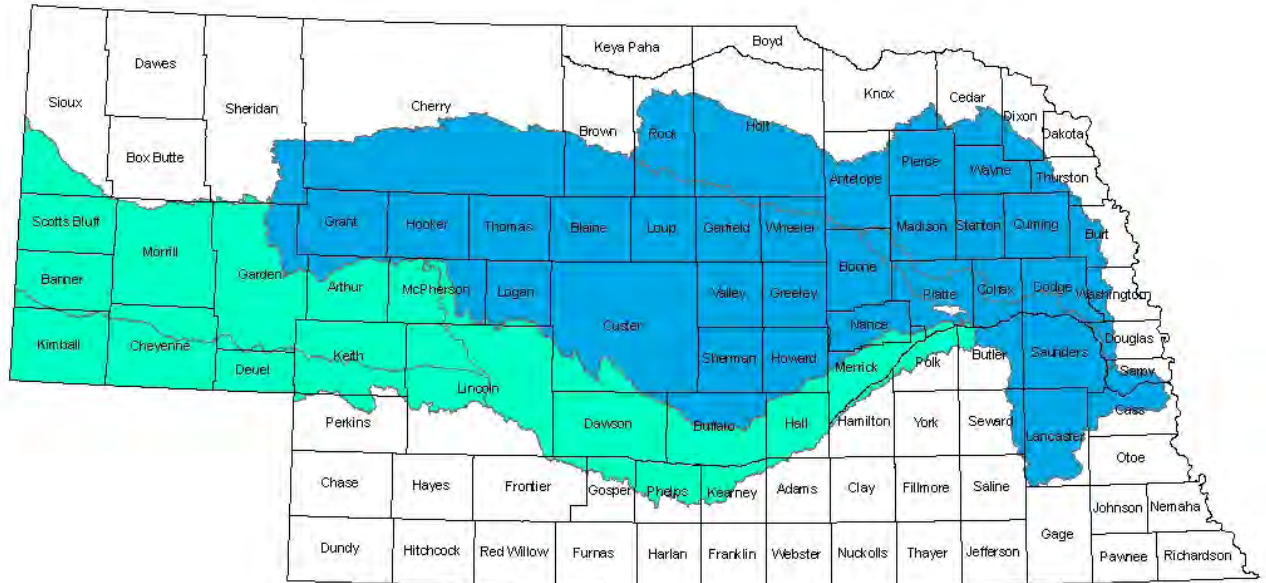
Describe or attach:

- A summary of the informal consultation that has been done to date with the USFWS and the NGPC, including their “effect” opinion.
- A brief discussion of the habitat needs of each species present and a description of the habitat within the project area.
- If a Biological Assessment was required, submit report to NDOR.
- If Formal Consultation was initiated, a summary of the results.

7b) *Platte River Depletion:* Coordination must be initiated with the appropriate Natural Resource District (NRD) and USFWS if a depletion to flow of the Platte River system is anticipated.

NOTE: The Platte River system considered for depletion that ends at the Loup River & Platte River confluence near Columbus, Nebraska.

Basins that have potential to impact Platte River Flows (depletion concerns).



Legend

- Basins Associated with the Lower Platte
- Platte River Implementation Recovery Area

Note: The Lower Platte Basin has been identified to be in a state of jeopardy. Individual consultation with the U.S. Fish and Wildlife Service would apply for Platte River depletions.

7c) Migratory Bird Treaty Act: The Migratory Bird Treaty Act (MBTA) protects all migratory birds, nests and eggs except English Sparrows, Starlings and Rock Doves (pigeons). The MBTA prohibits killing, taking, harassing, or harming birds in any manner. For example, removing inactive Swallow nests from under bridges prior to construction must be completed prior to April 1st or after August 15th. During the nesting season of raptors there will be a no work buffer area surrounding the nest of up to ½ mile. The buffer zone and nesting season varies with each species and must be determined on a case-by-case basis.

Block 8. Farmlands

If the proposed project has the potential to convert farmland to non-farm use, contact your local office of the Natural Resources Conservation Service (NRCS) or USDA Service Center. The impact assessment is completed on Form AD-1006, Farmland Conversion Impact Rating. The project sponsor completes the site assessment portion of the AD-1006 (fill in Parts I and III). This form and the instructions for completing it can be found at NRCS’s website:

<http://www.nrcs.usda.gov/programs/fppa/>

A copy of the completed AD-1006, if one is required for the project, should be attached. Any steps taken to reduce the amount of farmland impacts should also be discussed.

Block 9. Wetlands and Waters of the U.S. / Waters of the State (Title 117)

9a) If no wetlands, waters of the U.S. **or** waters of the State are located within the project area, mark Not Applicable (N/A). A determination of jurisdiction is required from USACE. No further documentation is needed.

If wetlands, waters of the U.S **or** waters of the State are present **but will be avoided**, reference and attach maps to show any wetlands, waters of the US or waters of the State and their relationship to the project. Discuss any sites that are in close proximity to the project, and how they will be avoided. If no wetlands are present, state how that determination was made (e.g., mapping, field review, etc.), and state who (i.e., NDOR personnel, consultant or other agency personnel) conducted the field review and when.

9b) Indicate whether wetlands are present in the project area and whether impacts are expected. Note the wetland category if available. Indicate the total wetland area impacted and the categories and size of each impact. If wetlands are present on federally funded transportation projects impacts greater than 500 square feet requires a Wetland Finding with the approval statement.

In the *Discussion* section, discuss the functions and values (Nebraska wetland subclass i.e. riverine, floodplain, depression, etc...) of any wetland impacted and measures investigated or proposed to avoid, minimize and mitigate the impact. If wetlands are present, indicate in the *Discussion* section how the information was ascertained and by whom. Also discuss impacts to any remaining wetlands from drainage or other highway related features.

If wetlands will be impacted but an Individual wetland finding will not be prepared, the following must be discussed:

- 1) The do nothing alternative is not practicable because: (a) it would not correct existing or projected capacity deficiencies; (b) it would not correct existing safety hazards; (c) it would not correct existing deteriorated conditions and maintenance problems; or (d) it would result in serious impacts to the motoring public and the general welfare of the economy in the area.
- 2) Improvements that will not result in any wetland impacts are not practicable because such avoidance would result in (a) substantial adverse community impacts to adjacent homes, businesses or other improved properties; (b) substantially increased project cost; (c) unique engineering, traffic, maintenance or safety problems; (d) substantial adverse social, economic or environmental impacts; or (e) the project not meeting identified needs. Within this discussion, alternatives that would result in minor alignment shifts, use of minimum design requirements, use of retaining walls and/or other structures or alternative designs shall be assessed.
- 3) It must be documented that all practicable measures to minimize the wetland impact(s), both within and outside of the highway right of way, have been fully considered and incorporated into the project's design. Minimization measures that are incorporated into the design shall be listed as environmental commitments in Block 17b of this document. The use of appropriate erosion and sedimentation control and other measures required by the current NDOR standard specifications and special provisions shall be a standing commitment.

Wetland Delineation: If the proposed action involves impacts greater than 1/10 acre to wetland areas, wetland delineation is required to determine the exact location and boundaries of each wetland.

Impacts Greater than ½ Acre: For severe impacts typically one-half acre or more, an USACE Individual permit will be required. Documentation included in the environmental document is similar to the discussion above. The discussion should include sufficient information concerning the nature of the activity to generate meaningful comments. This would include reasonably addressing the activities that will potentially be needed on the project (activities: structures, work platforms, coffer dams, borrow and disposal sites, access roads, equipment ramps, dredging, etc.). Although detail design is usually not available at this stage of the project development, estimations on project activities must be made as a basis to weigh the project's potential impacts to the environment.

Mitigation Plan: Depending on the projects impacts to wetlands and or streams (jurisdictional "waters of the U.S."), mitigation plans may be required. To the extent possible and based on agency correspondence, mitigation plans should be developed to offset the loss of stream and/or wetland habitats. Appropriate mitigation may include; wetland restoration, wetland creation, the purchase of mitigation credits at an approved wetland bank, restoration of degraded stream channels, riparian plantings and stream conservation easements.

9c) Indicate if any streams are present and whether they will be impacted (i.e., work will occur below ordinary high water level). Also indicate whether the stream is a national scenic river or a state wild, scenic or recreational river, and if so, whether it will be impacted (i.e. work will occur within 1,000 feet of the stream). Indicate the presence of and whether there will be impacts on any navigable waterways (note whether commercial or noncommercial). Indicate if the stream is designated as coldwater Class A stream (streams capable of supporting a self-sustaining trout population). Finally, state the type and nature of impact and give the name of the impacted stream.

In Discussion, if a stream is present but no impacts are expected, state why there will be no impacts. Consideration should include temporary modifications below the Ordinary High Water Mark. If stream impacts will occur, discuss what type of structure(s) is (are) proposed versus what is currently in place and quantify the impacts, if applicable. If stream work will be extensive, reference and attach additional sheets and include mapping and/or site plans to aid in impact interpretation.

If other surface waters are present, indicate the type of water body and whether impacts will occur. In the Discussion section, name the water body if it has a name and indicate the type and area of impact. Discuss the nature of the project's impact to these waters and any issues relevant. If a water body is present in the project area but no impacts are expected, state why there will be no impacts.

9d) Indicate if the project action will require a USACE Section 404 permit or a Section 401 Water Quality Certification from NDEQ, and attach the permit(s) or resource agency coordination letters showing compliance with Section 404 to the CE Documentation Form. If the proposed project involves activities that would require a Section 404 permit, it may also require a Section 10 permit if located in navigable waters of the U.S.

Block 10. Floodplains

10a) Location of Floodplain: Review the National Flood Insurance Program (NFIP) Flood Insurance Rate Maps (FIRM) to determine if the proposed project is located in a regulatory floodway. If maps are not available for the subject community, contact the floodplain administrator of the local government that has land use jurisdiction to determine if the proposed project is located within the floodplain. If the proposed project is *not* located in the floodplain, no further documentation is needed.

10b) Floodplain Encroachment: If a longitudinal encroachment is involved, it is mandatory that a discussion of the encroachment justifying the need for the encroachment and discussing impacts to the beneficial and natural values of the flood plain be attached. It is not expected that projects involving new, substantial longitudinal encroachments on FEMA designated flood plains would normally qualify as a CE.

Transverse encroachments are expected for bridge projects over streams. If a transverse encroachment is located in a FEMA designated flood plain (see flood insurance maps), coordination with the Local Flood Plain Administrator will be required during design phase to insure consistency with local flood plain planning. Substantial impacts meaning projects that could alter FEMA mapping or have unresolved coordination with agencies having jurisdiction cannot be processed as a CE.

Block 11. Regulated Materials

11a) A Site Reconnaissance is necessary to field verify the locations of sites identified through GIS mapping systems and regulatory record databases research. Every federal project requires a Phase I Environmental Site Assessment (ESA) when known or potential contamination sources are affected by an alternative under consideration. The Phase I ESA, generally following ASTM Guidance 1527, will identify potential “red flags” which may require a Phase II Site Investigation to further ascertain the extent of soil and groundwater contamination and its influence on design and construction. The known or potential waste site locations should be clearly marked on a map showing their relationship to the proposed project or alternatives under consideration.

Provide the following in the *Discussion* section:

- Identify environmental databases and sources researched.
- Information about the site
- Potential involvement
- Impacts and public health concerns of the affected area(s)
- Proposed mitigation measures to eliminate or minimize impacts or public health concerns should be documented

11b) Identify any groundwater monitoring wells in the right of way, in the adjacent right of way, and owner of said wells. Consult with the NRD and NDEQ for locations of monitoring wells.

Block 12. Air / Noise Quality

12a) NAAQS Attainment Status: Currently Nebraska remains in attainment with all Federal air quality standards (i.e., NAAQS).

12b) Procedures for a noise analysis should follow the FHWA guidance issued June 1995 and NDOR Noise Analysis and Abatement Policy guidelines issued May 1998. Alternative abatement measures as listed in 23 CFR 772 should be addressed in every analysis that discusses noise abatement. The terms reasonable and feasible (with respect to noise abatement) are discussed in the FHWA guidance, pages 50-55.

12c) Sensitive noise receptors are identified as residences, hospitals, libraries, schools, places of worship, and parks. Provide a description and map of the sensitive noise receptors.

12d) Discuss the mitigation measures for the noise impacts. Discussion should include:

- Noise abatement measures which have been considered for each impacted area and those measures that are reasonable and feasible and that would likely be incorporated into the proposed project.
- Noise impacts for which no prudent solution is reasonably available and the reasons why.

Block 13. Water Quality (Clean Water Act Section 401)

13a) Mark those groundwater or drinking/non-drinking water resources present in the project area. Consider both temporary (construction phase) and/or permanent impacts. If a water body or groundwater resource is present in the project area but no impacts are expected, state why there will be no impacts. If an impact to water quality will occur, indicate which water resource will be impacted and list any mitigation measures proposed to minimize impacts.

Attach correspondence with NDEQ documenting compliance with water quality standards for any project impacts to water resources.

Wellhead Protection Areas

When a proposed project encroaches on a Wellhead Protection Area (as identified on NDEQ's website <http://www.deq.state.ne.us/>), provide documentation that identifies the area. Documentation detail of the Wellhead Protection Areas along a project can be obtained by contracting NDEQ's Water Quality Section (402-471-2186).

13b) All persons discharging or proposing to discharge pollutants from a point source into any waters of the State are required to apply for and have a permit under the National Pollutant Discharge Elimination System (NPDES) to discharge. In addition to NDEQ, coordination with the appropriate Natural Resource Districts (NRDs) should be initiated.

Construction activity includes a disturbance to the land that results in a change in the topography, existing soil cover (both vegetative and non-vegetative), or the existing soil topography that may result in accelerated stormwater runoff, leading to soil erosion and movement of sediment into Waters of the State or urban drainage systems.

13c) Indicate if the proposed action will require connection to an existing stormwater system, sewer system, or require a new stormwater outfall into an existing channel.

Block 14. Wild and Scenic Rivers / Nationwide Rivers Inventory (NRI)

14a) Identify whether the project is within one mile of a protected river area. Nebraska has two designations of Wild and Scenic Rivers:

Missouri River - Designated Reach: This designation consists of two separate segments:

- from the Fort Randall Dam downstream to the backwaters of Lewis and Clark Lake and
- from Gavins Point Dam downstream to Ponca State Park.

Niobrara River - Designated Reach: This designation consists of the following segments:

- Verdigre Creek from its confluence with the Niobrara to the north boundary of the town of Verdigre.
- From Borman Bridge to its confluence with Chimney Creek.
- From the confluence with Rock Creek to State Highway 137.
- From the western boundary of Knox County to its confluence with the Missouri River.

If there is a potential impact to a protected river area, the project sponsor is required to initiate consultation with the NPS. Coordination with the Niobrara Council also needs to be initiated for work occurring within the designated reach of the Niobrara River. Attach record of consultation with the agency. The NPS and Niobrara Council contact information can be found in Appendix A / Agency Contact Information.

14b) Nationwide Rivers Inventory (NRI) Listing: The following is a list of the rivers and river segments in Nebraska currently listed on the NRI:

River	County	Reach	Length (miles)
Calamus River	Garfield, Loup, Brown, Rock	North Loup River to Source	80
Calamus River, excluding reservoir	Garfield, Loup, Brown, Rock	North Loup River to Source, excluding Virginia Smith Reservoir	71
Dismal River	Blaine, Thomas	Middle Loup River to Source (confluence of North and South Forks)	68
Long Pine Creek	Rock, Brown	Niobrara River to Source	38
Middle Loup River	Blaine, Thomas, Hooker, Cherry	Milburn Diversion Dam to Source (confluence of North and South Branches)	89
Niobrara River		The 40-mile segment from Borman Bridge southeast of Valentine,	0

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		downstream to its confluence with Chimney Creek and the 30-mile segment from the river's confluence with Rock Creek downstream to the State Highway 37 bridge.	
Niobrara River	Sioux	Entire segment within Agate Fossil Beds National Monument	10
Niobrara River	Boyd, Holt, Keya Paha, Rock, Brown, Cherry	Keya Paha River to Antelope Creek (omit Cornell Dam and Reservoir)	194
Niobrara River	Knox, Holt, Boyd	Missouri River to Keya Paha River (omit Spencer Dam & Reservoir)	59
Snake River	Cherry, Sheridan	Niobrara River to Source (omit Merrit Reservoir)	96

A more detailed description of each river or river segment in Nebraska can be found at the following link: <http://www.nps.gov/ncrc/programs/rtca/nri/states/ne.html>

If the proposed action may affect a NRI, coordination with the NPS must be initiated.

Section 4(f) and Wild and Scenic Rivers

Publicly owned waters of designated wild and scenic rivers are protected by Section 4(f). Additionally, public lands adjacent to a Wild and Scenic River may be subject to Section 4(f) protection. An examination of any adopted or proposed management plan for a listed river should be helpful in making the determination on applicability of Section 4(f).

Block 15. Construction Impacts

15a) Construction-related impacts are short-term impacts that would occur only during the construction of the proposed project and would not occur once construction is complete. Temporary impacts from construction activities typically include air pollution from dust and construction equipment, increased run-off and soil erosion, and construction noise. Other related impacts may include disruption or detours to traffic, construction of a temporary shoofly, causeway or crossing, or temporary loss of access to property.

In few paragraphs, describe the construction-related commitments that will be taken to minimize air, noise, and water quality impacts, and disruptions to traffic and access to property. Make note of any projects along the corridor or nearby that might cause conflicts or issues with detour routes, regardless of who the project proponent is.

15b) Discuss temporary structure alternatives and justify selection of alternatives. Provide details of type of structure, temporary impacts involved, how long needed, etc.

Identify potential impacts if construction activities require work in a stream channel.

In the *Discussion* Section, describe how impacts will be avoided or minimized (e.g., outside of migration season) for stream(s) provides passage for aquatic movement. Also describe measures for avoidance or minimization for changes in flow characteristics of the stream and activities that will occur below the high water mark. Include photos identifying the limits of the ordinary high water mark and floodway limits. Indicate if fringe wetlands or adjacent wetland are present in the channel area.

15c) Discuss whether the project will utilize a temporary road, detour or closure during the construction. If so, discuss what impacts are associated with the temporary road, detour or closure and assure that provision have been made to address any local concerns. When a project requires a detour, include a description and mapping of the detour route. Briefly describe the steps that will be taken to make the public aware of the closing and detour. Examples might be radio and or newspaper announcements or public meetings.

Block 16. Public Involvement

The public involvement process is applicable for CEs, and does not preclude a project from being processed as a categorical exclusion. Citizen information workshops and/or contact with local civic groups and citizens may be appropriate for a project classified as a CE.

16a) FHWA regulations regarding CEs (23 CFR 771.117) state in Section 117(b)(2) that CEs will not have “substantial opposition on environmental grounds”. Substantial opposition may be evident from correspondence on the project, from oral or written comments resulting from the public notices or meetings, or from public officials.

If substantial public controversy occurs, in the Discussion Section explain why it is not based on environmental grounds.

16b) Briefly describe any public outreach efforts undertaken on behalf of the project. Summarize the public involvement process to date, including:

- When public notices, public meetings, and/or meetings with public officials have been held.
- Approximate number from public that attended any public meetings.
- Summary of any substantive comments, questions, and concerns made by the public at any public meetings or written comments received.
- Describe outreach efforts that are targeted specifically at minority or low-income populations (e.g., bilingual flyers or newspaper ads, interpreters, radio stations, handicap accessible etc.).

NOTE: Project public meetings are independent of a project sponsor’s regular business meetings and held at convenient times and location(s) for the public affected by the project.

Block 17. Aesthetics and Other Values

17a) Identify whether the project alternative(s) has a potential for visual quality impacts to the view shed (visibility between locations’ or as ‘the entire area an individual can see from a given point).

If the potential exists, in the Discussion section identify the impacts to the existing visual resource, the relationship of the impacts to potential viewers of and from the project, as well as measures to avoid, minimize, or reduce the adverse impacts. When there is potential for visual quality impacts, explain the consideration given to design quality, art, and architecture in the project planning. These values

may be particularly important for facilities located in visually sensitive urban or rural settings. Identify any proposed mitigation for the preferred alternative.

Examples of an obstructed view shed include: Businesses at ground level along Dodge Street, from 102nd to 104th Streets in Omaha, are no longer visible from the upper level travel lanes and the view from the businesses now look out at lower level traffic and possibly MSE walls or piers. Other examples of viaducts or bridges that raise the traffic from ground level above existing businesses or residences are found throughout the state (most recently in North Platte and a Columbus viaduct study).

17b) Provide discussion of any multiple use opportunities within the proposed action. Examples of multiple use may include historic monuments, parking areas, bikeways, pedestrian paths, and other shared use facilities on highway ROW.

Block 18. Permitting and Environmental Commitments

The proposed action may still trigger the requirements of other laws, regulations, and policies requiring their own analysis requirements. Consult with appropriate agencies, as necessary, to identify other issues and the magnitude of concern. Supporting documentation should be attached to the checklist, as appropriate.

18a) Permitting: List the permits that must be acquired during final design for the proposed project and explain the current coordination status with the appropriate resource agency, and other Federal, State and Local regulations as applicable. Include any agency correspondence requesting special consideration of impacts or protection of sensitive areas during construction.

Other: List any additional consultation with state or local agencies for permitting or compliance issues. Other permits that are sometimes required are the USACE Section 10 Navigable Water Permit, or the Coast Guard Section 9 Permit.

18b) Environmental Commitments: Resource agencies and the public may identify or propose mitigation measures as part of the project. Environmental commitments are elements of the project that the project sponsor agrees to implement to avoid, minimize, or mitigate impacts to resources, or measures that will be implemented to enhance resources, including resources that will be avoided by the project. Environmental commitments may be firm (e.g., avoiding a historic property, mitigating for the loss of wetlands) or items for further consideration (e.g., planting of trees in excess right-of-way).

Restate all mitigation commitments made in the previous sections of this document, including resources to be avoided. The commitment summary will follow the project through design and construction and must be updated as appropriate through the development process.

NOTE: Federal determination on project classification is dependent upon successful implementation of environmental commitments. Environmental commitments must be followed through.

Block 19. Approval

Upon completion of the CE Documentation Form, the form and all supporting information should be forwarded to NDOR for review. If, after review, it is determined the project does not qualify as a CE, the project sponsor will be notified and the project will then need to be addressed on another appropriate level of environmental documentation. If it is agreed the project qualifies as a CE, the

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project sponsor will be notified of any comments that need to be addressed prior to approval by NDOR and FHWA. The approved document with all signatures will be recorded and placed in the NDOR and Project Sponsor project file.

It is encourage that during the process Project Sponsor are in coordination with NDOR environmental staff. If it appears that any resource area may have significant impacts, impacts cannot be mitigated, or consensus with resource agencies cannot be reached, the Project Sponsor should alert NDOR and FHWA immediately.

Attachments

This section will hold all documents needed in support of a signed CE.

Guidelines for completing the Project Description Section of NEPA Determination and CE Forms



The following is a list of items the Federal Highway Administration (FHWA) has identified as being needed in the Project Description Section on the NEPA Determination and Categorical Exclusion Forms where applicable:

The Project Description must contain complete sentences and must be written so the public, who are not familiar with the project, can understand the project details.

Project Length: provide an actual length of project

- Ex. Project 2.5 miles and include between „A St. and C St.’

Material: Identify paving material

- Ex. Asphaltic concrete with fog coat

Repair Work: Identify the type of repair work

- Ex. Joint repair, panel replacement/repair, crack sealing, etc.

Roadway Dimensions: Roadway, lane, and shoulder (surfaced or earth) widths of work

- Ex. 24; roadway, 8’ shoulders, 6’ surfaced for milling and resurfacing and grading

Depths: Milling depth, resurfacing depth, possibly existing depths from milled section

- Providing the existing asphalt depth and mill depth indicates if the existing concrete-asphalt bond will be maintained or milling will expose existing concrete (as applicable)
 - Ex. Existing asphalt surface 4”, mill 3” and resurface 3”

Appurtenances Updates: The general purpose and/or location of the guardrail or other updated appurtenances should be included.

- Ex. Guardrail at four bridges will be updated to meet FHWA standards.
- Ex. Specific location such as guardrail at viaduct will be updated.

Traffic Control: maintenance of traffic statement

- Indicate the traffic management in project description of additional comments.
- This was noted in a couple of forms in the additional comments, which works well.
- This does not need to be in-depth, but a statement indicating that “current traffic maintained on one lane” is sufficient.
- If current traffic will not be maintained during the project, or if access will be restricted, then more detail regarding traffic management during the project is needed
 - If traffic will not be maintained during the project a Categorical Exclusion Form maybe required.

Additional Comments: Please include any comments that may address any questions or permits that may be in question from the project description and purpose and need.

- The SWPPP statements are very helpful, as are any statements about a floodplain or wetland potential.
- This is also a good location to put in a sentence about maintenance of traffic on the facility.

Example NEPA Determination Form: The Federal Highway Administration (FHWA) reviewed the NEPA Determination Form for Project Control Number 51310 and found that it was completed with enough detail to understand what the work entailed. This document is available on the NDOR website at the following link: <http://www.dor.state.ne.us/gov-aff/downloads.htm>.

Questions: Contact Allison Zach, NDOR Environmental Analyst II, (402) 479-3632, allison.m.zach@nebraska.gov, with any questions.

Example Template Biological Evaluation for County Federal Aid Project in Response to a USFWS Technical Assistance Letter that was submitted to NDOR.

Send the completed Template and attachments to the appropriate LPA Section Personnel.

(Current Date)

(Address this letter to the appropriate individual (only one of the following people))

Mr. LeRoy Juengel, Secondary Roads Liaison

Mr. Jim Miller, Urban Project Liaison

Mr. Jim Pearson, Liaison for Transportation Enhancement or Safety Projects

Nebraska Department of Roads

PO Box 94759

1500 Highway 2

Lincoln, NE 68509

RE: Project Name, Section, Township Range, County Name, Control Number, Federal Project Number

Dear (Enter the appropriate person here):

On behalf of (Insert Name) County, our firm is submitting additional information in response to the comments received from the U.S. Fish and Wildlife Service (USFWS) on (Insert Date letter was received from USFWS).

Now, describe the project details up to date since the DR 333 conceptual stage or what has developed in the project. This discussion should help inform the reader of all the construction activities and how the project will take place. Some examples: describe the project location, the current situation (bridge is deteriorated and now closed), the surrounding habitat/landscape, how the project will be completed/constructed. Maybe include photos of the area and reference the size of the project's footprint (bridge length, number of span). The bottom line is to provide the proper information in order for the reader to know how the project will be constructed and be able to make the connection between the proposed project and the environmental impact evaluations made.

Endangered Species Act (ESA)

We conducted a review of the enclosure containing Federally Listed Threatened and Endangered Species and Designated Critical Habitat Occurring in Nebraska (2008). Results of this review are included in the following table.

Table 1. Federally Listed Threatened and Endangered Species and Designated Critical Habitat Occurring in Nebraska

Common Name	Scientific Name	Impact Evaluation
American Burying Beetle	<i>Nicrophorus americanus</i>	
Black-Footed Ferret	<i>Mustela nigripes</i>	
Blowout Penstemon	<i>Penstemon haydenii</i>	
Colorado Butterfly Plant	<i>Gaura neomexicana coloradensis</i>	
Eskimow Curlew	<i>Numenius borealis</i>	
Interior Least Tern	<i>Sterna antillarum</i>	
Piping Plover	<i>Charadrius melodus</i>	
Pallid sturgeon	<i>Scaphirynchus albus</i>	
Salt Creek Tiger Beetle	<i>Cicindela nevadica lincolniana</i>	
Scaleshell Mussel	<i>Leptodea leptodon</i>	
Topeka Shiner	<i>Notropis Topeka</i>	
Ute Ladies-Tresses Orchid	<i>Spiranthes divluvialis</i>	
Western Prairie Fringed Orchid	<i>Platanthera praeclara</i>	
Whooping Crane	<i>Grus americana</i>	

Impact Evaluation:

A – Potential habitat is absent from the project area and/or it is out of the known range for the species.

B – No wild population is known in Nebraska.

C – The project is located within the range of the species, however due to conditions of the project limits of construction, the species would not occur in this location.

D – Although the project is located within the range of the species, the project is not within the designated critical habitat, and the species is unlikely to occur in the project vicinity.

E – The project is located within the range of the species and habitat is available within the limits of construction, the project will evaluate conservation measures (surveys, avoidance, etc) to minimize impacts and or consult with the lead Federal agency.

Considerations:

- What was your thought process for impact evaluation (reference anything that you reviewed to help make your determination)
- Contact USFWS on the phone to talk about project.
- What is the adjacent habitat to the project?
- How have you come to your conclusion of impact?

Example:

We have contacted the Nebraska Game and Parks Commission (NGPC) and they have reported that the project will not impact state threatened and endangered species or critical habitat. Based on our above impact evaluation and correspondence with NGPC, we believe that the project will not impact federally listed species or designated critical habitat.

Bald and Golden Eagle Protection Act (the Eagle Act)

Some considerations:

- Is the project located along a riparian corridor with large trees?
- Look at the Technical Assistance letter as you evaluate if habitat exists for the species.
- Describe the project site's location and landscape--provide photos to help explain.
- Does the site have appropriate habitat for either species?
- Will the project take place during the species nesting season?
- Explain and conclude determination of impact.

Example:

Bald and golden eagle habitat as described in the USFWS letter has been evaluated. Construction is scheduled to begin in August of this year and conclude in November. We believe the project site does not have appropriate habitat for the bald or golden eagle (reference to site photos), therefore there will be no impacts to these species.

Migratory Bird Treaty Act (MBTA)

Some Helpful information:

- Construction schedule information if available.
- Recognition of April 1 –July 15 prime nesting period.
- Recognition that other species do nest outside the period (raptors, sedge wren, swallows...)
- Discuss habitat setting--will there be any need for removal of trees or adjacent habitat?
- Survey may be needed-- If schedule is not available, explain the circumstances and that you will keep the agency updated as to potential conflicts with the nesting season or survey.

Example:

Construction is scheduled to begin in August of this year and conclude in November. This time period falls outside of the migratory bird primary nesting season (April 1 through July 15). Although the sedge wren nesting period falls between July 15 and September 10, appropriate habitat for the sedge wren is not available on the project site. Describe habits to be potentially impacted: There are areas of grass in the right of way (ROW), however, the ROW is mowed on a regular basis and is highly disturbed and work is not anticipated to occur in ROW (Possible Photo). Adjacent properties consist of farm fields (Photos) and residential commercial properties (Photo). We believe there is not appropriate habitat available for migratory birds and no grubbing is proposed for the project, therefore no impacts are anticipated.

Fish and Wildlife Coordination Act (FWCA)

Wetlands, Streams, Riparian Habitats

Some things to consider:

- Is there a Department of the Army 404 Permit necessary?
- What will the project impact? (Wetlands? Trees? Channel?)
- How were the impacts avoided or minimized to the extent practicable?
- Will there be mitigation?
- Discuss the process of the project and reference any considerations from the USFWS recommendations in this section (Best Management Practices, No in-channel work to be done, Work in the channel will take place during low flow periods or in channel work will provide adequate culverts to provide for aquatic life movements--be thinking about construction temporary impacts both building new structure and removing old).

Example write up from a RR bridge expansion project:

The proposed project will impact 0.27-acres of emergent wetland situated in the ROW near Goose Creek. Creation of at least 0.54-acres of emergent wetland is proposed providing at least a 2:1 mitigation ratio. The U.S. Army Corps of Engineers (USACE), Omaha District has been contacted to request a Nationwide 14 Permit. Their response is pending. -

A new bridge over Goose Creek will be expanded with a 2-span 106-ft long Deck Plate Girder-Ballast Deck (CPG-BD). Construction work will take place on the existing structure. No impacts are anticipated to waters of the U.S. as activities involve driving piles which are not acting as fill. These activities will not impede animal or fish movement and will not reduce current channel width (Attach Plan Drawings). Construction is scheduled in August and completed by November (during low flow periods).

Construction will take place on existing structure (or above ordinary high water mark). Heavy equipment will not be driven through the streambed. Revegetation of the stream banks will be completed as soon as possible following construction activities. Best management practices such as silt fences and/or hay bales will be employed in areas near Goose Creek during construction to prevent erosion. Hazardous materials (petroleum products, other chemicals) will be stored offsite and only small amounts for immediate use will be used on the site. The contractor will be responsible for preparing a Stormwater Pollution Prevention Plan (SWPPP) to comply with state requirements and will include soil erosion plans (See attached Construction Plan –General Guidance).

The following must be included in with this document:

1. The Project Description that will be used in the NEPA Determination Form
2. A location map with the project identified on it
3. An aerial photo of the project area identifying any wetlands, streams or other environmental features that could be impacted by the project

Note: If any of the details in the project description change after this letter is submitted for concurrences a new Biological Evaluation will have to be submitted and new concurrence letters received.

Contact Allison Zach, NDOR Environmental Analyst with questions at:

Phone: (402) 479-3632

Email: Allison.m.zach@nebraska.gov



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
Nebraska Field Office
203 West Second Street
Grand Island, Nebraska 68801

August 21, 2008

Mr. Jim Wilkinson
Nebraska Department of Roads
PO Box 94759
1500 Highway 2
Lincoln, NE 68509

RE: Technical Assistance for County Federal Aid Projects, Funds will be provided by the Federal Highway Administration

Dear Mr. Wilkinson:

This technical assistance letter is in regards to your request for comments from the Service for Nebraska County Federal Aid projects. The Service has responsibility, under a number of authorities, for conservation and management of fish and wildlife resources. Chief among the federal statutes with which our office deals with are the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*), Fish and Wildlife Coordination Act (FWCA) (488 Stat. 401; 16 U.S.C. 661 *et seq.*), Bald and Golden Eagle Protection Act (The Eagle Act) (16 U.S.C. 688-688d, as amended), and Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712, as amended). Compliance with all of these statutes and regulations are required for compliance with the National Environmental Policy Act (NEPA) (42 U.S.C. 4321-4347). In addition to these statutes, the Service has authority under several other legislative, regulatory, and executive mandates to promote the conservation of fish and wildlife resources for the benefit of the American public.

Please note that the Service's position on a project under the authorities of ESA, the Eagle Act, MBTA, and NEPA cannot be assumed without our official written response. Pursuant to the "take" provisions under section 9 of ESA; 16 U.S.C. 688 (a and b) of the Eagle Act; and 16 U.S.C. 703 of MBTA, the project proponent is responsible for compliance with these federal laws regardless of whether the Service is able to respond within your requested time frame.

Endangered Species Act (ESA)

Section 9 of ESA prohibits the taking of any federally listed endangered or threatened species. Section 3(18) of ESA defines take to mean to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Our regulations (50 CFR 17.3) define harm to include significant habitat modification or degradation which actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. Harassment is defined as an intentional or negligent action that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering. The ESA provides for civil and criminal penalties for the unlawful taking of listed species. Exemptions to the prohibitions against take may be obtained through coordination with the Service in two ways: through interagency consultation for projects with federal

involvement pursuant to section 7 or through the issuance of an incidental take permit under section 10(a)(1)(B) of ESA.

In accordance with section 7 of ESA, enclosed is a list entitled, "***Federally listed Threatened and Endangered Species and Designated Critical Habitat Occurring in Nebraska.***" The Service recommends that the lead federal agency consider the information provided in this list with regard to making its assessment of potential impacts of the proposed project on federally listed species and designated critical habitat and in making the "affect/no affect determination." Further, the Service recommends that the lead federal agency not limit its consideration of affect to just the above project information, but other potential affects as they become apparent during the course of other project studies and/or project development and modification. If it is determined that the proposed project may affect (beneficial or adversely) federally listed species or federally designated critical habitat, further consultation under section 7 of ESA with this office is required.

The Service recommends continued section 7 consultations on the proposed projects with the project applicant once the above requested information has been provided. The requested information, supplemented by previous studies, should assist the project applicant and the Service with the development of a supportable determination of affect and concurrence/nonconcurrence, respectively with regards to the effect of the proposed project on the federally listed species.

In addition, all federally listed species are also State-listed under the Nebraska Nongame and Endangered Species Conservation Act. Further, there may be State-listed species affected by the proposed project that are not federally listed. To determine if the proposed project may affect State-listed species, the Service recommends that the project proponent contact Kristal Stoner, Nebraska Game and Parks Commission, 2200 N. 33rd Street, Lincoln, NE 68503-0370.

Bald and Golden Eagle Protection Act

The Eagle Act provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*) by prohibition, except under certain specific conditions, the taking, possession, and commercial use of such birds. The golden eagle is found in arid, open country with grassland for foraging in western Nebraska and usually near buttes or canyons which serve as nesting sites. Golden eagles are often a permanent resident in the Pine Ridge area of Nebraska. Bald eagles utilize mature, forested riparian areas near rivers, streams, lakes, and wetlands and occur along all the major river systems in Nebraska. The bald eagle southward migration begins as early as October and the wintering period extends from December-March. Additionally, many eagles nest in Nebraska from mid-February through mid-July. Disturbances within 0.5-mile of an active nest or within line-of-sight of the nest could cause adult eagles to discontinue nest building or to abandon eggs. Both bald and golden eagles frequent river systems in Nebraska during the winter where open water and forested corridors provide feeding, perching, and roosting habitats, respectively. The frequency and duration of eagle use of these habitats in the winter depends upon ice and weather conditions. Human disturbances and loss of wintering habitat can cause undue stress leading to cessation of feeding and failure to meet winter thermoregulatory requirements. These affects can reduce the carrying capacity of preferred wintering habitat and reproductive success for the species. To comply with the Eagle Act, it is recommended that the project proponent determine whether the proposed project would impact bald or golden eagles. If it is determined that either species could be affected by the proposed project, the Service recommends that the

project proponent notify this office as well as the Nebraska Game and Parks Commission for guidance regarding avoiding adverse impacts to bald and golden eagles.

Migratory Bird Treaty Act

Under MBTA, activities in grassland, wetland, stream, and woodland habitats, and those that occur on bridges (e.g., which may affect swallow nests on bridge girders) that would otherwise result in the taking of migratory birds, eggs, young, and/or active nests should be avoided. Although the provisions of MBTA are applicable year-round, most migratory bird nesting activity in Nebraska occurs during the period of April 1 to July 15. However, some migratory birds are known to nest outside of the aforementioned primary nesting season period. For example, raptors can be expected to nest in woodland habitats during February 1 through July 15, whereas sedge wrens which occur in some wetland habitats normally nest from July 15 to September 10. If the proposed construction project is planned to occur during the primary nesting season or at any other time which may result in the take of nesting migratory birds, the Service recommends that the project proponent (or construction contractor) arrange to have a qualified biologist conduct a field survey of the affected habitats and structures to determine the absence or presence of nesting migratory birds. Surveys must be conducted during the nesting season. The Service further recommends that field surveys for nesting birds, along with information regarding the qualifications of the biologist(s) performing the surveys, be thoroughly documented and that such documentation be maintained on file by the project proponent (and/or construction contractor) until such time as construction on the proposed project has been completed.

The Service requests that the following be provided to this office prior to construction proceeding at the proposed project site if the above conditions occur. The purpose of the request is to assist the project proponent to avoid the unnecessary take of migratory birds and the possible need for law enforcement action:

- a) A copy of any survey(s) for migratory birds done in conjunction with this proposed project, if any. The survey should provide detail in regards to survey methods, date and time of survey, species observed/heard, and location of species observed relative to the proposed project site.
- b) Written description of any avoidance measures implemented at the proposed project site to avoid the take of migratory birds.
- c) Written description of any circumstances where it has been determined by the project proponent that one or more active bird nests cannot be avoided by the planned construction activities.

Fish and Wildlife Coordination Act

The FWCA requires consultation with the Service and State fish and wildlife agency for the purpose of preventing loss of and damage to fish and wildlife resources in the planning, implementation, and operation of federal and federally funded, permitted, or licensed water resource development projects. This statute requires that federal agencies take into consideration the effect that the water related project would have on fish and wildlife resources, to take action to prevent loss or damage to these resources, and to provide for the development and improvement of these resources. The comments in this letter are provided as technical assistance only and is not the document required of the Secretary of the Interior

pursuant to Section 2(b) of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*) on any required federal environmental review or permit. This technical assistance letter is valid only for the described conditions and will have to be revised if significant environmental changes or changes in the proposed project take place. In order to determine whether the effects to fish and wildlife resources from the proposed project are being considered under FWCA, lead federal agency must notify the Service in writing of how the comments and recommendations in this technical assistance letter are being considered into the proposed project.

To determine if the proposed project may affect fish and wildlife resources of the State of Nebraska under the FWCA, the Service recommends that the project proponent contact Carey Grell, Nebraska Game and Parks Commission, 2200 N. 33rd Street, Lincoln, NE 68503-0370.

Wetlands, Streams, and Riparian Habitats

If wetlands or streams will be impacted by the proposed project, a Department of the Army permit from the U.S. Corps of Engineers may be needed. The Service recommends that impacts to wetlands, streams, and riparian areas be avoided or minimized. In accordance with the Section 404(B)(1) Guidelines (Guidelines) of the Clean Water Act, the Guidelines emphasize that avoidance and minimization precede compensation, which is to be considered solely for unavoidable adverse impacts on fish and wildlife resources and supporting ecosystems. For projects that do not require access or proximity to, or location within aquatic environments (i.e., non-water dependant project) to fulfill its basic project purpose, it is assumed that practicable alternatives exist that would cause less damage to aquatic resources than projects that are located in aquatic ecosystems. In addition to determining the least environmentally damaging practicable alternative, 40 CFR Part 230.10(a) of the Guidelines also states, "... no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, **so long as the alternative does not have other significant adverse environmental consequences**" (emphasis added).

If after an alternatives analysis has been completed in accordance with the Guideline, and unavoidable impacts are to occur to aquatic habitats, the Service recommends that compensation (i.e., restoration of a degraded wetland or creation) occur for like wetland type at a ratio of 2:1 (acres of wetlands restored/created to acres of wetlands impacted). For unavoidable impacts to streams, the Service recommends that stream pattern, profile, and dimension be mitigated at a ratio of no less than 1:1 (stream length and number, pattern, and length of meanders created/restored versus stream length and number, pattern, and length of meanders impacted; sequence and number of pools and riffles created/restored versus sequence and number of pools and riffles impacted). Additionally, compensation for impacts to riparian habitats should occur at a minimum ratio of 3:1 (i.e., acres of riparian habitat replaces for acres of riparian habitat impacted) The 3:1 ratio is based on the loss of the habitat and the amount of time that will be required for planted trees to reach maturity.

Animal Passage and Aquatic Biota

Land use practices that allow soil to runoff into waterways following rainfall events cause the siltation of streams, and increase turbidity which can result in a lowering of water quality and thus, a loss in the diversity of natural aquatic systems. The Service recommends that the project proponent incorporate rigorous soil erosion control practices both during and after the proposed construction, including temporary construction activities or any other alignment

procedures in order to avoid impacts to fish and other aquatic organisms. Culverts should also be constructed at elevations so as to not impede animal/fish movement (i.e. either new culvert installation or culverts used in a temporary crossing). The Service further recommends that the project proponent not alter or install culverts in any way that would result in reductions in current channel width. Additionally, the Service has enclosed recommended best management practices to minimize potential impacts to native fish and other aquatic resources, including spawning timeframes for Nebraska fish species.

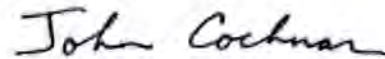
NATIONAL WILDLIFE REFUGES

In Nebraska, the Service manages six refuges and one wetland management district under the National Wildlife Refuge System. Based on the lack of information, the Service cannot determine whether the proposed projects may impact these seven wildlife areas.

Information contained in this letter represents the public interest for fish and wildlife resources and should warrant full consideration in the project planning process. The Service requests that no part of this letter be taken out of context and if reproduced, the letter should appear in its entirety.

The Service appreciates the opportunity to provide comments on this proposed project and the assistance by the NDOR to protect federal trust fish and wildlife species in Nebraska. Should you have any questions regarding these comments, please contact Ms. Brooke Stansberry within our office at Brooke_Stansberry@fws.gov or at (308) 382-6468, extension 16.

Sincerely,



John Cochnar
Deputy Nebraska Field Supervisor

Enclosures

cc: FHWA; Lincoln, NE (Attn: Victoria Peters)
NGPC; Lincoln, NE (Attn: Kristal Stoner)
NGPC; Lincoln, NE (Attn: Carey Grell)
NDOR; Lincoln, NE (Attn: LeRoy Juengel)

Enclosure

Federally Listed Threatened and Endangered Species and Designated Critical Habitat Occurring in Nebraska (August 2008)

Pursuant to section 7 of Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*), every federal agency, in consultation or conference with the U.S. Fish and Wildlife Service (Service), is required to ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any federally listed or proposed species and/or result in the destruction or adverse modification of designated and/or proposed critical habitat. In accordance with section 7(a) (2) of ESA, the lead federal agency should determine if any federally listed threatened or endangered species and/or designated/proposed critical habitat would be directly and/or indirectly affected by this proposed project. The assessment of potential impacts (direct and indirect) must include an "affect" or "no effect" determination and be presented to the Service in writing. If the Service agrees with the lead federal agency's determination, the Nebraska Ecological Field Office in Grand Island, Nebraska would provide a letter of concurrence. If federally listed species and/or designated/proposed critical habitat would be adversely affected by this action, the lead federal agency would need to continue section 7 consultation with the Service prior to making any irretrievable or irreversible commitments of resources in support of the proposed project or action.

Section 9 of ESA prohibits the taking of any federally listed endangered or threatened species. Section 3(18) of ESA defines take to mean to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Our regulations (50 CFR 17.3) define harm to include significant habitat modification or degradation which actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. Harassment is defined as an intentional or negligent action that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering. The ESA provides for civil and criminal penalties for the unlawful taking of listed species. Exemptions to the prohibitions against take may be obtained through coordination with the Service in two ways: through interagency consultation for projects with federal involvement pursuant to section 7 or through the issuance of an incidental take permit under section 10(a)(1)(B) of ESA.

Please note that the Service's position on a project under ESA cannot be assumed without our official written response. The following is a list of species under ESA that occur in Nebraska. This information should be used to determine whether a proposed action/project may affect a listed species or adversely modify critical habitat.

LISTED SPECIES

1. American Burying Beetle (*Nicrophorus americanus*) - Endangered Species

Occurrence:

Riparian corridors, grasslands, agricultural land. Recent records (1993-2003) are from **Antelope, Cherry, Custer, Blaine, Boone, Boyd, Brown, Dawson, Frontier,**

Garfield, Gosper, Holt, Keya Paha, Lincoln, Loup, Rock, Thomas, and Wheeler counties.

2. Black-Footed Ferret (*Mustela nigripes*) - Endangered Species

Occurrence:

Prairie dog towns; no wild population known in Nebraska.

3. Blowout Penstemon (*Penstemon haydenii*) - Endangered Species

Occurrence:

This plant is found in blowouts in the Nebraska Sandhills and central Wyoming. There are extant populations in **Morrill, Box Butte, Sheridan, Garden, Grant, Hooker, Thomas, and Cherry counties.**

4. Colorado Butterfly Plant (*Gaura neomexicana coloradensis*) - Threatened Species

Occurrence:

Floodplains created and maintained by streams. Found along Lodgepole Creek (**Kimball County**) above Oliver Reservoir.

5. Eskimo Curlew (*Numenius borealis*) - Endangered Species

Occurrence:

Spring migrant; status unknown. Highest potential for occurrence in **Adams, Buffalo, Douglas, Hall, Hamilton, Holt, Howard, Lincoln, Madison, and York counties.**

6. Interior Least Tern (*Sterna antillarum*) - Endangered Species and

7. Piping Plover (*Charadrius melodus*) - Threatened Species:

Occurrence:

Nests on riverine sandbars and sand/gravel piles resulting from mining on Platte, Missouri, Elkhorn, Niobrara, and Loup rivers, and at Lake McConaughy. **Known to occur in Boyd, Brown, Buffalo, Butler, Cass, Cedar, Colfax, Cuming, Custer, Dakota, Dawson, Dixon, Dodge, Douglas, Gosper, Hall, Hamilton, Holt, Howard, Kearney, Keith, Keya Paha, Knox, Lincoln, Madison, Nance, Phelps, Platte, Polk, Rock, Sarpy, and Saunders counties.**

8. Pallid Sturgeon (*Scaphirhynchus albus*) - Endangered Species

Occurrence:

Missouri River, Lower Platte River, and Elkhorn River. Known to occur in **Boyd, Knox, Cedar, Dixon, Dakota, Thurston, Burt, Washington, Douglas, Sarpy, Cass, Otoe, Nemaha, Richardson, and Saunders counties.**

9. Salt Creek Tiger Beetle (*Cicindela nevadica lincolniana*) - Endangered Species

Occurrence:

Found in saline wetlands and saline streams in eastern Nebraska, namely northern **Lancaster County.**

Critical Habitat:

Federally designated critical habitat has been proposed for the Salt Creek tiger beetle in **Lancaster and Saunders counties.**

10. Scaleshell Mussel (*Leptodea leptodon*) - Endangered Species**Occurrence:**

Found in 1982 and 2005 in Missouri River downstream from Gavins Point Dam.

11. Topeka Shiner (*Notropis topeka*) - Endangered Species**Occurrence:**

Small headwater prairie streams with high quality and cool temperatures. Found in **Cherry and Madison Counties.**

Critical habitat:

Critical habitat has been designated for the Topeka shiner on the lower 6 miles of Taylor Creek in **Madison County.**

12. Ute Ladies'-Tresses Orchid (*Spiranthes diluvialis*) - Threatened Species**Occurrence:**

Population (estimated 4,000 plants) confirmed in 1996 within Niobrara River floodplain, **Sioux County.**

13. Western Prairie Fringed Orchid (*Platanthera praeclara*) - Threatened Species**Occurrence:**

This plant occurs in tall-grass prairie, wet meadows; populations in **Boone, Cherry, Garfield, Greeley, Hall, Holt, Lancaster, Loup, Madison, Otoe, Pierce, Rock, Saline, Sarpy, Seward, and Wheeler Counties.**

14. Whooping Crane (*Grus americana*) - Endangered Species**Occurrence:**

Migrant, one bird summered in 1991; May occur in any Nebraska counties west of the 98th Meridian (**Adams, Antelope, Arthur, Blaine, Boone, Boyd, Brown, Buffalo, Butler, Chase, Cherry, Clay, Custer, Dawson, Fillmore, Franklin, Frontier, Furnas, Garfield, Gosper, Grant, Greeley, Hall, Hamilton, Harlan, Hayes, Hitchcock, Holt, Hooker, Howard, Jefferson, Kearney, Keith, Keya Paha, Knox, Lincoln, Logan, Loup, Madison, McPherson, Merrick, Nance, Nuckolls, Perkins, Phelps, Platte, Polk, Red Willow, Rock, Saline, Seward, Sherman, Thayer, Thomas, Valley, Webster, Wheeler, York counties**). Migration peaks in Late October and April.

Critical Habitat:

A strip of Platte River bottom with a north-south width of 3 miles, and I-80 as the north boundary, between Lexington and Shelton has been designated as **critical habitat** for the whooping crane.

Enclosure

Recommended Best Management Practices for Proposed Construction Activities Associated with Streams/Rivers in Nebraska:

- Avoid earth moving activities or fill/bank armoring during native fish spawning periods from May 15 – July 31, construct stream crossings or other associated temporary embankments during low flow periods (likely August – October).
- Minimize work area at stream locations. The majority of the work (including heavy equipment and storage sites) should occur above the high bank line. Avoid driving equipment through the streambed.
- Implement comprehensive and effective erosion and sediment controls. These methods should be implemented and maintained for the duration of the project and considered at all stages of the project planning and design. Close attention is warranted for the placement and maintenance of temporary erosion control measures at the construction site to minimize sediment loading. These erosion/sediment control techniques should keep sediments from entering the stream and remain in place until work areas become re-vegetated and stable. Such erosion control measures may include properly placed sediment/silt screens or curtains and hay bales. Proper techniques are important to the placement of these types of structures and include trenching, staking and backfilling as well as using the appropriate number of bales. These techniques are best used in combination with each other rather than separately.
- Erosion and sediment controls should be monitored daily during construction to ensure effectiveness, particularly after storm events, and only the most effect techniques should be utilized. Clean, repair and replace structures as necessary.
- Exposed stream banks must be stabilized immediately after construction activity. Eroded surfaces should not be left exposed for greater than one day. If rain is predicted, no construction should commence unless eroded surfaces are immediately treated with geotextile fabric, mulch, seeding or some techniques that would stabilize the bank or exposed areas from eroding.
- Erosion repair and stream bank restoration should use appropriate bioengineering solutions.
- Develop and implement a hazardous materials safety protocol. This would include that all temporary storage facilities for petroleum products, other fuels and chemicals must be located and protected to prevent accidental spills from entering streams within the project area.

FISRWG. 1998. Stream Corridor Restoration: Principles, Processes, and Practices. By the Federal Interagency Stream Restoration Working Group (FISRWG) (15 Federal agencies of the U. S. Government). GPO item No. 0120-A; SuDocs No. A 57.6/2:EN 3/PT.653. ISBN-0-9

Local Projects Division Green Sheet
Status of Environmental Commitments

Green Sheet #: _____

Project No.: _____

Control No.: _____

Location: _____

Green Check Boxes (left row check boxes) are to be completed by the NDOR Environmental Section Reviewer

Red Check Boxes (right row check boxes) are to be completed by the NDOR Project Coordinator who will review the final plans

NDOR/FHWA Environmental Clearance Obtained: Dates of Clearances:

Comments:

The NDOR Project Coordinator has reviewed the plans to determine if the project location information and the project description in the NEPA documents match the plans.

404 Permit Required: Yes No Received: Permit No.:

Acres Impacted: Acres Mitigated:

Location: Project Mitigation Ratio:

404 Permit Type: Individual Nationwide N/A

Wetland Delineation: Yes No Date Delineated:

Who Delineated:

Comments:

401 Water Quality Certification Required: Yes No Received:

401 Certification Type: Individual Certification (must get this type for an Individual 404 Permit)

Nationwide Certification (automatically issued for Nationwide 404 Permits)

N/A

Comments:

State Title 117 Waters (Letter of Opinion): Yes No Received:

Permit No.: Acres Impacted: Acres Mitigated:

Location:

Project Mitigation Ratio:

Comments:

The NDOR Project Coordinator has reviewed the project plans to determine if wetland and/or Title 117 Water impacts and mitigation were correctly marked on the plans. The project plans include a temporary work platform, shoo-fly, or temporary crossing if one will be used in the project.

Floodplain Permit Required: Yes No Received:

Permit No.:

Comments:

Historic Clearance: Yes No Received:

Comments:

The NDOR Project Coordinator has reviewed the project plans to determine if any historic or cultural resources impacted by this project were marked correctly on the plans.

Green Check Boxes are to be completed by the NDOR Environmental Section Reviewer

Red Check Boxes are to be completed by the NDOR Project Coordinator: *(Reviewer of Final Plans)*

Threatened and Endangered Species Clearance Obtained: Yes No

Received NGPC:

Received USFWS:

Comments:

The NDOR Project Coordinator has reviewed the project plans to determine if areas that were identified in the Threatened and Endangered Species concurrence are marked correctly.

NPDES/Stormwater Required: Yes No Received:

Permit No.:

Comments:

The NDOR Project Coordinator has reviewed the project plans to determine if erosion control measures were marked on the project plans.

Special Provisions: Are there Environmental Special Provisions? Yes No

If you check Yes, then see attached Environmental Commitment sheet.

Special Notes on Plans:

The NDOR Project Coordinator has reviewed any notes on the plans and has determined they are correct.

Green Sheet Approvals:

NDOR Environmental Reviewer Approval: I have compared the environmental documentation and project correspondence with the environmental commitments shown on this Form and found them to be accurate and complete.

NDOR Environmental Analyst
(Initial and Date)

NDOR Environmental Documents Unit Manager Approval: I concur with the findings of the Environmental Analyst's review of the plans.

NDOR Environmental Documents Unit Manager
(Initial and Date)

LPD Project Coordinator Approval: I have compared the environmental documentation, final project plans, and project correspondence with the environmental commitments shown on this form and found them to be accurate and complete.

LPD Project Coordinator
(Initial and Date)

LPD Section Head Approval: I concur with the findings of the LPD Project Coordinator's review of the plans.

LPD Section Head
(Initial and Date)

Environmental Commitments

Green Sheet #: 0

This information is being provided to inform project designers, construction staff, and maintenance staff of the environmental commitments that need to be fulfilled or re-examined during project development and construction.

Project No.: _____ Control No.: _____

Project Name: _____ Letting Date: _____

City/County: _____ Designer: _____

Environmental Project Contact: _____

Project's Responsible Charge: _____

List environmental commitments and contact people below.

DISTRIBUTION LIST

	<u>Name</u>	<u>Date Sent</u>
Consultant	-----	-----
Local Agency RC	-----	-----
District Construction Engineer	-----	-----
District Environmental Contact	-----	-----
Project File	-----	-----
NDOR Environmental Analyst	-----	-----
NDOR Project Coordinator	-----	-----
NDOR LPD Section Head	-----	-----
NDOR LPD Division Head	-----	-----
Contract Lettings	-----	-----
FHWA	-----	-----
SWPPP-Environmental Commitment Book	-----	-----

Additional Comments:

Guidelines for Completing Green Sheets for the NDOR Local Projects Section



Guidelines for Completing NDOR Local Project Section Green Sheets

The Nebraska Department of Roads (NDOR) Local Project Section (LPS) Green Sheets are used to record and communicate environmental project commitments made by local project sponsors throughout project development. Transportation projects have the potential to impact the surrounding environment and in many situations actions are agreed upon by project sponsors to avoid or minimize potential impact. These actions used to avoid or minimize environmental impacts are referred to as commitments. Examples of environmental commitments include: erosion control measures, threatened and endangered species surveys, maintenance of wetlands, and historical building preservation.

The LPS Green Sheets are used to communicate and document the commitments which will be implemented as the project moves forward. The Green Sheet will be used by local project sponsors and NDOR to identify the various types of environmental commitments that a project requires. Green sheets should be used to track environmental commitments a project requires so that Construction and Design staffs are aware of these requirements in the planning process.

Requirements for LPA Green Sheet Preparation

A Green Sheet must be prepared and included with the Plans, Specification, and Estimates package (PS&E package) to document that all required coordination materials, NEPA documents, and environmental permits have been acquired. The Green Sheet is used for the following types of federal actions: Programmatic Categorical Exclusions (PCE), Categorical Exclusions (CE), Environmental Assessments (EA), or Environmental Impact Statements (EIS). The description below details who will create Green Sheets.

The NEPA document preparer is responsible for completing the final Green Sheet. The final Green Sheet will have the words "Final Distribution" next to the red number on the first page of the form.

Preparing the Final Green Sheet

The NEPA document preparer creates the final Green Sheet once all required NEPA Documents have been approved by the required parties (FHWA and NDOR, only NDOR for a Programmatic Categorical Exclusion), all environmental permits have been obtained, and final plans have been approved. The Green Sheet is then submitted to the Responsible Charge (RC) for review.

Reviewing the Final Green Sheet

The NEPA document preparer is required to submit the final Green Sheet, to the Responsible Charge (RC) for review. The RC will send any comments on the Green Sheet to the NDOR Environmental Section along with the Green Sheet for review. The NDOR Environmental Section and the LPD Project Coordinator will review the Green Sheet. Once they both approve of the Green Sheet it will be circulated to all individuals on pg. 2 of the Green Sheet for signatures. Once signed the Green Sheet will be routed to all individuals on page 4 of the form and placed in the PS&E Package and in the project file.

Guidelines for Local Project Section Green Sheets

LPA Green Sheet Template

The Green Sheet Template should be used for all types of Local Public Agency (LPA) Federal Aid Projects including: Safe Routes, Secondary Road, Transportation Enhancement, and Urban projects. The Green Sheet template is available at the following website:

<http://www.dor.state.ne.us/gov-aff/downloads.htm>.

How to Complete a Green Sheet Template

Green Sheet Page 1: This page of the Green Sheet has check and comment boxes to enter information on the environmental clearances and permits a project requires.

Green Sheet #: This item is found in the upper right hand corner of each Green Sheet template in red text. It is in the upper right hand corner of the first page of the template. The Green Sheet number is used to track the Green Sheets for a project because there can be several of them for a single project.

If you are creating the first Green Sheet for a project then place a 1 in this space. If this is the second Green Sheet for a project then place a 2 in this space. All green sheets must be filed in the project file so check the project file in order to determine how many Green Sheets have been created for a project. **The final Green Sheet for a project** must have the words “Final Distribution” placed, in bold and in red text, near the Green Sheet number on the first page of the Green Sheet.

Project No.: Enter the Project Number (ex. BRO-7049(34))

Control No.: Enter the Project Control Number (ex. 21597)

Location: State the project name for this project.

404 Permit Required: Check “yes” or “no” on whether or not a 404 permit was required.

Received: Enter the date the 404 permit was received

Permit No.: Enter the 404 permit number.

Acres Impacted: State the number of wetland acres total that will be impacted by this project

Acres Mitigated: State the number of wetland acres total that will be mitigated

Location: State the location of the wetlands in the 404 permit.

Project Mitigation Ratio: Enter the ratio for this (ex. 4:1)

404 Permit Type: Check the 404 permit type that this project required.

Wetland Delineation: Check “yes” or “no” for whether or not delineation was conducted for this project.

Date Delineated: State the delineation date

Who Delineated: State the person and/or company that conducted the delineation.

Comments: Add any comments pertaining to the Wetland delineation or the 404 permit.

Guidelines for Local Project Section Green Sheets

401 Water Quality Certification Required: Check the appropriate box indicating if this certification was required.

Received: State the date the certification was received.

401 Certification Type: Check the appropriate certification type if your project required a 401 Certification.

Note: If you are issued a Nationwide 404 permit then you are automatically issued a Nationwide 401 certification. If you received an individual 404 permit then you must apply for an Individual 401 permit.

Comments: Add any comments pertaining to 401 Water Quality Certification.

State Title 117 Waters: Check “yes” or “no” indicating whether or not a Title 117 permit was required.

Received: State the date the permit was received

Permit No: State the permit number

Acres Impacts: State the total Title 117 waters acres impacted by this project

Acres Mitigated: State the total Title 117 water acres mitigated for this project.

Location: State the location of the Title 117 Waters

Project Mitigation Ratio: State the ratio (ex. 4:1)

Comments: State any comments regarding the Title 117 waters or permit.

Floodplain Permit Required: Check “yes” or “no” indicating if a floodplain permit was required.

Received: State the date the permit was received

Permit No.: State the permit number

Comments: List any information regarding the floodplain or the permit.

Historic Clearance: Check the box which represents if historic clearance was received for this project.

Received: State the date the historic clearance was issued.

Comments: State any comments pertaining to the project’s historic clearance

Threatened and Endangered Species Clearance: Check whether or not T&E clearance was received for this project.

Received: State the date the USFWS clearance was issued

NGPC: State the date the Nebraska Game and Parks Commission issued project clearance.

USFWS: State the date the US Fish and Wildlife Service issued project clearance.

Comments: State any comments pertaining to T&E Species commitments

FHWA Environmental Clearance: Check the “yes” box if this project requires Federal Highway Administration (FHWA) clearance.

Note: Programmatic Categorical Exclusions (PCE) projects do not require this clearance.

Comments: add any comments regarding the FHWA clearance of this project.

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NPDES/Stormwater Permit No.: State the NPDES permit number.

Green Sheet Page 2:

Special Provisions: Check the “yes” box if this project was issued any permit or environmental clearance that requires this project to follow specific conditions. For example if this project was issued a: 404 permit or Title 117 Waters permit then there are specific conditions in the permit that this project must follow.

Check “no” for this item if this project was not issued any permits or clearances that require this project to comply with specific conditions. For example no 404 permit or any other permits were required for this project.

Special Notes on Plans: If there were any notes that were written on the project plans for this project that pertain to any environmental commitments specify that here.

Initial and Date lines: The individuals listed must initial and date this section when the final Green Sheet is complete. The Green Sheet must be reviewed by the NDOR Environmental Section and the LPD Project Coordinator to ensure the final PS&E package documents include the required environmental commitments.

Green Sheet Page 3: This page is used to list all the Environmental Commitments that this project is subject to.

Project No.: Enter the Project Number (ex. BRO-7049(34))

Control No.: Enter the Project Control Number (ex. 21597)

Project Name: State the project name.

Letting Date: State the letting date for the projects.

County: State the county this project is in.

Designer: State the name and phone of the project designer

Environmental Project Contact: State the name and phone of the person that completed the NEPA documents for this project.

Responsible Charge: State the Responsible Charge’s name and title in this blank.

Location: State the project name for this project.

Guidelines for Local Project Section Green Sheets

Guidance on completing this page: If your project has any of the following Environmental Commitments or Permits then you must include them in this section of the Green Sheet. Include details on each commitment and the project contact person that is most knowledgeable on each specific commitment.

This section can be as short or as long as needed. You can continue this section onto additional pages if needed to list all the applicable environmental commitments for your project.

NOTE: For all projects that require a 404 permit, 401 Water Quality certification, or NPDES Permit/SWPPP we need to see a mitigation measure in the commitments section documenting the fact that the permits need to be obtained. If the permits are already obtained, a mitigation measure needs to be included stating that the terms and conditions of the permit will be implemented.

Example: “ Prior to construction activities within the jurisdictional stream crossing a Section 404 permit and 401 certification will be obtained. All terms and conditions of the permit and certification shall be implemented.”

If your project has a 404 Permit include the following information in this section:

1. List the Specific Conditions from the 404 permit
2. Insert the site descriptions of all wetland sites from the project’s 404 permit application.
3. State any other commitments pertaining to wetlands.
4. **List the contact information, including name, phone number, and email address, for the person that applied for the 404 permit.**
5. **Attach a copy of the 404 permit (including the Fact Sheet) to the Green Sheet.**

Threatened and Endangered Species Commitments:

1. State any commitments the US Fish and Wildlife Service concurrence letter states for this project
2. State any commitments the Nebraska Game and Parks Commission (NGPC) states for this project
3. State any commitments the NDOR Wildlife Biologist requires for this project.
4. **List Eric Zach as the contact person for any commitments pertaining to Threatened and Endangered Species.** Eric Zach, NDOR Biologist, eric.zach@nebraska.gov, (402) 479-4766.
5. **Attach a copy of survey protocols for any Threatened and Endangered Species surveys (including: Bald Eagle, Interior Least Turn, Piping Plover, River Otter, Swift Fox, and Whooping Crane) that are required for the project.**

Wellhead Protection Area Commitments:

1. **If this project is in a Wellhead Protection Area include the following language:** “This project has been identified as being located within a Wellhead Protection Area. For additional information contact NDEQ or go to NDOR’s website for a link to the NDEQ website.”
2. List any wellhead protection area specific commitments that pertain to the project.

Guidelines for Local Project Section Green Sheets

3. **List the contact information for the person that made the determination that this project was in a wellhead protection area.**

State Historical Society Commitments:

1. State any commitments the SHPO concurrence letter states for this project.
2. **List contact information of the person that prepared the NEPA documents for this project.**
3. **Attach a copy of the SHPO concurrence letter that states the specific commitments pertaining to this project.**

Floodplain Permit Commitments:

1. State any specific commitments the floodplain permit requires for this project
2. **List the contact information of the person that applied for the floodplain permit for this project.**
3. **Attach a copy of the Floodplain Permit Application and the Floodplain Permit.**

Any Other Environmental Commitments:

1. State any other commitments that this project is required to follow.
2. **List a contact person, and their contact information, for each additional environmental commitment.**
3. **Attach a copy of correspondence that states the specific commitments which affect this project.**

Green Sheet Page 4: This page is that Distribution List page. Once the final green sheet has approved by all the people on Page 2 of the Green Sheet it will be routed to all people on Page 4. A copy of the final Green Sheet will be place in the PS&E Package and the Project File. The information on the Green Sheet will be entered into the LPD database and a copy of the Green Sheet will be placed on NDOR's Falcon System.

If you have any questions on this guidance contact Allison Zach, NDOR Environmental Analyst, (402) 479-3632 or allison.m.zach@nebraska.gov.

Environmental and Planning Reference Materials

Document	Comment	Link
The FHWA Environmental Policy Statement (1990 & 1994)	Commitment to environmental protection and enhancement	http://www.fhwa.dot.gov/environment/eps/pt1.htm
NEPA and Transportation Decision Making Course Manual	Useful reference for project development	http://www.nhi.fhwa.dot.gov/downloads/catalog/142XXX.pdf
Environmental Guidebook (CD)	The Environmental Guidebook on FHWA's website	http://environment.fhwa.dot.gov/guidebook/index.asp
Environmental Flow Charts (12/98)	14205 Manual and Guidebook CD	http://environment.fhwa.dot.gov/guidebook/vol2/doc7m.pdf
Summary of Environmental Legislation Affecting Transportation	14205 Manual and Guidebook CD	http://www.fhwa.dot.gov/environment/env_sum.htm
FHWA Environmental Regulations	23 CFR 771 (revised)	http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr;sid=0342effde9eee877884a54f81c87dafc;rgn=div5;view=text;node=23%3A1.0.1.8.43;idno=23;cc=ecfr
CEQ Regulations for Implementing the Procedural Provisions of NEPA	14205 Manual and Guidebook CD	http://ceq.hss.doe.gov/Nepa/regs/ceq/toc_ceq.htm
CEQ 40 Questions and Answers	14205 Manual and Guidebook CD	http://ceq.hss.doe.gov/nepa/regs/40/40p3.htm

4(f) Requirements and Guidance	14205 Manual and Guidebook CD	http://www.environment.fhwa.dot.gov/projdev/pd5sec4f.asp
23 U.S.C. 109(h)	Sustainability / social, economic and environmental issues.	http://www.law.cornell.edu/uscode/23/109.shtml
Consideration of Cumulative Impacts in EPA Review of NEPA Documents	Guidance related to EPA's 309 responsibilities	http://www.epa.gov/compliance/resources/policies/nepa/cumulative.pdf
NHI Public Involvement in NEPA and Transportation Decision Making Course		http://www.nhi.fhwa.dot.gov/downloads/catalog/142XXX.pdf
NTI's Public Involvement in Transportation Decision Making Course		http://www.ntionline.com/CourseInfo.asp?CourseNumber=FP203
Public Involvement Techniques for Transportation Decision Making	A tool kit for successful public involvement	http://www.fhwa.dot.gov/reports/pittd/cov er.htm
Community Impact Assessment	Outline of CIA methodology	http://www.ciatrans.net/CIA_Quick_Reference/Purpose.html
Flexibility in Highway Design		http://www.fhwa.dot.gov/environment/flex/
Section 106 guidance		http://environment.fhwa.dot.gov/guidebook/vol2/doc10g.pdf
National Historical Preservation Act		http://www.achp.gov/NHPA.pdf
Highway Traffic Noise Analysis and Abatement 6/95		http://www.fhwa.dot.gov/environment/pol guid.pdf
Title VI - Civil Rights Act of 1964 and amendments		http://staffnet.fhwa.dot.gov/opt/training/fhwapdp/civnewmt.htm#title6
Executive Order 12898 (2/94)	Federal Actions to Address Environmental Justice in Minority and Low Income Populations	http://staffnet.fhwa.dot.gov/rulemaking/Execord/EO12898.htm
DOT Order 5610.2	Environmental Justice	http://www.fhwa.dot.gov/environment/ejustice/dot_ord.htm
FHWA Order - FHWA Actions to Address Environmental Justice in Minority and Low Income Populations	12/2/98	http://www.fhwa.dot.gov/legsregs/directives/orders/6640_23.htm
Environmental Justice Guidance Under the NEPA	202-395-5750	http://ceq.hss.doe.gov/nepa/regs/ej/justice.pdf
Summary of Section 404 permits		http://www.fhwa.dot.gov/environment/wetland/inlieu.htm
Applying the Section 404 Permit Process to Federal-aid Highway Projects	Commonly known as the "Redbook"	http://knowledge.fhwa.dot.gov/ReNEPA/ReNepa.nsf/All+Documents/6F708D283AD7A7C485256D63000B6CE5/\$FILE/RedBook.doc
1977 Clean Air Act		http://www.osha.gov/dep/oia/whistleblower/acts/caa.html

1990 CAA Amendments		http://www.epa.gov/air/caa/overview.txt
Transportation Conformity - A Basic Guide for State and Local Officials		http://www.fhwa.dot.gov/environment/conformity/bgguide05.pdf
EPA Transportation Conformity Rule Amendments: Flexibility and Streamlining		http://www.epa.gov/EPA-AIR/1997/August/Day-15/a20968.htm
Statewide and Metropolitan Planning Regulations	Revised	http://www.fhwa.dot.gov/planning/metro/
Transportation Planning Handbook		http://www.ite.org/bookstore/errata/TB-011AErrata.pdf
Transportation Planning and ITS - Putting the pieces together		http://www.fhwa.dot.gov/tfhrc/safety/pubs/its/planning/transplanits.pdf
An Introduction to Urban Travel Demand Forecasting - self- instructional text	Provides basic information on the 4 step process	http://ntl.bts.gov/DOCS/UT.html
Transims	Will provide an overview of the "new" planning process	http://www.tfhrc.gov/pubrds/marapr00/transims.htm
Guidance on Bicycle and Pedestrian Provisions of the Federal-aid Program		http://www.fhwa.dot.gov/environment/bikeped/bp-guid.htm
Financing Federal-aid Highways		http://www.fhwa.dot.gov/reports/financingfederalaid/index.htm
A Guide to Reporting Highway Statistics		http://www.fhwa.dot.gov/policy/ohpi/hss/guide.htm
HPMS Field Manual		http://www.fhwa.dot.gov/ohim/hpmsman/hpms.htm
Traffic Monitoring Guide;		http://www.fhwa.dot.gov/ohim/tmguid/
Compilation of Selected Surface Transportation Laws		http://www.fhwa.dot.gov/legsregs/title23.pdf

General direction on developing concise and understandable purpose and need statements is found in the CEQ/USDOT letter exchange found online at:

<http://www.environment.fhwa.dot.gov/guidebook/Ginterim.asp>

and in FHWA/FTA Joint Guidance issued July 23, 2003, found online at:

<http://www.environment.fhwa.dot.gov/guidebook/Gjoint.asp>.

<http://www.fhwa.dot.gov/hep/section6002/1.htm#Toc148770583>

40 CFR 1508:

http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&tpl=/ecfrbrowse/Title40/40cfr1508_main_02.tpl

National Environmental Policy Act of 1969 (NEPA), as amended:

<http://www.nepa.gov/nepa/regs/nepa/nepaeqia.htm>

Nebraska Local Operating Procedures for integrating NEPA/404 Website:

<http://www.fhwa.dot.gov/nediv/nepa-404.htm>

COE or USACE, Omaha District: <https://www.nwo.usace.army.mil/>

Army Corps of Engineers Standard Operating Procedures for the Regulatory Program:

<https://www.nwo.usace.army.mil/html/od-rne/sop.pdf>

- Clean Water Act of 1977, as amended P.L. 95-217 33 U.S.C Section 404;
- The RED BOOK - "Applying the Section 404 Permit Process to Federal-Aid Highway Projects," FHWA et al, September 1988;
- "Guidance for Preparing and Processing Environmental and Section 4(f) Documents" - FHWA Technical Advisory T6640.8A, October 30, 1987;
- 40 CFR 1500-1508 (*CEQ Regulations*);
- 33 CFR 320-330 (*USACE regulations*);
- 23 CFR 771 (*FHWA regulation*); and
- Executive Orders 11988, 11990, 12898, etc.

Chapter 6

Design

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6.1 Introduction

Project construction plans and specifications must provide for a facility that will adequately meet the existing and planned future traffic in a manner conducive to safety, project economics, durability, environmental compatibility, and economy of maintenance. This chapter presents the design standards the LPA or their consulting engineer must use when designing a project and summarize the key design elements. The LPA will be responsible for determining the appropriate design parameters for the project while using good engineering judgment. The RC shall gather all the engineering and environmental input required to provide a complete and acceptable PS&E plan package.

NDOR will review all LPA project plans, specifications, and engineer's estimate for projects to be bid. The items NDOR will be reviewing are in a checklist which is also provided in the appendix of this chapter.

6.2 Types of Project Improvements

The design of the project will vary based on the type of improvement. The typical improvement types include:

New Construction

New construction is an improvement to build a road, trail, and/or bridge on completely new alignment. This might take the form of a bypass constructed to carry through traffic around a town or it might be a new access route linking an existing roadway with a new recreational facility.

The project is constructed to full geometric standards to fulfill both the current as well as long-term transportation needs of the area.

Reconstruction

Reconstruction is defined as rebuilding an existing facility along an existing alignment to include the pavement and base or replacing a bridge superstructure. Reconstruction may involve making substantial modifications to the existing roadway's or trail's horizontal and vertical alignment, including alignment shifts, in order to improve safety and traffic operations. Reconstruction work normally involves a substantial construction effort to rebuild the existing facility to, at, or near full geometric and safety standards to provide long-term, multi-modal transportation performance. The complete spectrum of design deficiencies and functional obsolescence of the roadway and structures, as well as the future transportation needs, should be addressed by this level of upgrading. Typical work includes roadway and shoulder widening, grading of a safety section, realignment, access improvement, and replacement of bridges. While reconstruction approximately follows an existing road corridor, it may deviate significantly in width and alignment from the present road to achieve the project's purpose and need and achieve full geometric standards. This type of improvement could involve:

- Addition of a through lane(s);
- Significant change in horizontal and/or vertical alignment;
- Reconstruction of an interchange by adding lanes or relocating ramps (*widening ramps for storage, turning movements or ramp metering are not included*);
- Replacement of an entire bridge including the substructure and foundation; and
- Replacement of the pavement, including removal of substantial modification to the base. Replacement of the pavement without replacing the base or significant adjustment of the vertical profile shall be considered rehabilitation as described below.

Resurfacing, Restoration, Rehabilitation (3R)

3R projects focus primarily on the preservation and extension of the service life of existing facilities and on safety enhancements. The improvements, whether only at spot locations or continuous, should acceptably meet existing and preferably future (*i.e., 10 to 20 years*) traffic needs and conditions in a manner conducive to safety, durability, and economy of maintenance. A 3R project rarely addresses all the deficiencies of the roadway or trail. Some potential problem areas or substandard features may remain to be addressed as part of a future reconstruction.

Under the classification of 3R projects, the types of improvements to existing Federal-aid facilities include, but are not limited to: resurfacing, pavement structural and joint repair, minor lane and shoulder widening, minor alterations to vertical grades and horizontal curves, upgrading guardrail, bridge repair, and removal or protection of roadside obstacles. Specifically, 3R work typically involves pavement improvement (*down to but not including the base course*) and is generally described as the following:

- Resurfacing generally consists of placing additional surface over a structurally sound roadway or bridge that requires treatment to extend its useful service life;
- Restoration means returning a road, structure, trail, or collateral facility to the as-built condition existing after original construction or reconstruction; and
- Rehabilitation implies providing some betterment, such as widening shoulders. Pavement rehabilitation consists of "structural enhancements that extend the service life of an existing pavement and/or improve its load carrying capacity." (*Source: AASHTO Highway Committee on Maintenance*)

As there is no separate minimum design standard for 3R projects on the local system shown in the NE Minimum Design Standards, the minimum standards are the same as for new construction and reconstruction.

When the pavement condition reaches its minimal service level, there is a need for cost-effective pavement and roadway improvement projects. 3R projects reflect and emphasize economic management of the roadway or trail system and provide an opportunity for the LPA to provide cost effective safety improvements. Therefore, economic considerations will largely determine the scope of work. The following are factors that may influence the scope of a 3R project:

- Pavement conditions;
- Roadside conditions;
- Funding constraints;
- Environmental concerns;
- Changing traffic and land use patterns;
- Traffic data; and
- Crash data.

The limits of construction for resurfacing projects are generally within the existing roadbed bench, consisting of the roadway surface and subsurface, adjacent foreslope, and ditch. Rehabilitation and restoration projects can and often do involve the widening of shoulders or flattening of sideslopes to meet design requirements. Acquisition of additional ROW to construct 3R improvements is sometimes necessary. Horizontal and vertical alignment modifications, if any, should be minor and should be consistent with the geometry of adjoining roadway and trail segments. However, the proposed work on the roadway will typically affect the foreslopes from the edge of pavement to the hinge point of the fill slope and to the bottom of ditch slopes. A 3R project shall not reduce the existing geometrics of the roadway section and shall not reduce the safety at the intersection.

Preventive Maintenance

Preventive Maintenance is a planned strategy of cost-effective treatments to an existing roadway system and its appurtenances that preserves the system, retards future deterioration, and maintains or improves the functional condition of the system (*without significantly increasing the structural capacity*).

Preventive maintenance will preserve the pavement and bridge structure and extending the pavement and bridge life to at least achieve the design life of the facility. Preventive maintenance is typically applied to pavements in good condition having significant remaining service life. As a major component of pavement preservation, preventive maintenance is a strategy of extending the service life by applying cost-effective treatments to the surface or near-surface of structurally sound pavements. Examples of preventive pavement treatments include asphalt crack sealing, chip sealing, slurry or micro-surfacing, thin and ultra-thin hot-mix asphalt overlay, concrete joint sealing, diamond grinding, dowel-bar retrofit, and isolated, partial

and/or full-depth concrete repairs to restore functionality of the slab. Examples of preventive bridge treatments are crack sealing, joint repair, scour countermeasures, overlays, and painting.

Landscaping/Streetscaping

Landscape is used to define all parts of the exterior environment including: vegetation, walks, drives, walls, fountains and possibly street lighting. Landscape design can serve several important functions within the roadway environment. In addition to making the roadway more aesthetically pleasing, landscaping can also be used to be a form of erosion control, preserve the natural environment and minimize maintenance requirements and costs. Streetscape refers to the visual image of a street, including the buildings, paving, utilities, signs, street furniture, plantings, and other design elements. The most important component of this is to strengthen the linkages between healthy neighborhoods and viable neighborhood commercial corridors.

6.3 Design Criteria

Current FHWA and AASHTO guidelines, such as flexibility in Highway Design (found at <http://www.dot.gov/environmental/flex/forward.htm>), are about designing projects that balance the needs of the transportation user with the context of the facility. This requires an understanding of social, economic, and environmental concerns and effects, as well as the concerns and effects for capacity, speed, safety, quality, and efficiency. Achieving an appropriate balance of the needs of the transportation facility users with values of the environment and communities that are affected involves seeking Context Sensitive Solutions (CSS) and applying innovative decision-making approaches to the project development, design, and delivery process. Refer to [NCHRP Report 480](#), A Guide to Best Practices for Achieving Context Sensitive Solutions.

Design criteria are developed to provide a systematic means of achieving quality roadway design in a uniform manner. Geometric design standards relate to the functional classification of roadways, types of users, traffic density and character, design speed, capacity, safety, terrain, and land use. These criteria incorporate basic design considerations and design controls for various types of improvements.

The existing geometric elements of a roadway are used to describe in conventional engineering terms the physical, structural, safety, and operational characteristics of the facility. While a number of elements of design (*i.e.*, *stopping sight distance*, *grades*, *horizontal/vertical alignment*, *superelevation*) must be established to develop a roadway design, only a few controlling elements are essential to evaluate it at the conceptual stage. Roadway width (*i.e.*, *lanes*, *shoulders*), design speed, surfacing type and alignment location, or new corridor location, if applicable, are the main criteria for studying roadway alternatives.

Other than for roads entirely on new location, these criteria for studying roadway alternatives consists of an inventory of the physical features and operational characteristics of the existing roadway. Most of this information may be available in road monitoring reports and/or

planning/inventory studies the LPA or NDOR may have developed. In addition to reviewing any available As-built plans and reports, the LPA and their engineer should determine and verify through field inspections the road's length, width, surfacing type, traffic control devices, and roadside features along with their current condition. The LPA should evaluate the available sight distance along the roadway and at intersections, and identify discernible sight distance restrictions.

Figure 6.1 provides an illustration of typical rural cross section elements, Figure 6.2 shows a recoverable roadside including clear zone and Figure 6.3 shows a typical urban cross section element.

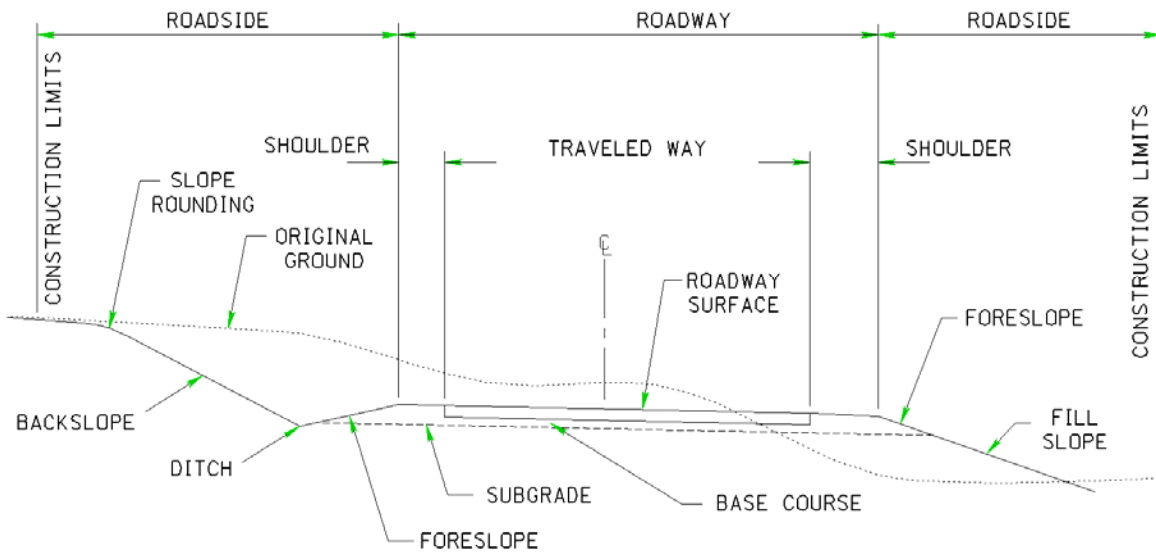


Figure 6.1 Typical Rural Cross Section Element

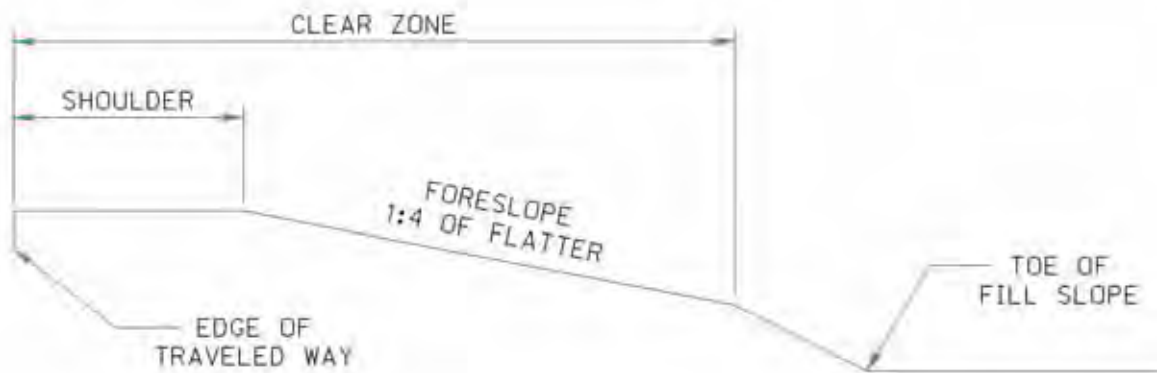


Figure 6.2 Recoverable Roadside Clear Zone

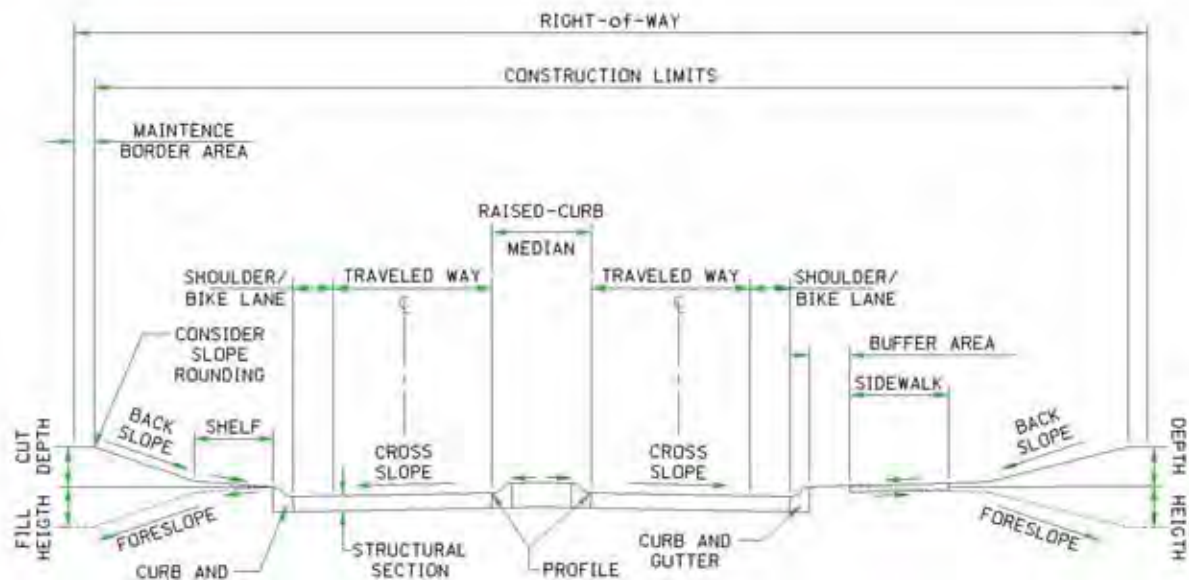


Figure 6.3 Typical Urban Cross Section Element

Project design should be done to a consistent standard. The LPA should evaluate the route between major termini to assure uniformity in the application of design features on the overall route that may be constructed or reconstructed in stages. The LPA should identify contextual features and qualitative aspects of each project early in the design process, before design standards are selected, and consider them throughout the design process.

FHWA has adopted policies and standards for Federal-aid roadway design that recognize these concepts. The policies and standards are listed in 23 CFR Part 625 - Design Standards for Highways. These standards basically adopt AASHTO policy for projects on the National Highway System (*NHS*) and refer to the approved State or local design guidelines, standards and procedures for non-*NHS* projects.

It is important the LPA recognize that any projects located on the *NHS*, regardless of the funding source, are to be developed in compliance with a number of AASHTO publications including "A Policy on Geometric Design of Highways and Streets" (*Green Book*). Although the *Green Book* was developed as a guide and not a standard, FHWA has adopted it as their applicable standard for new or reconstructed projects. For 3R type activities, the *Green Book* references TRB Special Report 214, *Designing Safer Roads*. 23 CFR Part 625 also specifies that there is no provision for 3R Standards on the Interstate or freeway system, although specific 3R criterion for the Interstate system is noted in the AASHTO publication *A Policy on Design Standards – Interstate System*.

Federal-aid projects not on the *NHS* are to be designed, constructed, operated, and maintained in accordance with State laws, regulations, directives, safety standards, design standards, and construction standards. These projects must, as a minimum, be designed to comply with the Nebraska Board of Public Roads Classifications and Standards - Nebraska Minimum Design Standards and applicable Federal law, rules, and regulations. The LPA should consider higher than minimum values for the geometric design standard if analyses of design traffic volumes, percent truck traffic, level of pedestrian, bicycle or transit use, safety performance, level of service (*LOS*), future transportation needs, or other factors, either separately or in combination, indicate such values are appropriate.

LPAs may use their specifications, special provisions or supplemental specifications on a project. However, the LPA must have these documents reviewed and approved by NDOR prior to bid advertisement. The LPA must assure, and NDOR certifies, that all project documents and process followed meet Federal regulations and requirements. Typically, the use of plans, specifications, special provisions or supplemental specifications other than NDORs should be approved as part of the Plan-In-Hand submittal. However, for program consistency, it is recommended that the LPA use NDOR's processes, plans, specifications, special provisions, or supplemental specifications on a project.

Reference materials, standards and criteria can be found in the following publications:

American Association of State Highway and Transportation Officials (AASHTO)

- A Policy on Geometric Design of Highways and Streets, 2004 Edition;
- A Policy on Design Standards, Interstate System;
- A Guide for Achieving Flexibility in Highway Design;

- A Policy on the Accommodation of Utilities Within Highway Right-of-Way;
- Guide for Design of Pavement Structures;
- Highway Drainage Guidelines;
- Guide for Roadway Lighting;
- Roadside Design Guide;
- Guide for the Development of Bicycle Facilities;
- Geometric Design of Very Low Volume Local Roads (*ADT<400*);
- Guide Specifications for the Design of Pedestrian Bridges; and
- Guidelines for Landscaping.

Transportation Research Board (TRB)

- Highway Capacity Manual; and
- Designing Safer Roads (*Practices for Resurfacing, Restoration and Rehabilitation*), Special Report 214, Transportation Research Board.

Federal Highway Administration

- Manual of Uniform Traffic Control Devices (*MUTCD*);
- 49 CFR Part 27 and Designing Sidewalks & Trails for Access, Part II;
- 23 CFR Part 625 Design Standards for Highways;
- 23 CFR Part 650 Bridges, Structures, and Hydraulics;
- Flexibility in Highway Design;
- Federal Aid Policy Guide – Non-Regulatory Supplement NS CFR 23 625, Information on Application of Design Standards, Uniform Accessibility Standards, and Bridges; and
- Designing Sidewalks and Trails for Access.

Nebraska State Department of Roads

- Drainage and Erosion Control Manual;
- Roadway Design Manual;
- Bridge Office Policies and Procedures;
- Standard Specifications for Highway Construction;
- Standard Item Listing;
- Right-of-Way Acquisition Guide for LPAs;

- Standard Plans; and
- Supplement to the Manual on Uniform Traffic Control Devices (*MUTCD*).

Nebraska Board of Public Roads Classifications and Standards

- Nebraska Board of Public Roads Classifications and Standards - Nebraska Minimum Design Standard.

American with Disabilities Act (ADA)

- 28 CFR Part 35 – Nondiscrimination on the Basis of Disability in State and Local Government Services;
- Americans with Disabilities Act Accessibility Guidelines (*ADAAG*); and
- Public Rights-of-Way Accessibility Guidelines (*PROWAG*).

Other Publications

- Secretary of the Interior’s Standards for the Treatment of Historic Properties. (*60 FR 35.843*);
- The 1995 Standards for the Treatment of Historic Properties regulations 36 CFR 68; and
- Evidencing Nebraska Land Titles (*Nebraska Land Titles Association*)

Many of these documents are available on various websites, and the NDOR LPD Project Coordinator can assist the LPA in obtaining copies of applicable guidelines and standards upon request. The NDOR LPD Project Coordinator will review and check the design plans to ensure proper design. Any variances to these guidelines must be approved by NDOR prior to preparation of the final plans. To request a design relaxation, the LPA must contact and work with the NDOR LPD Project Coordinator.

6.4 Preliminary Design

There are several types of project plans which occur at various stages of preliminary design. The LPA will be required to prepare and submit a set of plans at each stage of the design. The various project plan types may include:

- Preliminary Design Plans (*30-50%, used for the plan-in-hand field inspection*);
- Functional Plans (*60%, required for design public meetings/hearings*); and/or
- Final Plans (*100%, PS&E Package*).

Consult with the NDOR LPD Project Coordinator to help determine the type of plans to be submitted for the project. The plans will be thoroughly checked for completeness, accuracy, and formatting by NDOR, and/or FHWA.

Preliminary design is the amount of design work necessary to acceptably complete the environmental document. The amount of design will depend on the complexity of the project and its effects on the environment. The preliminary design phase involves developing the engineering design and evaluation in collaboration with the various functional disciplines including ROW, surveys and mapping, environment, safety, roadway design, pavements, hydraulics, geotechnical, structural design, and construction, to support the identification of a preferred alternative and the decision-making process.

This phase may include developing multiple alignment configurations, roadway templates, pavement structures, roadside features, or other alternatives for evaluation. The preliminary design is typically developed to approximately the thirty (30) percent level of final design but may be developed to a greater extent to address the environmental review process. This phase typically includes identification of a detailed scope of engineering activities, estimated costs, and a project delivery plan for implementing the proposed project and achieving the project objectives on schedule and within budget. The preliminary design phase is performed in conjunction and concurrently with the environmental process.

For example, projects such as 3R, isolated bridge replacements and other projects constrained by a limited or scope, the preliminary design and technical engineering activities may include:

- Develop survey and mapping for preliminary engineering and environmental activities;
- Develop design criteria for each alternative being considered;
- Develop initial alignments, typical sections and roadway design for each alternative;
- Determine proposed pavement structure options;
- Develop preliminary technical discipline recommendations, as applicable (*e.g., cut/fill slopes, walls, major culverts, bridge foundations*);
- Develop resource mapping and identify potential impacts of each alternative;
- Provide design information for the environmental analysis, such as: areas of impact, preliminary earthwork quantities, waste and staging areas, material source plans, preliminary drainage designs, bridge layout, ROW exhibits, construction phasing and closure schedules, and cost estimates; and
- Provide design information for other analyses, such as for a Value Engineering Analysis for projects costing \$25 million or more and \$20 million for any bridge project.

Deliverables or outputs from the preliminary design process may include:

- Feasibility study, if applicable;
- Plan-in-Hand report;

- Thirty (30) percent preliminary plans of the design alternatives (*e.g., plan/profile sheets, typical sections, major work items identified and located*); and
- Preliminary construction cost estimates for the design alternatives.

6.4.1 Traffic Characteristics

Traffic characteristics play a major role in establishing the concept and design of a roadway.

Traffic indicates the type of service for which the improvement is being made and directly affects the criteria for geometric design features (*e.g., widths, alignment, grades*). Basic traffic data (*e.g., average daily traffic, vehicle classification, percent heavy trucks*) can be readily obtained and provides a benchmark for traffic data in the study area. If traffic data is not available, the LPA should develop it by counting and analyzing existing traffic and their use patterns. If information is needed to verify the functional classification or other design controls, the LPA should obtain information on the user's origin and destination patterns and their functional use of the roadway.

Some common traffic data elements are listed below. Note that not all items listed are required for every project and can vary depending on specific project requirements:

- Average Annual Daily Traffic (*AADT*). The total yearly volume of automobiles and trucks divided by the number of days in the year;
- Average Daily Traffic (*ADT*). The calculation of average traffic volumes in a time period within the year, greater than a single day and less than one year;
- Peak-Hour Traffic (*PH*). The highest number of vehicles passing over a section of roadway during 60 consecutive minutes. Non-peak-hour traffic is representative of other times;
- Peak-Hour Factor (*PHF*). A ratio of the total volume occurring during the peak hour to the maximum rate of flow during a given time period with the peak hour (*typically 15 minutes*);
- Design Hourly Volume (*DHV*). The one-hour volume in the design year selected for determining the roadway design;
- K-factor (*K*). The K-factor is the percent of daily traffic that occurs during the peak-hour. A rule of thumb for rural roadways is approximately 11% of the ADT;
- Traffic Growth Rate. The trends and growth rates, past, and projected;
- Classification of Vehicles. Percent passenger vehicles, trucks and buses, recreational vehicles, etc.;
- Directional Split. Percentage of the design volumes in either direction;

- Turning movements. Traffic volumes of vehicles making allowable turns at major intersections, typically expressed as a portion of the DHV;
- Congestion data. Speed, density, volume, headway, percent of time following, and level of service data at identified traffic congestion areas;
- Speed and delay data. Measurements of operating speeds, running speeds, and amount of delay to vehicles at intersections; and
- Conflict study data. The identification of potential conflict points at intersections and the associated numbers of vehicles exposed to the potential conflicts.

As a minimum to designing a project, the LPA will need to determine the current ADT volume for the roadway, then project that ADT to the design year. Studies to determine future traffic are not normally necessary on very low volume roads where even high-percentage increases in traffic do not significantly impact design decisions. The design year is typically projected twenty (20) years into the future from the year of construction for new construction but may vary from 10-20 years for 3R projects. Projecting the traffic data is known as "Traffic Forecasting." Traffic forecasting can be complicated. The LPA needs to realize that the historic growth rate of traffic on a road may not continue unchanged after it is improved which can lead to significant miscalculations of its actual future traffic. In fact, traffic levels on an improved road may increase faster than anticipated as drivers seek to take advantage of its better driving conditions.

The traffic forecasting process begins with the collection of data on current traffic on the facility and throughout the region, followed by the calculation of expected growth in traffic for the region in general. This base case regional traffic projection should reflect expected economic, demographic, and land use trends, based on historic and projected relationships between these factors and regional traffic growth.

Data on expected regional traffic growth can then be entered into the region's travel demand model to simulate regional traffic flows with and without the new roadway capacity. MPOs and States typically maintain the travel demand models for planning purposes. Most travel demand models now in use are effective at measuring the extent to which existing network traffic will divert to new capacity which is a major source of new traffic on improved roads. Other traffic responses can be approximated even when they are not measured explicitly by the models. For instance, the models can be manipulated, through various feedback adjustments, to simulate the effects of mode shifts and alternative destinations chosen by regional travelers in response to a reduction in congestion. Although not explicitly captured in most travel demand models, the shifting of traffic to and from peak periods as congestion levels change can be estimated using supplemental methods. Identify any areas that are being considered for new traffic patterns, directional signing, revised pavement markings, and other change to traffic control devices that benefit traffic operations.

The AASHTO Green Book, Chapter 2, Traffic Characteristics section, provides a description of various traffic characteristics (*e.g., volume, directional distribution, composition of traffic projections, speeds*). While this information may have a greater bearing on design details, conceptual studies and associated alternative analyses are also dependent on overall traffic data. Sometimes traffic data (*e.g., operating speeds, travel time and delay, occupancy rates*) are needed to address a special issue (*e.g., determining the design speed or the need for passing lanes*). If traffic characteristics data is unavailable, the LPA should conduct a traffic study as described in the ITE Transportation and Traffic Engineering Handbook to collect this information.

Crash Data

The LPA should obtain the current traffic crash data for the project area. Vehicular crash data can provide excellent guidance in determining a road's past safety performance problems. If the LPA does not have these data and statistics readily available, they may be available from NDOR, the Nebraska State Patrol, or local law enforcement agencies responsible for the area. When this type of data is not immediately available, conduct a short-term traffic safety study or an assessment of crash potential. The crash history should cover a minimum of three years data for the roadway. If a formal traffic study is not available, anecdotal information from responsible sources can provide insight as well.

Figures for crash rates should be shown in crashes per million vehicle miles traveled. Figures for fatality rates should be shown in fatalities per one hundred million vehicle miles traveled.

6.4.2 Design Elements

Basic design controls serve as the foundation for establishing the physical form, safety, and functionality of the facility. Some design controls are inherent characteristics of the facility (*e.g. its context and the transportation demands placed upon it*). Other design controls are selected or determined in order to address a project's purpose and need. Selecting appropriate values or characteristics for these design controls is essential to achieve a safe, effective, CSS. The LPA should evaluate the following design controls to understand the factors influencing the design and to determine the applicable criteria for establishing the standards for the project:

- Contextual factors and environmental constraints;
- Functional classification;
- Topography within the corridor;
- Location (*e.g. rural or urban*);
- Existing and expected traffic volumes and composition (*e.g. ADT*);

- LOS and mobility;
- Level of access and management;
- Cross section type and level of multi-modal accommodation;
- Existing and expected users and their characteristics;
- Existing and expected speed characteristics;
- Existing and expected safety performance; and
- Other technical factors such as geotechnical, hydraulic, pavement, structural, etc.

The FHWA has designated thirteen (13) geometric controlling criteria with a primary importance for safety in the selection of design standards for roadway and bridge projects and 4 supplemental standards. The thirteen (13) principle controlling criteria are:

- Design Speed;
- Grades;
- Lane Width;
- Sight Distance;
- Shoulder Width;
- Cross Slopes;
- Bridge Width;
- Superelevation;
- Horizontal Alignment;
- Lateral Clearance to Obstruction;
- Vertical Alignment; and
- Vertical Clearance
- Structural Capacity

Deviations that result in design values less than the minimum or greater than the maximum standards for any of the 13 geometric controlling criteria require the LPA to obtain formal approval by either NDOR or FHWA in the form of a design relaxation (*design exception*) in accordance with the procedures described in Section 6.5 of this chapter.

Design Speed

Design speed is the safe speed that can be maintained when conditions are so favorable that the design features of the facility govern the speed a motorist is likely to use to traverse the roadway. The desirable design speed for a roadway project is the anticipated operating speed limit for the roadway.

The minimum design speed is the design speed shown in the Nebraska Minimum Design Standards or the anticipated posted speed limit, whichever is greater. The LPA should establish the overall design speed to be used for their project (*e.g., mainline, intersecting collectors, frontage/access roads, turnouts*). For example, if the design speed from the Nebraska Minimum Design Standards is 50 mph and the anticipated posted speed of the roadway is 55 mph, the LPA shall use a design speed of 55 mph on the project. In the event that a design exception is required for design speed and results in a reduction in stopping sight distance, the LPA shall design appropriate warning devices into the project to be placed to warn the driver.

Rural roadway projects should be designed to one design speed.

Sight Distance

Stopping Sight Distance (*SSD*) is defined as the distance needed for drivers to see an object on the roadway ahead and bring their vehicles to a safe stop before colliding with the object. It is the sum of the distance traversed by a vehicle from the instant the driver sees an object necessitating a stop to the instant the brakes are applied (*brake reaction distance*) plus the distance required to stop the vehicle from the instant brake application begins (*braking distance*). *SSD* is important for designing crest and sag vertical curves and for determining horizontal clearance on horizontal curves.

Decision Sight Distance (*DSD*) is the distance required for a driver to see a decision point or obstacle in the roadway environment, recognize that an action is required, choose the appropriate action (*stop, accelerate, change lanes, etc.*), and complete the chosen action. In visually cluttered environments such as interchanges, urban intersections, lane drops, and detours, the decision sight distance may be longer than the stopping sight distance.

Intersection Sight Distance (*ISD*) consists of the provision of sight triangles along each leg of an intersection, which are free of visual obstacles, giving a driver sufficient time and distance to avoid conflicts at the intersection.

Providing adequate *SSD* should be a priority during the design process. Locations along the roadway where adequate sight distance for the various listed maneuvers is not provided should be signed and/or marked according to accepted practice.

There are complex realities of driver perception and behavior to be considered when evaluating sight distance problems and evaluate the sight distances available to support the various maneuvers (e.g., SSD, DSD, ISD, and Passing Sight Distance (PSD)). The roadway location may be divided into component sections based on specific driving demands (e.g. to perform a task or maneuver). The LPA should analyze each section in terms of its availability of sight distance to support the specific task or maneuver. The LPA should then compare the available sight distance with the required sight distance to safely perform the driving task. If there are locations where the stopping sight distance cannot be addressed, describe where this occurs and any potential mitigation that could be incorporated into the design.

Lane Width

Through lane surface widths vary from nine (9) feet to twenty (20) feet. The normal lane width is twelve (12) feet and is determined by the roadway functional classification, traffic volumes and design speed. Minimum lane widths are presented in the Nebraska Minimum Design Standards or the Green Book depending upon the facility being designed and type of improvement.

Shoulder Width

Shoulder widths vary from two (2) feet to twelve (12) feet and are determined by the roadway functional classification, traffic volumes, and design speed. Minimum shoulder widths are provided in the Nebraska Minimum Design Standards or the Green Book depending upon the facility being designed and type of improvement. Where sidewalks are to be included in urban areas, a minimum ten-foot (10') shoulder width is desirable.

Bridge Width

Bridge width is the total width of all lanes and shoulders on the bridge measured between the elements of the bridge which project the farthest onto the roadway. The minimum bridge widths can be found in the Nebraska minimum Design Standards, AASHTO Green Book, or Special Report 214 depending upon the facility being designed and type of improvement.

Grades

Grade is the rate of change of the vertical alignment expressed in percent rise (+) or fall (-). Grade affects the vehicle speed and control of vehicles, especially heavy commercial vehicles. The Board of Public Roads Classifications and Standards establishes maximum grades based on functional classification, type of improvement, design year traffic volumes, type of terrain, and design speed. Grades steeper than those shown in the Nebraska Minimum Design Standards can only be used with an approved design exception. Flatter than maximum grades should be used whenever possible. For roads on the NHS, the Green Book contains both minimum and maximum grades.

Cross Slopes

Crowned cross slopes are preferred for multi-lane divided interstates and expressways with depressed medians, to allow for proper drainage. For two-lane sections, the crowned typical section has the high point of the pavement located at the center of the travel lane and slopes to both shoulders, usually at 2%, minimizing the amount of storm water runoff on the roadway.

Superelevation

Superelevation is the rotation of the pavement on the approach to and through a horizontal curve. Superelevation is intended to assist the driver in counteracting the lateral accelerations produced by tracking the curve. The minimum horizontal curve radius is limited by the design speed of the facility and by the maximum superelevation rate (e_{max}) permitted. Selection of a maximum superelevation rate depends on several factors. These factors include design speed, location, climatic conditions, roadside conditions, future or ultimate development, roadway characteristics, facility type, and driver expectations.

Higher e_{max} should be used for higher design speeds or friction demands. An e_{max} of six (6) percent is typically recommended for higher design speeds, equal to or greater than 50 mph. In rural areas, the e_{max} should typically be six (6) percent. In urban areas, the e_{max} should typically be either four (4) or six (6) percent, due to the constraints imposed by adjacent development (e.g., *intersecting curbs, sidewalks, driveways and streets*).

In low-speed urban areas, less than 50 mph, the typical e_{max} rates of four (4) or six (6) percent may not be desired or may be impractical. In such cases, the methodology used in the AASHTO Green Book under Horizontal Alignment, Theoretical Considerations may be used to balance the design elements of curves to minimize superelevation. This method is based on an appropriate relationship between design speed and curvature and on their joint relationships with superelevation and side friction. In such cases, the roadway may maintain a normal crown in curves so long as the resultant side friction demand is less than the allowable side friction factor, " f ", for design (see *the AASHTO Green Book, Exhibit 3-12*).

In this part of the design, the LPA needs to:

- Determine the normal crown and maximum superelevation of the roadway and curves;
- Determine if maximum superelevation rates should vary, according to the elevation or climatic conditions on the project;
- Define the methodology for distribution of superelevation on the curve and on the tangent and what the maximum and minimum rates are for various conditions; and

Horizontal Alignment

Major considerations in horizontal alignment are safety, design speed, topography, the environment, and economics. Motorist' safety is important in all elements of roadway design. An alignment that follows the natural topography of the area generally provides the most aesthetically pleasing and most environmentally and economically constructed roadway. Other factors, such as maintenance considerations, may also influence selection of the final alignment. In urban and developed rural areas, ROW, and development considerations may have a greater impact on alignment.

NDOR designs and designates horizontal curves based on the radius of the curve. The use of a minimum horizontal curve radius should be avoided, unless economically or environmentally necessary due to topographical conditions. Any change in direction with a deflection angle of 1 degree or greater will require a horizontal curve.

For the horizontal alignment, the LPA needs to establish the minimum radius to be used for each design speed and roadway section, and the requirements for SSD and PSD. Also, determine if there are horizontal clearance criteria constraints to be applied.

Lateral Offset to Obstruction

Lateral offset to obstruction (*Clear Zone*) is defined as the distance from the edge of the traveled way, shoulder, or other designated point to a vertical roadside element. The adopted criteria specify a minimum operational offset for all roadway conditions and classifications of 1.5 feet. Examples of these elements are curbs, walls, barriers, bridge piers, sign and signal supports, trees, and utility poles.

Lateral Offset can be thought of as an operational offset (*vertical roadside elements offset*) to the extent that they do not affect a driver's speed or lane position. Adequate clearance from these elements should be provided mirrors on trucks and buses and for opening curbside doors where on-street parking is provided.

The LPA should attempt to provide an unobstructed, recoverable clear zone distance beyond the edge of the traveled way, as recommended by the AASHTO Roadside Design Guide for the applicable functional classification in urban or rural areas, traffic volume, speed, curvature, embankment and backslopes.

The LPA should determine the minimum clear zone distances commensurate with traffic volumes and speeds; however, the prescribed clear zone values represent only a general approximation of the needed clear zone distance. The effect of longitudinal grade, horizontal curves, drainage channels, and transverse slopes may influence the recommended clear zone distances. Engineering judgment must used to determine how much clear zone to provide throughout the roadway corridor. The minimum clear zone distance values should be increased for horizontal curvature and for areas where there is a crash history, or a relatively high potential for future crashes, or both, as appropriate and practical.

In cut areas, the clear zone should be extended to the back of the ditch, which may be a greater distance than is recommended elsewhere. Where minimum sight distance lines extend beyond the clear zone in rural areas, or in undeveloped urban areas, the design should be adjusted to maintain the necessary sight lines.

For high-speed urban roadways with 50 mph or more posted speeds, the recommended clear zone distances apply. For low-speed urban roadways, the recommended clear zone distance should be provided wherever possible, such as in undeveloped areas. For low-speed urban roadways where adjacent development constrains the clear zone, and curbs are used, provide the maximum practical clear zone and the following guidance also applies:

- For lower-speed urban roadways with 40 mph or less posted speeds and parking lanes, the clear zone should extend at least to the minimum offset distance beyond the face of curb;
- For lower-speed urban roadways without parking lanes, the clear zone should extend at least four (4) feet beyond the edge of traveled way or turning lanes, or at least to the minimum offset distance beyond the face of curb, whichever is greater;
- For urban transitional roadways with 45 mph posted speed, in undeveloped areas, the recommended clear zone distance should be provided wherever possible; and
- For urban transitional roadways in developed areas, the clear zone should extend at least eight (8) feet beyond the edge of traveled way or auxiliary lanes, or at least to the minimum offset distance beyond the face of curb and preferably two (2) feet beyond the face of curb, whichever is greater.

Vertical Alignment

The vertical alignment, (*profile grade line*), is a reference line that establishes the elevation of the pavement and other features of the roadway or trail. Vertical curves join two intersecting tangents to provide a smooth transition between changes in grade. Vertical curves should be simple in application and result in a design that is safe, comfortable, pleasing in appearance, and adequate for drainage.

Vertical alignment is controlled by safety, topography, sight distance, horizontal alignment, functional classification of the roadway, geology, drainage control, construction costs, and appearance considerations. The performance of heavy vehicles on grades is also significant. A practical vertical alignment design will be economically sound, keeping earthwork quantities to a minimum while meeting sight distance and other design requirements. All of these factors must be balanced to produce an alignment that is safe, economical, in harmony with the natural contour of the land, and at the same time adequate for the design classification of the roadway or trail.

The engineer should provide the longest vertical curve possible given ROW and design constraints. All intersections and driveways, except for field entrances, shall be evaluated for ISD.

The LPA should determine the minimum and maximum gradient to be used for each design speed and roadway or trail section. These may vary within a project as the terrain changes. If so, define where and why these changes occur. Determine the minimum vertical clearance and stopping sight distance requirements.

Vertical Clearance

Required minimum vertical clearance over or under an existing or future obstruction of known elevation often dictates that the vertical profile must pass through a particular point to satisfy minimum clearance criteria. The minimum vertical clearance shall be measured from the high point of the roadway, including the turf shoulders. If the minimum vertical clearance point on the profile is located on a vertical curve, the curve length will be dependent upon the required elevation of the given point.

In addition to these thirteen (13) controlling criteria requiring formal approval, the LPA should document any other elements of the roadway design relating to safety, operational performance, or functionality that do not meet applicable guidance or standards such as but not limited to the following:

Clear Zones

An important consideration in defining the appropriate cross section for a particular highway facility is the width of the clear zone. As defined in Chapter IV of the AASHTO Green Book, the clear zone is ***"...the unobstructed, relatively flat area provided beyond the edge of the traveled way for the recovery of errant vehicles."***

The width of the clear zone is influenced by several factors, the most important of which are traffic volume, design speed of the highway, and slope of the embankments. The AASHTO Roadside Design Guide' is a primary reference for determining clear zone widths for freeways, rural arterials, and high speed rural collectors based on these factors. For low speed rural collectors and rural local roads, the AASHTO Green Book suggests providing a minimum clear zone width of ten (10) feet. For urban arterials, collectors, and local streets with curbs, the space available for clear zones is typically restricted.

Barrier Crashworthiness

The primary purpose of all roadside barriers is to prevent a vehicle from leaving the roadway and striking a fixed object or terrain feature that is less forgiving than striking the barrier itself. Barrier performance is assessed through a series of tests presented in the National Cooperative Highway Research Program Report No. 350, Recommended Procedures for the Safety Performance Evaluation of Highway Features (*NCHRP Report 350*). For a listing of approved roadside appurtenances such as traffic barriers, barrier terminals and crash cushions, bridge railings, sign and light pole supports, and work zone hardware that have met the NCHRP Report 350 performance criteria the LPA should access FHWA's website at:

http://safety.fhwa.dot.gov/roadway_dept/road_hardware/

Hydraulic Design

The LPA or their consultant will develop the conceptual hydrology and hydraulic design to be applied for the drainage watersheds where the project is located, including typical roadway ditches, and determine the location, type and size of major drainage crossings and culverts that have an impact on the preliminary roadway design or which control the alignment and grade. Design storm frequencies by drainage facility are given in the following table from [NDOR's Drainage and Erosion Control Manual](#).

Design Location	Interstate	Expressways & Over 7500 ADT	2000-7499 ADT	1999 ADT & Under
Culverts	50 year	50 year	50 year	25 year
Storm Sewer *	50 year	50 year	10 year	10 year
Storm Sewer on depressed Roadways	50 year	50 year	50 year	25 year
Roadway Gutters	50 year	50 year	10 year	10 year
Median Pipe	50 year	50 year	10 year	10 year
Ditch Grade Control Drop	50 year	50 year	25 year	25 year
Intercepting Dike/Backslope Drop Pipe	25 year	25 year	25 year	25 year
Temporary Facilities** (Duration ≤ 2 years)	2 year	2 year	2year	2 year

* The 10 year design storm for storm sewers does not include cross-drainage culverts.

** These frequencies are used for facilities to remain in place for less than two years. If a facility will be in use for more than two years, other appropriate storm frequencies should be considered.

Analysis should also include determination of any apparent existing drainage problems and develop the preliminary design of needed improvements based on field observations, previous safety reports or discussions with the roadway maintenance staff or area residents. A determination may also need to be made if any special measures are required for erosion control or improvements to existing inlets/outlets that must occur. Also, determine any roadway profile issues that may need to be addressed during the final design (*e.g., insufficient clearance over proposed culverts or adjustments in the roadway design or drainage facilities to prevent roadway flooding or overtopping*).

If a proposed project includes a new or expanded encroachment on a FEMA regulated base (100 year) floodplain, or contains the potential for adversely impacting private property or insurable buildings on or near the base floodplain, the design will comply with the FEMA standards and criteria used to administer the National Flood Insurance Program in accordance with 23 CFR 650A, Section 650.115(a)(5), in addition to the other applicable standards and criteria contained within this chapter. These standards and criteria apply as minimums, regardless of the hydraulic structure proposed or the encroachment type (*i.e.*, *transverse or longitudinal*). For the purposes of this chapter, adverse impacts to private property or insurable buildings will be defined, respectively, as follows:

- Damage to existing real or fixed private property, caused directly by the project during a
- 100-year flood, over the service life of the project; and
- Increased 100-year water-surface elevations that impact existing, insurable buildings.

Pavement Design

FHWA's policy in 23 CFR 626 states that: "Pavement shall be designed to accommodate current and predicted traffic needs in a safe, durable, and cost effective manner." It is essential that reconstruction and rehabilitation projects be properly engineered to achieve the best return possible for the money expended. When an existing pavement structure is sound, and the cost to restore serviceability is minor when compared to the cost of a new pavement structure or major rehabilitation, an engineering and economic analysis of alternative actions may not be necessary. In general, for all major rehabilitation or reconstruction projects, each of the following steps should be followed to properly analyze and design the project:

- Project Evaluation;
 - Obtain the necessary information to evaluate the performance and establish the condition of the in-place pavement with regard to traffic loading, environmental conditions, material strength, and quality. Historical pavement condition data, obtained from a Pavement Management System (PMS), can provide good initial information.
 - Identify the types of pavement distresses and the factors causing the distresses before developing appropriate alternatives. The tools necessary to analyze pavement failures, such as coring, boring, trenching, and deflection measurements, can be employed.
 - Evaluate the array of feasible alternatives in terms of how well they address the causes of the deterioration, repair the existing distress, and prevent the premature reoccurrence of the distress.

- Project Analysis; and
 - Perform an engineering and economic analysis of candidate strategies. The engineering analysis should consider the traffic loads, climate, materials, construction practices, and expected performance. The economic analysis should be based on life cycle costs and consider service life, initial cost, maintenance costs, user costs, and future rehabilitation requirements, including maintenance of traffic.
 - Select the rehabilitation or reconstruction alternative that best satisfies the needs of a particular project considering economics, budget constraints, traffic service, climate, and engineering judgment.
- Project Design.
 - Conduct sufficient testing, both destructive and non-destructive, to verify the assumptions made during the alternative evaluation phase. The LPA should consider a new distress survey if the original condition survey was sample based or if the survey is not current in terms of the time the project is scheduled to go to contract.
 - Consider and address all factors causing the distress in addition to the surface indicators in the final design. Such factors as structural capacity, subgrade support, surface and subsurface drainage characteristics need to be considered.
 - Once a rehabilitation or reconstruction alternative is selected, design the project using appropriate engineering techniques. A number of publications are available to guide the selection of these engineering techniques. The FHWA's "Pavement Rehabilitation Manual," and the NHI training course "Techniques for Pavement Rehabilitation" provide excellent guidelines. AASHTO's "Guide for the Design of Pavement Structures" and the "Mechanistic-Empirical Pavement Design Guide" are excellent design guide sources. There are also a number of excellent guides available from the asphalt and concrete industries.

Safety and Operational Risks

Safety and operational risks increase substantially as combinations of critical design elements meeting only minimum design standards are added together. Combinations of minimal horizontal curve geometry, minimal vertical curve geometry, minimal roadway width and cross section elements, steep grades, limited sight distance, presence of intersections and driveways, structures and barriers each add a greater level of risk to the users of the facility. Where use of the minimum design criteria for a single design element may not pose a great risk, the combination of minimum design criteria, or below minimum design criteria, or both, for several design elements at the same location may result in unacceptably high levels of safety or operational risk. When the LPA proposes to use minimum design criteria, the combinations of other roadway and design elements and features should also be analyzed.

The LPA should consider the combinations of volume, speed and type of traffic that is exposed to the risk, in evaluating the site-specific conditions (*e.g., nighttime versus daytime traffic volume and speed*) to factor into design risk decisions.

Level of Service (LOS)

Level of service is a grading system for amount of congestion, using the letter A to represent the least amount of congestion and F to refer to the greatest amount. For a comprehensive treatment of this topic, refer to the Highway Capacity Manual (*HCM*). Table 6.1 presents a brief description of the operating characteristics associated with each level of service.

Level of Service	Description
A	Free flow with low volumes and high speeds.
B	Reasonably free flow, but speeds beginning to be restricted by traffic conditions.
C	In stable flow zone, but most drivers are restricted in the freedom to select their own speeds.
D	Approaching unstable flow; drivers have little freedom to select their own speeds.
E	Unstable flow; may be short stoppages
F	Unacceptable congestion; stop-and-go; forced flow.

Table 6.1 Level of Service Descriptions

The appropriate degree of congestion (*that is, the level of service*) to be used in planning and designing roadway improvements is determined by considering a variety of factors. These factors include the desires of the motorists, adjacent land use type and development intensity, environmental factors, and aesthetic and historic values. The factors must be weighed against the financial resources available to satisfy the motorists' desires.

Table 6.2 presents the relationship between roadway type and location and the level of service appropriate for design, suggested by the AASHTO Green Book. Taking into consideration specific traffic and environmental conditions, the LPA or their engineer should attempt to provide a reasonable and cost effective level of service.

Highway Type	Type of Area and Appropriate Level of Service			
	Rural Level	Rural Rolling	Rural Mountainous	Urban and Suburban
Freeway	B	B	C	C
Arterial	B	B	C	C
Collector	C	C	D	D
Local	D	D	D	D

Table 6.2 Recommended Levels of Service

While the HCM provides the analytical basis for design calculations and decisions, judgment must be used in the selection of the appropriate level of service for the facility under study. Once a level of service has been selected, all elements of the roadway should be designed consistently to that level. The selection of the desired level of service for a facility must be weighed carefully because the facility's overall adequacy depends on this decision.

LOS for At-Grade Intersections

The HCM defines level-of-service for signalized and unsignalized intersections as a function of the average vehicle control delay. LOS may be calculated per movement or per approach for any intersection configuration; however, LOS for the intersection as a whole is only defined for signalized and all-way stop configurations.

LOS	Signalized Intersection	Unsignalized Intersection
A	≤10 sec	≤10 sec
B	10-20 sec	10-15 sec
C	20-35 sec	15-25 sec
D	35-55 sec	25-35 sec
E	55-80 sec	35-50 sec
F	>80 sec	>50 sec

Table 6.3 Recommended Level of Service for At-Grade Intersections

When analyzing unsignalized intersections that are not all-way stop-controlled, each possible movement is considered individually. Each movement has a rank. Rank 1 movements have priority over Rank 2 movements, which have priority over Rank 3 movements, which have priority over Rank 4 movements. The rank of each movement is as follows, with the minor road being the road that is controlled by the stop signs and the major road being the road whose through movement moves freely. As for vehicular movements that conflict with pedestrian movements of the same rank, pedestrians have priority:

1. Movements of this rank are the through movements on the major road, parallel pedestrian movements, and right turns from the major road. LOS for movements of this rank is trivial, because LOS is determined by control delay. These are "free" movements, and as such the control delay is always zero.
2. Movements of this rank include left turns from the major road.
3. Movements of this rank include through movements on the minor road, parallel pedestrian movements, and right turns from the minor road.
4. Movements of this rank include left turns from the minor road.

Movements are analyzed in order of rank (*highest rank first*), and any capacity that is left over from one rank devolves onto the next rank below. Because of this pecking order, depending on intersection volumes, there may be no capacity for lower-ranked movements.

Modern Roundabouts

The LPAs may utilize “Roundabouts: An Informational Guide” which can be found at <http://www.tfhrc.gov/safety/00-0671.pdf> for introductory material through design detail, as well as the wide range of potential applications of roundabout intersections. This guide provides information and guidance on roundabouts, resulting in designs that are suitable for a variety of typical conditions. The scope of this guide is to provide general information, planning techniques, evaluation procedures for assessing operational and safety performance, and design guidelines for roundabouts.

Since there is no absolutely optimum design, this guide is not intended as an inflexible “rule book,” but rather attempts to explain some principles of good design and indicate potential tradeoffs. This guide has been structured to address the needs of a variety of readers including the general public, policy-makers, transportation planners, operations and safety analysts, conceptual and detailed designers. This Guide distinguishes roundabouts from other traffic circles.

The 2000 HCM provides coverage of modern roundabouts, but does not define LOS at this time. Instead, the measure-of-effectiveness is the quotient of the volume to the capacity. A modern roundabout in the United States is a roundabout in which traffic inside the circle always has priority. Entering traffic is controlled by a yield sign.

6.4.3 Drainage

The LPA should complete a drainage review for each new or reconstruction project. The review should include, where appropriate, a watershed study; hydrologic analysis; type, size, and location study; cost analysis; hydraulic design; and sediment, and scour analysis. All work items are considered equally important during drainage design.

In addition, the LPA should complete a hydraulic design for all facilities (*culverts, storm drains, etc.*). Hydraulic design of drainage structures should be based on hydrologic analysis of local site conditions and the type of facility being constructed. Where projects cross or encroach upon established or proposed regulatory flood plains, the flood frequency curve approved by the Federal Emergency Management Agency (*FEMA*) and administering agencies should be used for design. The LPA should determine the 100-year and 500-year discharges for each crossing. For 3R projects, the LPA will evaluate the drainage system based upon the safety of the traveling public. Frequent overtopping of a roadway or a crash history due to hydraulic inefficiency would be reasons for considering reconstruction of a hydraulic system with a 3R project.

[The Nebraska Administrative Code Title 258, Chapter 1](#), (Reference 1.16), provides rules and regulations related to construction in floodplains. No new construction, substantial improvements or other obstruction (*including fill*) shall be permitted in the floodplain of a base (100-year) flood, unless it is demonstrated that the cumulative effect of the proposed new construction, when combined with all other existing and anticipated new construction or substantial improvements, will not increase the water surface elevation of the base flood more than one (1) foot at any location.

A watercourse or drainway in the floodplain shall not be altered or relocated in any way which in the event of a base flood or more frequent flood will alter the flood carrying characteristics of the watercourse or drainway to the detriment of upstream, downstream, or adjacent locations. Furthermore, no new construction, substantial improvements, or other obstruction (*including fill*) shall be permitted within the floodway unless it has been demonstrated through hydrologic and hydraulic analyses that the proposed new construction would not result in any increase in water surface elevations along the floodway profile during the occurrence of the base flood.

For facilities without curbs, the depth of a roadside ditch should be designed so that the allowable headwater for the design discharge is at least one (1) foot below the outside edge of the finished shoulder. Typical ditch depths are shown on the typical roadway cross-sections in the Nebraska Minimum Design Standards. Ditches of greater than normal depth are referred to as special ditches. When placing a special ditch, the designer shall use the foreslopes as specified in the Nebraska Minimum Design Standards.

For curbed facilities, the type of facility limits the maximum width or spread of stormwater from the curb onto the roadway. Curb height, superelevation, and longitudinal slope all impact drainage design for curbed facilities. Drainage design is further discussed in [NDOR's Drainage Design and Erosion Control Manual](#).

Culvert Design

A roadway generally acts as a barrier to the flow of water in a stream or channel where the roadway crosses a watercourse. Culverts are conduits for conveying water from a stream or channel through the roadway embankment. In addition to their hydraulic function, culverts must also support construction equipment, roadway traffic, and earth loads. Therefore, culvert design involves both hydraulic and structural design.

Culverts are of great importance to adequate drainage and the integrity of the roadway facility. Improved traffic service and a reduction in the total cost of roadway construction and maintenance can be achieved by judicious choice of design criteria and careful attention to the hydraulic design of each culvert.

Any structure which measures less than twenty (20) feet from the inside face of the exterior wall to the inside face of the exterior wall (*including interior walls*) along the centerline of the roadway is classified as a culvert; any structure which measures twenty (20) feet or greater for the same dimensions is classified as a bridge or major structure.

Hydraulic Analysis

Hydraulic design procedures described in this section are based on Hydraulic Design Series No. 5, [Hydraulic Design of Highway Culverts](#).

Hydraulics analysis includes computation of the:

- Drainage area;
- Design flow;
- Allowable headwater; and
- Headwater at design flow.

New and Reconstructed Projects

Hydraulic analysis of culverts is required for all new and reconstructed projects, even if the existing vertical alignment is used in place. On new and reconstructed projects, culvert extensions should be discussed at the Plan-in-Hand inspection. The existing culvert size should be evaluated to determine if it is still within the allowable range.

3R Projects

3R projects do not require a hydraulic analysis of culverts, unless there is a known hydraulic problem since these projects normally involve only the driving surface. Some 3R projects may require extending the culvert end beyond the fixed obstacle clear distance. In these instances, the existing culvert may be extended without a hydraulic analysis.

Culvert Design Features

The LPA will need to note culvert locations on the preliminary plans. A design discharge should also be specified. Design discharge computations and culvert data will be reviewed, at all culvert locations, and at the Plan-in-Hand inspection. Additional information is required if the culvert is located in a floodplain. Culvert design involves consideration of the following factors:

- Inlet and outlet control;
- Culvert shape and cross-section;
- Location and material;
- Culvert length and extension;

- End treatments;
- Multiple installations;
- Inlet improvement;
- Outlet velocity;
- Culvert size;
- Slope and alignment;
- Camber; and
- Bedding and fill requirements.

Storm Sewers

Federal funds may be used to construct storm sewer drainage features only for the portion of the facility that serves the needs of the project. FHWA has determined that project needs drainage includes surface runoff within the project ROW plus surface runoff within one block of the ROW. Local drainage is considered surface runoff outside of the project needs drainage area.

$$\text{Federal-aid Participation} = \frac{(\text{Project needs drainage})}{(\text{Project needs drainage}) + (\text{Local drainage})}$$

When connecting a proposed storm sewer to an existing municipal system, the LPA should determine the proposed storm sewer does not overload the existing system. If the desired frequency storm design puts the existing system over capacity, the following alternatives should be investigated on a project-by-project basis:

- NDOR will notify the LPA that it should upgrade its municipal drainage facilities;
- NDOR will request, for safety and liability reasons, that the LPA commit to one of the following plans for upgrading their municipal drainage facilities;
 - The LPA provides the state with reasonable written assurances of a present plan for a future upgrade of its municipal facilities. The LPA shall provide the state with the details of its proposed improvements that will convey the design event determined by the state.
 - The LPA requests that the project include an upgrade of its municipal drainage facilities to be paid for solely by the LPA, and the LPA shall enter into an agreement with NDOR concerning this upgrade of its facilities prior to beginning the final design of the project.

- Design for a 10-year frequency, connect to the existing municipal system, and assume the LPA will upgrade their system in the future (*this alternative must not increase flood liability downstream*); and
- Consider detention using 10-year frequency design.

6.4.4 Multi-modal Accommodation and Cross Sectional Elements

The LPA should determine the design controls that will influence the overall roadway width and components of the cross section that will accommodate the various users. Approach the formulation of needed cross section components beginning from the ROW or construction limits edge to edge then inward, rather than the more traditional approach of beginning from the centerline outward. Through this approach, the accommodation of pedestrians and bicyclists should be positively encouraged and safely enhanced, and contextual elements considered from the outset.

Determine the level of multi-modal accommodation within the cross section for pedestrians, bicyclists, and motor vehicles, i.e., whether separate accommodation of travel for all type users must be provided (*e.g., sidewalk, bike lane, shoulder, travel lane*) or whether some form of shared use may be acceptable within the roadway. If a public transit system exists or is anticipated, determine the level of separate accommodation needed. Consider the operating speed of motor vehicles, and the relative volumes of pedestrians, or bicyclists, or both, the vehicular needs for usable shoulders, roadside or on-street parking, and environmental or ROW constraints in establishing the level of multi-modal separation or shared-use cross section relationships.

Consider the overall roadside including the criteria for slopes, clear zones, ditch sections, curbs, barrier systems, auxiliary lanes, and medians as these elements typically contribute greater influence and impact on the overall cross section than the range of travel lane and shoulder widths considered. Also, consider the needs for snow storage, maintenance, placement of utilities (*poles and buried conduit*), roadside signage, fencing, and other appurtenances for inclusion as cross section design controls.

Determine the various factors that control the range of travel lanes and shoulders that should be considered, such as: the roadway function, traffic volume, speed, and mix of motor vehicles and drivers that are anticipated to use the facility. Once the level of multi-modal accommodation, roadside design criteria, and roadway cross section design controls are determined, the dimensions for each cross-sectional element can be identified and assembled. Consider a variety of alternative arrangements that can be combined for the various cross section elements, which optimizes the mobility and safety for all users, within the environmental and right of way constraints.

6.4.5 Sidewalks

Sidewalks are critical transportation routes for communities. They provide accessibility by allowing pedestrians to travel safely from one place to another. Consideration of including sidewalks into the project planning process is critical to the success of a transportation network.

The planning process pertains to project development planning, including pedestrian system planning, public outreach, land use considerations, and preliminary facility designs. In order to ensure that all pedestrians are considered throughout the planning, development, and installation processes, interested parties must redefine internal goals and allocate the necessary resources to integrate accessibility into all transportation programs and projects.

Sidewalk construction should be considered during the preliminary design of a project. Discussion regarding sidewalk construction will be made at the Plan-in-Hand inspection. Final determination regarding sidewalk construction will be made during completion of the NEPA document and verified at the public hearing (*if applicable*). Where sidewalks currently exist along a roadway, the sidewalk will normally be reconstructed when impacted by the construction of a project or depending on the existing condition of the sidewalk. Public input is considered when determining if sidewalks should be constructed on both sides of a roadway where a sidewalk currently exists on only one side. If an existing bridge structure with a sidewalk is to be rehabilitated or replaced, the sidewalk will normally be retained.

Sidewalk widths may vary from four (4) to eight (8) feet. The typical recommended minimum sidewalk width is five (5) feet. If both pedestrians and bicyclists frequently use a sidewalk, a ten (10) foot (*AASHTO recommended*) sidewalk should be considered.

Where there is sufficient ROW, a ten (10) foot or wider buffer area between the back of the curb and the sidewalk is desirable. Generally, providing a four (4) foot wide buffer area between the back of curb and the edge of sidewalk is the most practical section based on available right of way. Where ROW is limited, a minimum two (2) foot buffer should be provided to allow adequate space for hydrants, parking meters, and other roadside appurtenances. If no buffer is provided, a minimum six (6) foot sidewalk width should be used to accommodate these appurtenances.

To provide safety when there are sidewalks adjacent to steep fill slopes (*greater than 3:1*) and where no safety barrier or guardrail is present, a chain-link fence may be considered at a typical distance of two (2) feet behind the sidewalk. The fence should have a minimum height of four (4) feet with the chain-link fabric facing the sidewalk. If the sidewalk and the steep slope are on the approach to a viaduct or overpass, the concrete bridge railing should be extended onto the approach slab and, where possible, the sidewalk flared away from the traffic.

6.4.6 Curb Ramps

Accessibility Policy for Applicable Projects or Activities: The following shall apply to projects or segments of projects.

- A. New Construction Projects** – New construction projects are constructed in a new location and are designed to meet the new construction design standards. Accessibility features will be included to the extent required by ADAAG.
- B. Reconstruction Projects** – Reconstruction projects are projects designed to conform to reconstructed design standards in an existing location of a roadway. Accessibility features will be included to the extent technically feasible as provided by the ADAAG. However, when the project affects the public ROW, the accessibility in that section must be improved.
- C. Other Pavement Projects** – Other pavement projects include:
 - Pavement overlays with a design thickness of 1.5 inches or greater; and
 - Pavement repair or patching that requires replacement of curb within a crosswalk that does not currently have a curb ramp.

The following subsections apply to other pavement projects:

- (1) **Curb Ramps** – Curb ramps will be constructed within project limits. Curb ramps should be constructed or reconstructed when necessary, whenever an activity, listed in Section 2.A. of NDOR's Accessibility Policy for Transportation Projects and Activities, alters the pavement in a crosswalk. When an activity causes a differential in elevation in gutter line at a crosswalk with a curb ramp in excess of 0.5 inch, the differential must be eliminated.
- (2) **Landing Area of the Curb Ramp** – Whenever a new curb ramp is installed as a part of a project, the landing area on the sidewalk side of the curb ramp will be evaluated to identify and implement, if reasonable, other improvements to provide an open and useable landing area. For example, reasonable steps should be taken to relocate signs and other objects to a location outside of the landing area.
- (3) **Sidewalk** – New sidewalks will not ordinarily be installed and existing sidewalks will not ordinarily be replaced except as necessary to create a transition from the new curb ramp or landing area to the adjacent sidewalk. Based on Neb. Rev. Stat. §§ 39-2105 and 39-1339, generally, cities and villages have the duty to construct, operate, and maintain sidewalks and curb ramps along the State Highway System within the corporate limits.

- (4) **Driveways** – Ordinarily, driveways will not be replaced or reconstructed as a part of this policy.
- D. **Maintenance Activities** – routine maintenance activities do not need to have accessibility improved.

Curb ramps may be constructed to meet local requirements if those requirements meet or exceed ADAAG standards.

When construction obstructs sidewalk access, the LPA's engineer shall assess the need for and provide if identified temporary access measures for pedestrians with disabilities. Access to businesses or other publicly-used facilities during the construction of the project is important to all involved. The LPA should also consider the needs of disabled individuals crossing the project during construction and the need for implementing temporary measures to meet these needs when identified.

FHWA memorandum dated January 23, 2006 provides information that the Architectural and Transportation Barriers Compliance Board (*Access Board*) published revised [Draft Accessibility Guidelines](#) (*the Draft Guidelines*) for public ROW in the Federal Register on November 23, 2005.

<http://www.access-board.gov/provac/index.htm>

They cover pedestrian access to sidewalks and streets, including crosswalks, curb ramps, street furnishings, pedestrian signals, parking, and other components of public ROW.

The Draft Guidelines are not standards until adopted by the US DOJ and the US DOT. The present standards to be followed are the ADA Accessibility Guidelines (*ADAAG*) standards. However, the PROWAG Draft Guidelines are the currently recommended best practices and can be considered the state of the practice that could be followed for areas not fully addressed by the present ADAAG standards. Further, the Draft Guidelines are consistent with the ADA's requirement that all new facilities (*and altered facilities to the maximum extent feasible*) be designed and constructed to be accessible to and useable by people with disabilities.

For additional guidance, see the NDOR's Policy entitled ADA Accessibility Requirements in Transportation Projects.

6.4.7 Medians

The primary benefit of medians is to improve safety. Medians improve safety by: separating opposing traffic thus reducing head-on and sideswipe crashes; providing a recovery area for errant vehicles; and providing a refuge area for crossing and left-turning vehicles from intersecting roads. Medians also improve pedestrian and bicyclist safety by breaking up crossing distances and providing a refuge area for pedestrians and bicyclists crossing the roadway. Other benefits of medians include: improving mainline traffic operations by controlling left turns and channelizing traffic movements; providing space for drainage and drainage

facilities, bridge piers, and other structures; providing a refuge area for disabled vehicles, and providing a snow storage area. Medians provide opportunity for landscaping and aesthetic treatments, which help buffer visual impacts and noise, and generally provide for increased driver comfort and ease of operation.

There are also disadvantages to medians. Raised medians may complicate snow plowing, storage, and removal operations. In addition, plantings and other landscaping elements may obscure sight distance in horizontal curves and at intersections and may constitute roadside obstacles. Such elements should be consistent with the AASHTO *Roadside Design Guide*.

Urban Medians

Medians for urban roadways are either raised or flush. The raised area of urban medians should be curbed. To accommodate left-turn lanes with a raised median and offsets for them, the raised median width in lower-speed urban areas is sixteen (16) feet as a minimum with a range of eighteen (18) to twenty-four (24) feet being acceptable. Raised medians should be a minimum of four (4) foot width, which allows for a minimum four (4) foot width raised area with one-foot offset between the outside edge of the raised area and the travel lane. Provide a parabolic (*desired*) or semi-circular bullet nose at the end of all raised medians. Refer to the Green Book, Chapter 9 “Intersections” – Median Openings and Exhibit 9-76 through 9-87 for design of median openings.

Flush medians are typically four (4) to sixteen (16) feet and should be well delineated by striping, painting, or paving with a contrasting surfacing type, color, or texture.

Consider a Two-Way Continuous Left-Turn Lane (*TWLTL*) if necessary to provide access in areas with frequent driveway spacing in highly developed or commercialized areas. *TWLTLs* function well when traffic levels are moderate, the percentage of turning volumes are high, and the density of commercial driveways is low. *TWLTLs* will function well on most arterials with low to moderate commercial driveway density and where the AADT is in the range of 10,000 to 28,000 vehicles per day. *TWLTLs* can also work very well in places where the number of driveways per block or mile is high but where the land use does not produce many turning movements per hour. For example, an arterial through a predominantly residential area.

TWLTLs begin to lose their effectiveness when traffic volumes on a roadway are high. Studies indicate operating degradation occurs between an AADT of 24,000 to 28,000 vehicles per day which is a relatively high level of traffic level for most Nebraska locations. *TWLTLs* are also much less effective in situations where commercial driveway densities are high and these driveways are closely spaced.

Various studies have recommended for and against a *TWLTL* being implemented on roadways with more than two (2) through lanes in each direction or average operating speed over 45 mph. What is important to consider for this type of application is traffic volume, roadway function and environment, and crash history on safety and operational effects of the roadway.

A centerlane width of between twelve (12) to sixteen (16) feet is acceptable for TWLTL with a fourteen (14) feet width being preferred. Careful evaluation of individual sites is required for design of a TWLTL, as it may be inappropriate at some locations. An alternative median treatment with dedicated left-turn lanes, where needed, may be preferable to a TWLTL for safety and access management.

Rural Medians

Depressed medians are generally used on rural divided roadways with median in excess of thirty (30) feet for more efficient drainage and snow removal. Median side slopes should follow the recommendations of the AASHTO *Roadside Design Guide*. Careful consideration of longitudinal and transverse slopes, ditches and drainage features is necessary. Drainage inlets in the median should be designed either with the top of the inlet flush with the ground or with culvert ends constructed with traversable safety grates.

6.4.8 Driveways

Driveways and non-public approach roads are not considered intersections; however, the requirements and criteria for design of turning movements are similar. Driveways are intended for low-speed vehicle operation, and should have corner radii reflecting low speeds. Single-lane driveways are appropriate for two-way traffic for single-family residential uses and small groups of residential units, and for small commercial for employees only (*no retail customers or regular visitors*). For larger groups of residential units, or commercial uses with retail customers and regular visitors, a two-lane driveway is appropriate. The steepest recommended grade for residential driveways is fifteen (15) percent depending on climate, terrain, and vehicle clearance and maximum five (5) to eight (8) percent for commercial and industrial uses. Provide a flatter landing area at the connection to the mainline.

Sidewalks and bikeways must be considered in the geometric design of driveways. A minimum four-foot wide path of two (2) percent maximum cross slope must be provided where a driveway crosses a sidewalk. Where possible, provide continuity of the sidewalk paving material across the driveway, rather than continuity of the driveway paving material across the sidewalk. Where paving materials are the same, the sidewalk should be outlined with joints or saw cuts across the driveway. Provide minimal change to grade and cross slope of the sidewalk, even if this requires a break in the driveway grade.

For further information on driveways, see the Institute of Transportation Engineers (ITE) document [“Guidelines for Driveway Location and Design.”](#)

A study is currently underway titled “Geometric Design of Driveways” that is intended to update and replace this ITE document.

6.4.9 Passing Lanes

Passing lanes can be used in either rolling or level terrain when passing restrictions exist because of limited sight distances or high volumes of oncoming traffic. Consider providing passing lanes particularly on roadways with high traffic volumes including slow-moving trucks and recreational vehicles, and that lack frequent sections with adequate PSD, resulting in operational delays and potential safety conflicts. Consider passing lanes are less effective on sections that already provide good passing opportunities, at least during the off-peak periods. Although potentially more costly, it may be desirable to locate passing lane sections in the rolling terrain at locations where passing sight distance is generally unavailable, rather than in level terrain sections. Passing should be allowed within passing lane sections for the opposing traffic if PSD is available and access conditions are appropriate.

Refer to AASHTO, Chapter 3 - Vertical Alignment – Methods for Increasing Passing

Opportunities on Two-Lane Roads, and the HCM for guidance on the design of passing lanes.

Standard practice for design of passing lanes includes:

- Design passing lanes to be at least 1,000 feet long, excluding tapers;
- For two-way total DHV less than 600, the desirable length of a passing lane is 0.5 mile to one mile, which does not include the taper length for the lane addition and lane drop;
- Design the lane addition taper at a ratio of 25:1;
- Design the lane drop taper in accordance with the MUTCD, Section 3B-8, or at a ratio of 50:1, whichever is longer;
- Superelevate the passing lane in the same manner as for a multi-lane roadway; and
- Provide passing lane signing and markings in accordance with the MUTCD.

The lane addition and drop should be located in areas where sight distance is maximized, preferably where 1,000 feet of sight distance is available, to allow a driver to anticipate the passing opportunity and also its end. The end of the merging taper should be visible from the lane reduction sign. Because of sight distance concerns, the merging taper should not be located just beyond the midpoint of a crest vertical curve.

When determining where to locate passing lanes, consider the following factors:

1. **Costs and Impacts.** Locate passing lanes to minimize costs and impacts. Difficult terrain will generally increase the costs and impacts for construction of passing lanes.
2. **Appearance.** The passing lane location, and its value, should appear logical and be obvious to the driver.

3. **Horizontal Alignment.** Where practical, avoid locating passing lanes on segments with lower-speed horizontal curves that restrict the speed for all vehicles.
4. **Vertical Alignment.** Where practical, construct passing lanes on a sustained upgrade. The upgrade will generally cause a greater speed differential between slow-moving vehicles and passing vehicles. However, passing lanes in level terrain still should be considered where the demand for passing opportunities exceeds supply.
5. **Intersections.** Locations should be avoided that include major intersections or high volume access points (*over 500 ADT*). Use special care when designing passing lanes through minor intersections and commercial entrances.
6. **Structures.** Avoid placing passing lanes where structures (*e.g., large culverts, bridges*) may restrict the overall width of the traveled way, passing lane, and shoulder.
7. **Tapers.** Avoid locating the ending or merging taper within 500 feet prior to an intersection or major side approach road. The merging taper should be located to avoid side approach roads or driveways on either side of the roadway.

6.4.10 Turn Lanes

Auxiliary lanes may be considered for designated left-turn lanes, right-turn lanes, or free-flow right-turn lanes as warranted. The “Intersection Channelization Design Guide” from TRB provides warrants and guidelines for auxiliary lane design.

Remember that adding auxiliary lanes at signalized intersections affects the timing of phases based upon pedestrian travel time. Unwarranted auxiliary lanes can cause more delay than improvement by increasing required green time for pedestrian travel.

Turn lanes may be recommended as features to improve the capacity and safety aspects of a roadway. A right-turn lane may be added to the project for the following reasons:

- To serve right-turn vehicles required to slow for the turn, alleviating rear-end accident potential as well as delays to through traffic; and
- To move the stop bar position back on the minor approach thus widening the throat entry for left-turning vehicles from the arterial roadway which serves to provide better visual “targeting” for the driver, aids larger vehicles to avoid edge runoff, and permits faster turning, thus reducing the through lane clearance time requirements.

Left-turn lanes are provided on the mainline at signalized intersections if warranted. The following situations may necessitate provision of an exclusive left-turn lane:

- Where fully protected left-turn signal phasing is to be provided;
- Where left-turn volumes exceed 100 vph and space is available; and
- Where left-turn volumes exceed 300 vph, a double left-turn lane should be considered.

Left-turn treatments may be necessary on two-lane roadways where traffic volumes are high and safety considerations are sufficient to warrant them. Left-turn lanes should be provided on divided arterials at intersections and at other median breaks where left-turn volumes and/or vehicle speeds are high. To reduce the opposing traffic obstruction of the line of sight, the left-turn lanes in sixteen (16) foot raised medians should be designed with a one (1) foot offset. Wide striping on the right side of the left-turn lane should be used to encourage traffic to move closer to the median.

Intersections must be properly designed to accommodate the number and type of turning vehicles. This will significantly affect the geometric layout and operation of the intersection. The following must be considered:

- Select the design vehicle based on the largest vehicle likely to make the turn with considerable frequency;
- Select the speed at which the vehicle should be allowed to make the turn;
- Determine the tolerable encroachment onto other lanes. This will vary with functional class, design speed, traffic volumes, lane width, one-way or two-way operation, and traffic control device;
- Determine the need for a turn lane;
- Determine the availability of ROW;
- Determine the required length of turn lane based on turning movement volume;
- Evaluate the need to design for pedestrian traffic movements;
- Determine the need and location of signal poles; and
- Select the appropriate channelization treatment.

Refer to Chapter 4, Section 1.D.1 of the [NDOR Roadway Design Manual](#).

6.4.11 Bicycle Trails

Bicyclists have the same mobility needs as every other user of the transportation system and use the roadway system as a means of access to jobs, services, and recreational activities. Planning for existing and potential bicycle use should be integrated into the overall transportation planning process. See [23 CFR 652](#).

Most bicyclists use public roads when no dedicated bicycle space is provided along the roadway section. Bicycle traffic can be expected on almost all roadways. NDOR permits bicycles on all roadways and roadway shoulders except for the freeway and the interstate systems or where a dedicated bike trail is located adjacent to the roadway. Therefore, the bicycle has become an element for consideration in the roadway or trail design process.

A bicycle lane is a portion of a roadway that has been designated by signing and pavement markings for the preferential or exclusive use of bicycles. Where feasible, bicycle traffic should be separated from vehicular traffic. A bicycle path is physically separated from vehicular traffic by an open space or barrier, either within the roadway ROW or within an independent ROW. In many instances, design features of separate bicycle facilities are controlled by the adjoining roadway and are an element of the design of the roadway itself.

In rural areas, for a shared-use facility that both bicycles and motor vehicles travel, it is recommended that the LPA design the roadway or trail for a combined lane and shoulder width of at least fourteen (14) feet, the minimum necessary for a motor vehicle and bicycle to operate side by side. In rural areas with motor vehicle design ADT greater than 1,000 and bicycle ADT greater than twenty-five (25), a paved shoulder width of five (5) feet is recommended to accommodate bicycle use. If rumble strips are to be installed on the shoulder, it is recommended that the shoulder be six (6) feet wide to accommodate the rumble strips and provide a four (4) foot wide path for the bicyclist.

Where applicable, the LPA should design bicycle lanes to provide a dedicated space for bicycle travel along the roadway or trail which provides for a consistent separation between bicyclists and passing motorists and pedestrians. Design striping and signing to designate bicycle lanes in accordance with the [MUTCD](#).

Bicycle lanes that are not physically separated from the roadway should be located between the travel lane and the edge of the roadway shoulder. A minimum width of four (4) feet is required for a bike lane; however, five (5) foot bicycle lanes are preferred for most conditions, especially when the lane is adjacent to a curb, curbside parking, or guardrail. Exclude the width of gutter from the bicycle lane design width. Where parking is permitted, the combined recommended width for bicycle travel and parking should be a minimum of fourteen (14) feet and sixteen (16) feet desired. Where motor vehicle operating speeds exceed 45 mph, or the volume of trucks and buses is thirty (30) or more per hour, the minimum recommended bicycle lane width is five (5) feet, and six (6) foot bicycle lane width is desirable. Bicycle lanes wider than six (6) feet are generally not used since they may encourage inappropriate use by motor vehicles. Designate bicycle lanes with a six (6) inch solid white line on the right edge of the motor vehicle travel lane, bicycle lane pavement markings, and signs at periodic intervals. The solid lane marking should change to a broken white line before any intersections on the right side, providing sufficient distance for motorists to merge to the right side of the roadway before making a right turn. A four (4) inch solid white line, or parking space markings, on the right edge of the bicycle lane should be used when adjacent to parking areas or parking lanes.

Provide bicycle-safe drainage grates for all inlets adjacent to bicycle facilities. Design all grates and utility covers to be set flush with the pavement surface. Design the pavement cross slope to not exceed ten (10) percent and avoid design of an abrupt pavement edge at the inlet. Where shoulder width, or a bike lane, adjacent to a curb is less than five (5) feet, recessed drainage inlets or curb inlets should be used.

Where the corridor is constrained and a separate bicycle lane or path is beneficial, it may be practical to provide the facility in only one direction of travel.

When applicable, consider including a separate two-way bikeway or shared-use path in the overall design of the highway project when the level of bicycle use is high and safety, operational or other benefits to the mix of facility users are sufficient to justify a designated bicycle facility, either on a separate independent alignment or parallel to the roadway. Provision of shared-use paths is particularly suited to high-speed, high-volume roadways where the traffic characteristics or the roadway geometry is incompatible with typical bicycle and pedestrian use. The LPA should exercise care in the design of shared-use paths to minimize the conflicts between bicyclists and pedestrians. Two-way bikeways and shared-use paths should always be physically separated from the roadway by a significant terrain feature and at least five (5) foot width, or by a crashworthy barrier system. The paved width of a two-way bike path should be a minimum of eight (8) feet. Where pedestrians will routinely share the path with bicyclists, it should be a minimum width of ten (10) feet, and twelve (12) feet desired. The presence of a bikeway or shared-use path near a roadway does not eliminate the need to consider the presence of bicyclists in the design of the roadway, unless bicycle use is specifically prohibited on the facility.

The [AASHTO Guide for Development of Bicycle Facilities](#) provides guidance for the design of bikeways. For guidance on design of shared-use trails, refer to the *Evaluation of Safety, Design, and Operation of Shared-Use Paths*, FHWA-SA-05-006, and the [FHWA-HRT-05-139](#), 2006. Also, see [Bikesafe: Bicycle Countermeasure Selection System Pedestrian and Bicycle Information Center](#).

6.4.12 Safe Routes Pedestrian Facilities

Special consideration for sidewalks or shared use pathways should be given to schools, publicly-accessed government offices, and at all medical facilities. Projects specifically designed for the Safe Routes to School Program require some different design considerations and requirements. The minimum sidewalk or pedestrian zone width is five feet.

- The minimum width of a sidewalk corridor is 8.5 feet. This includes a five (5) foot wide sidewalk with a 1.75 foot clearance area on each side of the sidewalk. If the sidewalk is less than five (5) feet, the clearance zone must be at least two feet on each side of the sidewalk;

- The sidewalk must have a minimum of a two (2) foot clearance zone from the back of curb. If no curb is provided, a minimum of a five (5) foot clearance zone is required;
- The minimum frontage zone (*area between the pedestrian zone and the property line*) is one foot;
- The grade should ideally not exceed 5%, and the most gradual possible slope should be used at all times. If grades do exceed 5%, ADA standards must be met; and
- A phasing scheme that should identify the signal heads and the colors displayed during the multiple portions of ROW assignment, and the general sequence of phase assignment, so that it can easily be interpreted by signal contractors and suppliers. Include basic timing information for each phase assignment such as minimum green, maximum green, passage, yellow change, red clearance, walk, and flashing don't walk.

6.4.13 Historic Preservation

The primary consideration in design is to avoid the historic property. The next design consideration is to minimize and mitigate the project impact. The following general standards apply to all projects undertaken on or adjacent to historic properties listed or eligible for listing in the National Register of Historic Places:

- A property will be used as it was historically or be given a new use that maximizes the retention of distinctive materials, features, spaces, and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken;
- The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided;
- Each property will be recognized as a physical record of its time, place, and use. Work needed to stabilize, consolidate, and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection, and properly documented for future research;
- Changes to a property that have acquired historic significance in their own right will be retained and preserved;
- Distinctive materials, features, finishes, and construction techniques, or examples of craftsmanship that characterize a property will be preserved;
- The existing condition of historic features will be evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material will match the old in composition, design, color, and texture;

- Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used; and
- Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

6.4.14 Bridges (Non Historic)

Minimum bridge roadway widths for the different functional classifications are provided in the Nebraska Minimum Design Standards. For higher traffic volumes, see the NDOR's Roadway Design Manual and AASHTO Standard Specification for Highway Bridges, or the Green Book (*Exhibit 5-6*). A bridge to remain in place is any bridge that does not require widening or other extensive superstructure or substructure modifications to provide the required roadway width. A special study may be performed to provide details which allow bridges to remain in place if the existing roadway is within four (4) feet of the required roadway width. NDOR's Bridge Division must be consulted when determining whether to use an existing bridge in place.

Where possible, locate bridge structures entirely on tangents, or curves. Construction of bridges on transitions for horizontal curves presents unique engineering and construction challenges due to the changing superstructure and deck geometry and should be avoided. This may require minor adjustments in horizontal alignment to avoid or minimize these types of combinations. Wherever possible, avoid the introduction of new cross section elements (*widening, additional lanes or shoulders*) on the bridge. Instead, introduce the cross section element ahead of the bridge and carry the element across the bridge structure.

For every project consisting of a structure, the LPA will be required to submit a design data sheet at the time of the 30% plan submittal to the NDOR LPD Project Coordinator. This bridge data sheet will provide background and/or design details such as: sufficiency rating, hydraulic information, bridge type, elevations, grades, traffic data, and bridge TS&L sheets. An example of the bridge data sheet can be found at the end of this chapter in the appendix section.

According to the Nebraska Board of Public Roads Classifications and Standards Minimum Design Standards, any bridge on the State Highway System where the rehabilitation of the structure entails removing the entire superstructure, shall be designed to conform to the standards for a New or Reconstructed bridge.

For more information on bridge design, please refer to [NDOR's Bridge Operations, Policies & Procedures Manual](#).

6.4.15 Control of Access

The LPA or its consultant should determine the level of access control and management to maintain safe and efficient roadway operations for all users. The LPA should also consider:

- The management of driveway locations, approach roads, median treatments, turn lanes, curbs, barriers, and other access management features. The degree of access management is influenced by both the function of the roadway and the roadway context;
- More stringent access control on arterials than on collectors and local roads, reflecting the mobility and land access functions of these roadways; and
- The existing access points along the roadway and the possibility for changes in access that are consistent with the project's objectives, and need for future access to developing areas. For example, it may be possible to relocate, redesign, or consolidate some driveways along an existing roadway to improve sight distances and safety.

Intersections

The LPA or its consultant should:

- Determine the location and density of intersections;
- Identify the standards and criteria to be used for the intersections contained within the project;
- Determine and provide a description of the design vehicle that will use the intersection and the minimum radius of the outside and inside radius returns;
- Determine the turn lanes, acceleration, and deceleration lanes that may be proposed;
- Determine the horizontal and vertical alignment of approaches, type of control, number and types of lanes, lane widths, median opening configuration, shoulders, islands, and auxiliary lane transitions and terminals; and
- Determine the intersection pavement cross slope, curve radii and tapers, sight distances, pedestrian facilities including sidewalks and crosswalks, and bicycle accommodation facilities.

For full controlled access facilities, determine the general configuration of interchanges, speeds, alignments and widths of ramps, and locations of auxiliary lanes. If there are known constraints that preclude obtaining the desired ISD, provide guidance on how to mitigate this safety concern.

6.4.16 Erosion and Sediment Control

The FHWA requires erosion and sediment control measures be included in the Plans, Specifications, and Estimates (PS&E) package for all Federal-aid projects. At a minimum, FHWA requires the identification of all erosion and sediment-sensitive areas and identification of the methods to be used for minimizing adverse effects. In addition to the FHWA requirements, the “National Pollutant Discharge Elimination System” (NPDES) permit requires erosion and sediment control plans for all sites that are one acre (0.4 hectare) or larger in size.

Soil erosion is a naturally occurring phenomenon where soil particles are displaced and carried away by water, wind, or other agents. The rate at which erosion occurs depends upon the properties of the soil, terrain, climate, rainfall intensity and duration, and the volume and characteristics of the water flow.

Sedimentation is the deposition of eroded soil and may occur in lakes, reservoirs, streams, or other drainage ways. Sedimentation may restrict drainage ways, plug culverts, damage property, and adversely impact stream ecological systems. Erosion and sediment control is accomplished by:

- Absorbing the impact of rainfall;
- Slowing water’s velocity, dividing water into smaller quantities;
- Infiltration by soil or vegetation; and
- Retention or temporary detention.

Roadway or trail construction may involve the disturbance of large land areas. Erosion and sediment control is a major concern in roadway or trail construction and is addressed during all phases of the project from planning and design through construction and continues into maintenance. An erosion and sediment control program includes the plans of action and provision of documents to achieve an acceptable level of erosion and sediment control.

Engineers must keep in mind the need for erosion and sediment control throughout the entire design phase. Erosion and sediment control plans must comply with applicable Federal, State, and local rules and regulations, including, but not limited to, the requirements of the NPDES issued by the NDEQ. An effective erosion and sediment control program must accomplish the following objectives:

- Limit both on-site and off-site impacts to acceptable levels both during and after construction;
- Facilitate project construction while minimizing overall costs;
- Aid in the restabilization of the construction site, reducing the long-term maintenance requirements;

- Comply with Federal, State, and local regulations; and
- Require minimal maintenance.

A preliminary erosion and sediment control plan should be completed prior to the Plan-in-Hand site visit. This will give the roadway designer an opportunity to review the plans for effectiveness and to make any necessary design changes. An excellent resource for the LPA designer to use as a tool is NDOR's [Erosion Control Plan-In-Hand Checklist](#), of the Design Process Outline. This checklist should be reviewed during the Plan-in-Hand. The Erosion Control Plan-In-Hand Checklist becomes part of the plan-in-hand package and is used for determining appropriate erosion controls as well as for estimating erosion control costs.

Information on erosion and sediment control may be shown on the:

- Erosion and Sediment Control plan sheets;
- Plan and Profile sheets;
- Summary of Quantities sheet;
- Removal and Construction plan sheets; and
- Drainage sheets.

6.4.17 Aesthetic Considerations

The LPA or its consultant should strive to accomplish the following:

- Apply the general considerations, general design controls, and alignment coordination found in the AASHTO Chapter 3 - Combinations of Horizontal and Vertical Alignment.
- Avoid short, abrupt horizontal and vertical curves, especially if the central angle or change in grade is small and a substantial length of both tangents is visible.
- Designate sufficient ROW area on the inside of curves, and at the ends of long tangents, to facilitate adequate control of vegetation or setback of potential future development that could impair sight distance, and tangential views.
- Provide curvilinear alignment through scenic terrain.

Broken-back vertical curves are visually unpleasing and undesired and should be substituted with a single overall vertical curve when practical.

From an aesthetic standpoint, the geometric design for bridges should blend in with curvilinear alignment. Design superelevation to avoid or minimize unsightly kinks, humps, or dips in bridge railing, or curbs. Coordinate the vertical alignment closely with the bridge location. Consider that bridges placed on conspicuous sag vertical curves can have an unfavorable appearance. Coordinate the clearing, slope design, and vegetation management in vista areas to provide a visual buffer, frame views, define spaces, or to provide visual context for the roadway. Consider aesthetic treatment of curbs, culvert headwalls, retaining walls, traffic barriers, and structures to blend and de-emphasize new features and enhance vistas. Consider the location and type of signing, posts, fencing and other appurtenances to minimize blockage of views. The ultimate test for an aesthetically pleasing facility is whether it complements the area through which it passes and enhances the user's appreciation of its context. The LPA should strive to achieve this goal.

6.4.18 Plan-in-Hand Field Review

A Plan-in-Hand (*PIH*) is a field inspection and/or meeting that should be conducted on every project that receives Federal-aid. This inspection typically takes place when the project plans are approximately thirty (30) to fifty (50) percent complete. The LPA RC, NDOR Program Engineer, the NDOR LPD Project Coordinator, the NDOR District representative, and FHWA (*on full oversight projects*) must be notified and invited.

The purpose of the PIH review is to evaluate and resolve the roadway geometry, safety considerations, and environmental impact mitigation and cost effectiveness of the proposed improvement, and to support completion of the environmental document and decision-making process. The review should identify the revisions needed to bring the roadway design, plans, and estimate to a full thirty (30) percent stage. The field review should include verifying the mapped features and spot-check the topography, particularly in areas of narrow roadbed bench width.

This inspection should identify substantive issues of concern and serve as a check of the progress of a project. The issues that should be discussed and examined are additional survey needs, roadway alignment, environmental, ROW, utility issues, phasing, constructability issues, surfacing types, and specific design questions such as any need for design exception requests.

The level of detail for the PIH review depends on the scale of proposed improvements and may be different for 3R projects than for reconstruction or new construction projects. The information to be available at the review includes detail maps or plans and profiles showing preliminary alignments and plotted cross sections of the mainline and major intersecting roadways for all alternatives being considered and preliminary construction cost estimate. The plans and cost estimate are developed to approximately the 30 percent level for preliminary design.

The LPA RC should identify any design relaxations as part of this field review. The RC will need to document any relaxations to the standards, along with any associated hazards or risks so that all parties are aware of the potential consequences of the decisions made. Refer to Section 6.5 for a more detailed discussion on design relaxations/exception.

Following the PIH inspection, a report must be completed and submitted to the NDOR LPD Project Coordinator. An outline of the PIH report can be found in the appendix section at the end of this chapter.

6.4.19 Estimates

Cost estimating is an integral part of the plan-design-construct process of roadway projects. The degree of detail and accuracy required for each estimate varies throughout the design process as the level of design detail and information about the project increases. Estimates, therefore, vary from general approximations at the early stages of a project to very detailed cost estimates at the bid letting stage. The engineer's estimate serves as the benchmark for analyzing bids and is an essential element in the project approval process. There are three basic approaches to estimating: actual cost, historic data, and a combination of historic data and actual cost.

Cost estimates are regularly scheduled during the planning and design process and generally coincide with project milestone activities. Estimates are revised as part of the annual update of programs and should also be updated whenever changes in the concept or in the scope of the project occur outside of the normal estimate activity schedule. The earlier that cost estimate updates are made in the process, the more likely it is that projects will be let in a timely manner.

Estimates should always be as detailed as possible. All of the items necessary for the construction of the project should be included in each estimate, even though detailed quantities may not yet be developed for some of the items. Any special conditions that would affect a bid should be incorporated into the estimates including such factors as tight work schedules, restricted working hours, incentives/disincentives, environmental compliance, etc.

The standard practice for developing and updating estimated prices for construction includes the following:

- Develop unit prices that consider the location, timing, and characteristics of the work to be performed;
- Estimated unit prices may be based on historical data (*i.e., bid prices for previous contracts*), or on actual costs, or a combination of both;
- For major items of work identify and analyze the primary factors and risks affecting the cost of the work (*e.g., local labor rates, equipment rates, unusually small or large quantities, transportation distances, interest rates, time allowance, competition levels, material shortages*);

- Document the methods and assumptions used to establish each unit price, including the primary unknowns and risks that are taken into consideration; and
- Perform periodic reviews of the unit prices and construction cost estimate during the design process, at each major project development phase, to confirm it is accurate and fully reflects the project scope and current market conditions.

Unit prices for the engineer's estimate should reflect the actual cost to the contractor of doing business, including a reasonable profit. Consider the two common methods to determine this cost; historical costs (*bid-based estimating*) and actual costs (*cost-based estimating*). With either method, the LPA should strive to predict the expected overall low bid, and develop unit prices that will at least equal, or slightly exceed, this amount. Develop unit prices for each defined pay item using either historic bid data that is factored for the project conditions, or cost based pricing (*using costs for equipment, labor, material, and production rates applicable for the project conditions*), or use a combination of both methods for comparison, as appropriate for each pay item.

1. **Historically Based Estimating.** Use historical bid data as a basis for estimating current costs. Consider the bids received for like items on recent (*within the past two years*), representative projects built under similar conditions that fairly represent the contractor's cost plus a reasonable profit. Consider the average of the low bids received on previous projects in similar locations, factored for project conditions and cost indices, as a basis for the anticipated minimum overall cost for current projects. However, do not use solely the lowest bids for analysis of historic unit prices, due to the variability in bids and costs for the individual bid items.

Consider that the lowest bid for a project may not represent a consistent distribution of costs among the bid items, and that the low bidder's prices on each individual item may not represent the lowest or most reasonable cost for every item. Therefore, it is recommended to use the average of the unit prices from the lowest three (3) bidders to verify that the low bid unit price is reasonable and consistent. Use the lowest three bidders' prices from representative past projects, and modify them to fit the conditions on the project, and adjust for increases in the overall cost of construction over time using an inflation index. Consider factors that may have a direct bearing on the historical bid prices in relation to the current project, including:

- Availability of construction material;
- Proximity of access roads and railroads;
- Distance from towns and travel speed;
- Timing of construction;

- Inflation indices; and
- Amounts of quantities.

The historical bid price approach, tempered with engineering judgment, is recommended for estimating the minor items of work on a project. For major items of work, it is recommended to also consider the cost-based estimating approach, in addition to the bid-based estimating approach, to verify the unit price analysis is reasonable.

2. **Actual Cost Based Estimating.** Consider the cost-based approach for some items of work, especially major items such as roadway excavation, base and plant mix material, bridge material, etc. The actual costs to construct these items should be analyzed to ensure that all factors that bear on the cost of the item receive consideration. Use current labor, equipment and materials costs, production rates, as well as overhead and profit to develop cost-based unit prices.

When updating costs used in the engineer's estimates, consider the effects of inflation on pay items, wage rates, equipment rates and material costs. Use current inflation trends in roadway construction prices. Several cost inflation indexes are available to track short and long-term construction pricing trends, including:

- FHWA Price Trends in Federal-Aid Highway Construction Projects; and
- American Road and Transportation Builders Association (*ARTBA*) Price Index.

When updating historic bid prices or other cost data, use an inflation time period that begins at the year and month the historic bid or cost data originates from, and ends in the year and month of the proposed project's anticipated construction completion.

The LPA may also use a combination of the two methods above when preparing a cost estimate. For guidance on preparing Right-of-Way estimates, see Chapter 7 of this manual.

6.4.20 Functional Design Plans

There are several types of project plans which occur at various stages of preliminary design. The LPA will be required to prepare and submit a set of plans at each stage of the design. Consult with the NDOR LPD Project Coordinator to help determine the type of plans to be submitted for the project. The plans will be thoroughly checked for completeness, accuracy, and formatting by NDOR and/or FHWA.

The Functional Plans package should be developed to the sixty (60) percent level. The functional plan package should include cross-sections, major pay items with their associated quantities, major design details (*e.g., intersections, turnouts, large culverts, guardrail, walls*), and any items affecting permits and ROW acquisition (*e.g., erosion control plan*). The completed functional plan package, with incorporation of review comments and revisions, should enable the development of final ROW plans and descriptions, final structural designs, final retaining wall designs, final hydraulic and geotechnical designs and for all major elements

that other technical disciplines will develop or finalize as applicable for later inclusion in the PS&E.

As functional plans are being developed, the plan sets should be organized in the following order:

1. Title Sheet;
2. Typical Sections;
3. Plan and Profile;
4. Bridges;
5. Drainage Facilities;
6. Environmental mitigation;
7. Preliminary Cross Sections;
8. Contiguous projects; and
9. ROW Ownership Plans (*if not provided separately*).

Consider the following information to develop the functional plans package:

- Summary of comments provided at the plan in hand (30%) review;
- Preliminary Engineering Study Report;
- Environmental commitments from the NEPA document; and
- Preliminary design plan and estimate.

Activities required to develop the functional plans package include:

- Document the resolutions to the plan in hand field review comments and revise the PS&E package accordingly;
- Update the design exception justification, if needed;
- Incorporate any environmental commitments from the NEPA document;
- Finalize construction limits;
- Prepare draft environmental permit applications as needed. Develop the plans to sufficient detail to enable preparation of applications for permits;
- As needed, provide design information to the NDOR LPD Project Coordinator for the development of the draft ROW plans and easement plats;

- As applicable, for projects exceeding \$25 million in construction costs (*or bridges over \$20 million*), perform a Value Engineering study;
- Refine the preliminary cost estimate (*from the preliminary design*) to reflect all design changes; and
- Prepare a draft set of special contract requirements, as needed. This is recommended, but not required, at this point.

Functional Plans Field Review

The purpose of the review (*if applicable*) is to resolve all aspects of the roadway geometry and design features that affect the physical disturbances, safety considerations, environmental impact mitigation, and cost of the proposed improvement to ensure that the design and PS&E:

- Is context sensitive;
- Minimizes or avoids resource impacts;
- Mitigates environmental impacts (*wetlands, etc.*);
- Addresses safety;
- Has correct roadway geometrics;
- Is cost-effective and constructible;
- Integrates into the design the environmental mitigation and stipulations; and
- The plans are being developed with appropriate design and drafting standards.

The extent of all proposed construction limits for the roadway footprint is typically a key issue that requires resolution at this stage. For the review, identify and document any exceptions to standards and the associated safety risks so that all parties are aware of the ramifications of the decisions.

The review may consist of an office review, or a field review at the project site, or both. The NDOR review should preferably occur after an internal LPA review is performed, and preferably after the plans have been revised as necessary based on comments from the internal review. Provide copies of the plans, cross-sections and Special Contract Requirements to NDOR sufficiently prior to performing the field review.

The result of the functional plans field review is the determination of the design features affecting the limits of disturbance for a project (*e.g., horizontal and vertical alignments, cross sections, major approach roads, intersections, earthwork, and type, size location of structures and retaining walls*). For some projects, this intermediate review may not be necessary to complete the design. The level of detail of the review depends on the scale of construction proposed (*e.g., 3R to new construction*). The information provided for the review includes:

- The 60 percent plans containing detail plans and profiles showing preliminary alignments, grades, construction limits;
- The plotted cross sections;
- Draft special contract requirements; and
- The engineer's cost estimate.

6.5 Design Relaxation

Design policies and standards generally represent minimum values. Higher standards should be used within reasonable economic limits. If minimum design standards and the Americans with Disabilities Act (*ADA*) standards are not met, a design relaxation must be requested unless the project is classified as a minimum maintenance project. NDOR has approval authority for the departure from standards for LPA Federal-aid projects (*FHWA must approve for full oversight projects*).

Before a relaxation is recommended, there must be compelling and demonstrated reasons why the approved standard criteria should not be used. The need for a design relaxation should be identified, evaluated and decided as soon as possible in the design and decision-making process. The key milestone for identification and evaluation of design relaxations is at the completion of the preliminary design (*30 percent*) stage.

Environmental impacts and concerns, social impacts, extraordinary costs, or costs prohibitive of the limited available funds occasionally justify the need for design elements that are less than the minimum design standard. This can often be the case for 3R projects. Analysis should include consideration of adjacent roadway sections and the relationship to future improvements, as well as existing conditions, and operational and safety conditions that will result from completion of the project. When the analysis concludes that achieving full standards is not practical, evaluate the consequences and document each decision for relaxation to the standards. The design relaxation analysis and documentation process shall also include and discuss the incorporation in the design any existing substandard conditions or elements that are not reconstructed to approved current standards as part of the project.

Any substandard elements that will remain after completion of the project must be identified, evaluated, and documented in the same way as new design features.

There are basically two different approaches for evaluating and documenting design standard relaxations:

- A project-wide, or corridor design exception; and
- A site-specific design exception.

A project-wide or corridor design relaxation may be advantageous for design consistency, maintaining driver expectancy, and to coordinate geometric design features within the corridor (*albeit using lower design criteria*), but may be disadvantageous if the necessity for the lower design criteria is not a prevailing condition throughout the corridor. A corridor design relaxation is best reserved for those elements (*e.g., roadway width*) that are not functions of the design speed. A design speed relaxation relates to either 1) the minimum design speed applicable to the functional classification and terrain, or 2) individual design elements that are based on design speed and addressed on an individual basis. The design speed is not necessarily constant within the corridor if there are distinct zones that are appropriate to change design speed.

A site-specific design relaxation acknowledges the necessity for using lower geometric design criteria for a specific feature while providing higher design criteria for the prevailing conditions along the corridor, and the relaxation will usually affect only a single element of the geometric design criteria (*e.g., a horizontal curve radius, a vertical curve length*) and other elements are not compromised.

The LPA shall describe and explain the conditions that preclude conformance to the applicable design standard. A preliminary estimate of the additional construction cost to conform to the applicable standard will be required, as compared with the proposed design exception. Safety enhancement is an essential element of any project design, therefore, a design relaxation should not be recommended if it would decrease the relative safety performance of the roadway in the affected area. Functional classification of the road, the amount and character of the traffic, the type of project (*i.e., new construction, reconstruction, 3R*) and the crash history should be considered. The cost of attaining full standards and the resultant impacts on scenic, historic or other environmental features, as well as whether other future improvements are programmed, should also be taken into consideration. Consider as a minimum:

- What is the degree to which a standard is being reduced;
- Will the relaxation affect other standards or projects; and
- Are additional features being included in the project (*e.g., improved roadway geometry, signing, delineation, roadside safety*) that would adequately mitigate the safety and operational effects of the deviation?

Requests for design relaxation of the Nebraska Minimum Design Standards must be submitted to the NDOR Local Projects Division Engineer by the City Street Superintendent or the County Highway Superintendent accompanied by a City/County certification or resolution. Approval must be obtained by the Deputy Director-Engineering, and FHWA for full oversight project. After approval is obtained, the City Street Superintendent or the County Highway Superintendent shall send a letter to the Secretary of the Board of Public Roads Classifications and Standards at least ten working days prior to the board meeting where the request shall be presented to the Board of Public Roads Classifications and Standards for their approval.

A design relaxation request letter shall contain, but not be limited to, the following items:

- **Project design:** basic design parameters for the project (*e.g., design number, current and design traffic volumes, design speed, posted speed, percent trucks, etc.*);
- **Degree of reduction in the standard:** both the required standard value and the proposed reduced value of the design feature should be clearly stated;
- **Design exception effect on other standards:** there should be clear discussion of the design exception's anticipated effect on the safety and operation of the facility, and its compatibility with adjacent sections of the roadway. Since safety enhancement is an essential element of any project design, exceptions should not degrade the overall safety of the roadway;
- **Crash history analysis:** Sufficient analysis should include the crash rate and/or history of the project to comparable routes, locating or identifying hazardous locations, and identifying crash trends within the project limits;
- **Cost of attaining full standards:** the cost of obtaining the full project standards versus providing the relaxed condition must be quantified. The costs should be realistically based on detailed cost analysis;
- **Mitigating features:** when features are added to the project to mitigate the effects of a design exception, they should be documented in the files;
- **Future improvements:** future work that will correct the substandard design feature should be documented in the files. This information should include the project numbers and their anticipated construction dates;
- **Resultant environmental impacts:** although avoidance, minimization or mitigation of environmental impacts has not typically been used to justify or approve design exceptions, there have been cases where full standards were not achieved due to their environmental implications; and
- **Other factors that could affect the decision:** for example, proposed development in the project area or local concerns may be issues to be addressed.

To coordinate the request for relaxation or to obtain an example design relaxation letter, contact the NDOR LPD Project Coordinator assigned to the project.

6.6 Final Design

6.6.1 Final Plan Review

The purpose of the final plan review is for the LPA to ensure that the appearance of the plans is uniform and consistent, containing all of the information required for the construction of the project. The use of duplicate data and cross references should be avoided; this is unnecessary and complicates the task of assembling, checking and revising the plans. The “Plans Not Final” note shall be removed and the “Engineer’s/Architects Seal” placed on all plan sheets at this time.

Final plan review also includes the review of the PS&E package. After revising the plans and specifications to show changes from the previous reviews, the PS&E package is typically distributed for a final review to ensure consistency with programming, environmental, geotechnical, hydraulics, bridge or other project requirements. A PS&E review meeting should be held, if comments need to be discussed and reconciled. Depending on the thoroughness of the previous reviews, an on-site inspection may or may not be required. In either case, resolve all comments received concerning the proposal so that the project may proceed to solicitation for construction. Incorporate the recommendations from any final geotechnical reports and permit requirements, and stipulations from ROW and utility agreements. Ensure that all necessary permits, agreements and other requirements for advertisement of the project are completed and are addressed in the PS&E.

The final design plans shall have all corrections made prior to submission for approval and authorization to the construction phase.

6.6.2 PS&E Submittal

After final design the PS&E package must be submitted to the NDOR LPD Project Coordinator. The purpose of this activity is to advance the PS&E package for bid advertisement and letting. During this activity, the plans are signed and all specifications, estimates, certifications, and other documentation are reviewed and approved. The completion of this activity allows the solicitation of the contract package. See Chapter 11 for the complete PS&E review and authorization process.

6.6.3 Final Estimate

An Engineer’s Estimate (*EE*) showing estimated quantities, unit prices, and extended totals of all items of work shall be submitted to NDOR with the final plans. Subtotals shall be shown for roadway items, grading, paving, signals, lighting, signing, striping, and bridges, electrical, and miscellaneous items. Non-participating work (*work that is not eligible for Federal participation*) shall be identified in the estimate. To maintain the integrity of the bidding and procurement process, unit price analysis and the engineer’s estimate must be treated as a confidential document.

The EE is a listing of all items of work in the contract, including appropriate incentive payments, makes up the construction estimate. Contingencies, construction engineering, project agreement costs, and other costs added to the construction estimate makes up the program amount.

When a contract is financed by multiple funds and expenditure of a fund is limited to a particular section, a separate estimate, summary sheet and bid schedule are necessary for each section. When a contract is financed by more than one type of fund, but expenditures are not limited to a particular section, only one bid schedule is necessary, supported by a combined estimate and summary sheet.

For final estimate all pay items and any pay items incentives should be known and specified, and no contingency is included for the final estimate. An allowance may be included within the tabulations of individual bid item quantities listed on the plans to address approximated quantities potentially needed to fit the project site conditions.

6.6.4 Specifications and Project Special Provisions

It is recommended that the LPA use the latest edition of NDOR's Standard Specifications for Highway Construction. The LPA may modify these specifications where appropriate for job-specific requirements or conditions. Also, the LPA may write customized specifications for their projects. These specifications shall be referenced on both the drawings and the specifications package as the basic standard for materials and construction. LPAs are urged to prepare the specifications and special provisions carefully to ensure that the inspection, testing, and sampling procedures are adequately covered.

6.6.5 Temporary Traffic Control

Traveling through a construction work zone or through a detour can be confusing to drivers. To alleviate the confusion, a well-designed temporary traffic control plan which includes but is not limited to: warning signs, markings, channelization devices, etc. should be developed. The LPA is fully responsible for developing the temporary traffic control plan. The LPA should address construction-sequencing issues and coordinate the development of the temporary traffic control plan with the NDOR LPD Project Coordinator.

The LPA should consider both construction sequencing that maintains traffic on the section to be constructed or closing the project to all traffic and providing a detour route. The construction sequencing method selected needs to be detailed in the project's temporary traffic control plans.

A number of factors should be considered in determining the minimum acceptable traveled way width, including the presence and proximity of roadside features. As indicated by the *Roadside Design Guide* vehicle speeds and position (*i.e., lateral vehicle location*) may be affected by roadside features. Section 9.2.1.1.2 of the *Roadside Design Guide* indicates that the minimum desirable offset from the edge of the travel lane to the temporary concrete barrier (TCB) is two (2) feet.

Traveled way widths that result in twelve (12) foot wide travel lanes and provide offsets to constraining features (*e.g., barriers*) are desirable. However, lane constrictions are less than ideal conditions that must sometimes be provided as a matter of practicality. Factors that are sometimes considered in determining acceptable traveled way lane width include:

- Traffic volumes;
- Heavy-vehicle (*i.e., truck*) volumes;
- Lateral constraint;
- Speed;
- Horizontal curvature;
- Duration of lane constriction;
- One-way or two-way roadway (*i.e., if all other factors are equal, the minimum traveled way width for an undivided two-way roadway should be greater than for the one-way roadway*); and
- Number of lanes.

Traveled ways that result in travel lane widths of eleven (11) feet are fairly common in work zones; those that result in travel lanes less than ten (10) feet are generally not used for construction work zones on high-speed roads.

Stopping sight distance shall meet the minimums, shown in AASHTO's A Policy on Geometric Design of Highways and Streets, for the speed limit set in the construction zone.

Often road improvements such as milling, armor coat and asphalt surfacing, and shoulder work will require the closing or partial closing of travel lanes on roadways during construction. On roadways of four (4) lanes or more, this may simply involve reducing the number of lanes in each direction so construction work can be completed. On two-lane roadways this may involve the actual closing of an entire lane and the use of a flagger and associated signing and marking to direct traffic through the construction.

Upon the request of the LPA, NDOR will recommend what type of temporary traffic control is needed in all situations.

6.6.6 Standard Plans

Standard Plans are engineering drawings showing standard details of various construction items, representing the current policies of the NDOR, and approved for repetitive use where appropriate. The drawings are produced for statewide use by the Department, counties, and cities. Standard plans are used in conjunction with the Standard Specifications for Construction and other applicable specifications, policies, and manuals. These plans are prepared by the NDOR Standard Plans Committee, are approved by FHWA, and signed by the appropriate NDOR Division Engineer. These Standard Plans are available to the LPA's upon request or can be downloaded from NDOR's website.

6.7 Value Engineering

Value Engineering Studies (VEs) are required for all projects costing \$25 million or more on the NHS, and \$20 million for any Federal-aid bridge project. The \$25 million or \$20 million is an aggregate total from the estimated PE, ROW, Utilities, Construction and CE costs. Any project that approaches this cost limit on the preliminary estimate should also have a VE study performed in anticipation of cost increases from preliminary design to the final PS&E stage of a project. VE is a tool that can provide: cost reduction, product or process improvement, and alternative means and materials for roadway construction and maintenance.

For VE studies relating to bridges, there is no qualifying road system classification (*Federal-aid system as mentioned above*) or funding source. Therefore, any bridge project that meets or exceeds the dollar amount must have a VE study completed. SAFETEA-LU also states that if the Secretary deems appropriate, the Secretary can require a VE study on any other Federal-aid project. This could be a unique project on or off the Federal-aid system.

However, VE analysis should not be limited to only projects meeting the monetary minimum cost estimate. It can also be highly effective when used on other projects when there is potential for a significant ratio of savings to the cost of the VE study or substantial improvements in project or program effectiveness. Federal agencies have applied VE to projects costing as little as \$500,000 and consider a savings to cost ratio of 2:1 significant. LPAs are encouraged to use VE throughout roadway project development, design, and construction. For more information, see: <http://www.fhwa.dot.gov/ve/>.

VE is the systematic application of recognized techniques, by a multi-disciplined team to identify the function of a product or service, establish a worth for that function, generate alternatives through the use of creative thinking, and provide the needed functions to accomplish the original purpose of the project.

To be considered VE, the analysis process should incorporate each of the following characteristics:

- Multi-disciplinary team approach;
- The systematic application of a recognized technique (*VE Job Plan*);
- The identification and evaluation of function, cost, and worth;
- The use of creativity to speculate on alternatives that can provide the required functions (*search for solutions from new and unusual sources*);
- The evaluation of the best and lowest life-cycle cost alternatives;
- The development of acceptable alternatives into fully supported recommendations; and
- The presentation/formal reporting of all VE recommendations to management for review, approval, and implementation.

VE may be applied at any point in roadway development, operation, and maintenance. For maximum effectiveness, however, VE should be undertaken as early as possible (*during the first 30 percent of design*) when decisions on life-cycle costs are being made and valid project development recommendations can be implemented. When a complex, costly project is selected as a candidate for potential cost reductions, investigations should start as soon as a preliminary estimate is in hand.

VE should be considered on project when the ratio of potential savings to the cost of the VE study is significant. VE can also be used in evaluating standard details that are used repetitively on many projects. The cost of VE studies in preconstruction activities may be allocated to the preliminary engineering cost of the related project. LPAs are also encouraged to include a VE incentive clause in their construction specifications. Such clauses encourage contractors to propose changes to the contract that fulfill a project's functional requirements at less cost. The net savings of each proposal should be calculated in accordance with Section [104.03 in Nebraska's Standard Specifications](#).

The VE Team should be comprised of at least five (5) members including the facilitator. One team member should have a background in bridge design (*if a bridge is part of the project*) or construction. If environmental factors are part of the study process, then the team should also include a member who has expertise on environmental issues.

The VE Team will formally present their study results to the LPA representative, NDOR, and other interested persons. Team findings and recommendations will then be documented in a formal report and will be provided to interested parties soon as possible. Courtesy copies will be sent to other appropriate agencies and individuals.

The LPA will evaluate the VE Team recommendations. Should their preferred alternative differ from the prospectus or if no project prospectus has been approved, the LPA submits a new or revised prospectus for their preferred alternative to the NDOR LPD Project Coordinator. A summary of the VE study results shall be included in this transmittal as reference material. The project then proceeds as defined in this manual.

Appendix

Plan-in-Hand Report Outline

Interchange Justification Report Guidelines

NDOR checklist for review of LPA plans

PLAN-IN-HAND REPORT OUTLINE

FOR
LPA FEDERAL AID PROJECTS

Date: Date of Report Submittal
From: Name of the LPA
To: LPA and NDOR Project Files
Thru: NDOR LPA Project Coordinator
Subject: Plan-In-Hand Report
State Project #, Control #, Project Name
Proposed Letting Date

1. **General.** The Plan-In-Hand field review was conducted on date and the attendance included:
2. **Introduction.** This will be a brief summary of the project. Describe the authority, the purpose and need for the project, ownership and maintenance, project objectives, brief history, and a full description of the project. It should include:
 - Location of the project,
 - Length of the project,
 - Logical Termini of the project,
 - Functional classification of the roadway,
 - Type of work (i.e. new, reconstruction, resurfacing, or maintenance),
 - Surfacing details (i.e. material type, thickness, etc.)
 - Typical section features of the proposed project,
 - Number of lanes,
 - Existing intersections,
 - Existing site conditions,
3. **Funding.** Identify funding split(s) by percentage and for what phases of work. Include eligibility for traffic signals, lighting and utility revisions. Provide the current estimated Right-of-Way, utility and construction costs.
4. **Summary of Traffic Data.** Provide a summary of all the traffic data and level of service throughout the project and at the major intersections.
5. **Summary Design Criteria and Major Design Features.** This section will describe the applicability of design standards, the design elements and other design considerations such as: intersection design, drainage, geotechnical issues, access management and constructability.

6. **Structures.** Identify the bridges/structures that are a part of the project. Provide the bridge number and sufficiency rating for each. Discuss the impacts and improvements.
7. **Environmental Impacts.** Address any concerns or issues regarding: wetlands, hazardous waste, parks/public property, historical and the social/economic aspects of the project. Identify any mitigation factors.
8. **Right-of-Way.** Provide a summary of impacts to the area properties. Indicate the required number of tracts that will be needed and summary of the different types of takings needed.
9. **Utilities.** Describe the utility situation and the anticipated impacts.
10. **Accommodation of Bicycles and Pedestrians.** Indicate whether or not bicycle paths/trails will be included on the project: State the bicycle/trail path limits. Briefly mention items that will improve bicycle travel such as new surfacing, surfaced or widened shoulders.
11. **Construction Phasing or Scheduling.** Where a project includes construction phasing, include a description of each of the phases. In addition, include a description of the proposed construction schedule.
12. **Design Exceptions.** Indicate if a relaxation to the project's design standards is needed. If so, provide a summary of the situation and the degree of reduction in the standard.
13. **Exhibits.** Exhibits to be included:
 - Typical Sections, and
 - Project Location Map

NDOR LPS PLAN REVIEW CHECKLIST

- Check to see if the Title sheet includes: the State Project #, Control No.#, location map and a North arrow;
- Review for the correct plan sheet order;
- Check/compare project unit pay items and their respective quantities to the current engineer's estimate;
- Check the Typical cross sections. Make sure the legend items match what's shown in the typicals. Check cross slopes, lane widths and obstacle clearances, etc. Lastly make sure the stationing is accurate to what is shown on the plan view;
- On the Plan & Profile, checks to make sure the grades don't exceed the maximum standard;
- On the Plan & Profile, check to make sure the horizontal and vertical curves meets the minimum design criteria;
- On the 2L sheets, spot check to make sure the "Construction & Removal Tabulars" have accurate symbols, stationing, offsets and pay quantities and that LOC's and ROW limits are clearly shown;
- On the 2L sheets, make sure all the Construction, Removal and Drainage Items have "Tabulars";
- Spot check the geometrics for accuracy;
- Check the sight distance calculations to see if it meets the minimum design criteria;
- Ensure ADA minimum requirements are met;
- On the drainage cross section sheets, make sure the elevations, slopes, flow lines, stationing, symbology, numbering and pipe size all match what is shown on the 2L Sheets;
- Make sure all special and standard plans are the most current version;
- Check to see if there is an erosion control plan and that mitigation is sufficient;
- Review phasing plans (*if necessary*);
- Review traffic control plans/detours; and
- Look through the cross sections to make sure nothing seems out of the ordinary and that the proposed ROW taking is sufficient to the contractor to complete the earthwork/construction.

Chapter 7 *Right-of-Way*

Right-of-Way (*ROW*) is a general term denoting land or property acquired for or devoted to a public use. If ROW is not already owned for your public project, it must be acquired by purchase, donation or eminent domain. Fee simple title, permanent easements and temporary easements are all means of conveying ROW.

All ROW acquired must conform to the rules and regulations under Title III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (*Uniform Act*). The Uniform Act applies whenever federal dollars are used in any phase of a project. **The Uniform Act must be followed even if there is NO Federal funding in the ROW phase.** NDOR has overall responsibility to the FHWA for the acquisition of ROW on all FHWA funded transportation projects in the State. Title II of the Uniform Act must be followed when the acquisition of property causes any person to be displaced from the property or to move their personal property from the acquired property.

To ensure the Uniform Act is followed for your project, please refer to the NDOR Right-of-Way Acquisition Guide for LPAs found at this location:

<http://www.nebraskatransportation.org/roway/pdfs/lpa/lpa-manual.pdf>

If ROW is not acquired according to the Uniform Act, ALL Federal funding in the project will be jeopardized.

Chapter 8

Utilities

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8.1 Introduction

It is in the public interest for utility facilities to jointly use the ROW of roadways, trails, and bridges when the use and occupancy does not adversely affect safety of the traveling public, or does not otherwise impair the roadway or its aesthetic quality and does not conflict with provisions of Federal, State, or local laws and regulations. NDOR has the responsibility to regulate and oversee the utility occupancy, relocation and adjustment on all LPA Federal-aid projects. The purpose of this chapter is to assist the LPA in locating and applying those laws, regulations, and procedures, which are most pertinent to the utility relocation, adjustment, accommodation and reimbursement process. The utility relocation process embraces a large and complex series of issues. In this chapter, those issues have been simplified and condensed so they may be easily located and understood by the LPA.

In order to retain Federal-aid eligibility for the utility adjustments and relocations on a project, NDOR has prepared [A Policy for Accommodating Utility Facilities on State Highway ROW](#) to be used on all roadways under its jurisdiction. Unless the LPA has a pre-approved (*by NDOR*) procedure for accommodating utilities on LPA ROW, the LPA shall adopt and follow the procedures set forth in the current [NDOR's Policy for Accommodating Utilities on State Highway ROW](#), which complies with the requirements of the Federal-Aid Policy Guide and 23 CFR 645 Parts A and B, to be eligible to receive Federal-aid for road and bridge projects in their respective jurisdictions. **Federal-aid participation is not allowed for utility betterment.** Increased service capacity or service improvements that are not required due to the construction of the project are considered betterments.

The provisions of 23 CFR 645 Subpart A apply to reimbursement claimed by the LPA or NDOR for costs incurred under an approved and properly executed utility agreement. FHWA's reimbursement to NDOR will be governed by State law (*or State regulation*) or the provisions of 23 CFR 645 Subpart A, whichever is more restrictive. When State law or regulation differs from this regulation, a determination shall be made by NDOR subject to the concurrence of the FHWA as to which standards will govern, and the record documented accordingly, for each relocation encountered.

Compliance with this policy does not relieve a LPA from complying with the laws and regulations of the State of Nebraska, FHWA, other public authorities or governmental codes which may prescribe a higher degree of protection than provided by this policy. In instances where the latter occurs, the higher degree of protection should prevail. Utility installations on public ROW are the responsibility of the utility owner. Compliance with the provisions of this policy or the conditions of a permit issued pursuant to this policy does not relieve a utility of its legal responsibilities under Nebraska and Federal law.

8.2 Responsibilities

The following is a list of actions the LPA must perform with regard to utility accommodation. Throughout design development, the LPA must coordinate all utility relocations.

- Complete the utility survey, review preliminary plans for existing utilities, perform a field inspection, and note any utilities on the design plans;
- Notify the utility companies of any impacts and provide them with conflict maps;
- Review and approve an estimate and rehabilitation plans from each affected utility company including LPA-owned utilities;
- Obtain the necessary right of way and execute any required utility agreements;
- Develop, in writing, the responsibilities of the LPA and utility for financing and accomplishing the relocation work;
- Notify NDOR in writing if Federal funds are to be requested for utility costs as part of the project cost, and provide a detailed cost estimate;
- Prepare a Status of Utility Report;
- Give each utility written authorization to proceed in relocating or beginning any utility work;
- Make periodic inspections to determine that the traveling public is being adequately protected; and
- Monitor the progress and verify that utility adjustments or relocations have been carried out according to the conflict resolution plan and schedule.

The following is a list of responsibilities NDOR must carry out to ensure Federal eligibility.

- Review the utility plans and estimate for acceptance;
- Provide guidance pertaining to NDOR and Federal procedures and requirements;
- Obtain authorization for the utility workphase from FHWA and provide the LPA a written authorization to proceed in the physical relocation of the utilities; and
- Review and approve payment for items eligible for Federal-aid.

8.3 General Policy

8.3.1 Protection of the Traveling Public During the Installation of Utilities

The traveling public shall be protected from the activities of the contractor or individuals installing or relocating utilities within the project ROW by means of signs, flaggers, and traffic control devices as outlined in the latest edition of the MUTCD, US DOT, FHWA, and the State of Nebraska Supplement. Any utility construction or maintenance operation should be planned with

full regard to safety and interference with roadway traffic should be kept to an absolute minimum. The LPA must ensure measures are planned and organized for the detour of traffic and the re-establishment of the normal route.

Whenever a utility installation, adjustment or maintenance activity will affect the movement of traffic or traffic safety, the LPA or utility shall implement a traffic control plan and utilize traffic control devices as necessary to ensure the safe and expeditious movement of traffic around the work site and the safety of the utility work force in accordance with procedures established by NDOR. The traffic control plan and the application of traffic control devices shall conform to the standards set forth in the current edition of the MUTCD and 23 CFR part 630, subpart J.

Vehicles and equipment with properly fitted beacon lights, when not in use in connection with the actual placing of a utility within the project ROW, must be kept a minimum of twenty (20) feet from the traveled way in rural areas and six (6) feet behind the curb in curbed areas wherever practical to do so. All vehicles and equipment used in the utility work must be fitted with yellow rotating/flashing beacon lights.

On Federal-aid projects, new above ground utility installations, where permitted, shall be located as far from the traveled way as possible, preferably along the ROW line. No new above ground utility installations are to be allowed within the established clear zone of the roadway or trail unless a determination has been made by NDOR or FHWA that placement underground is not technically feasible or is unreasonably costly and there are no feasible alternate locations. In exceptional situations when it is essential to locate utility facilities above ground within the established clear zone of the roadway or trail, appropriate countermeasures to reduce hazards shall be used. Countermeasures include placing utility facilities at locations which protect or minimize exposure to out-of-control vehicles, using breakaway features, using impact attenuation devices, using delineation, or shielding.

8.3.2 One-Call Notification Act

This law sets the requirements to be followed by any 'person' contemplating 'excavation' and what is required to protect 'underground facilities'.

Excavators must notify operators of underground facilities in an excavation area so that operators have the opportunity to identify and locate the underground facilities prior to excavation and so that the excavators may then observe proper precautions to safeguard the underground facilities from damage.

Notification to operators of underground facilities will be done by calling the One-Call Notification Center at 1-800-331-5666 (*statewide*) or 402-344-3565 (*Omaha metro*).

8.4 Identifying & Planning Utility Conflicts

Early coordination and planning is important to avoid unnecessary delays and costs. Utility owners must have sufficient time to design the adjustments, budget the costs and acquire the necessary materials and supplies. They must then fit the work into operating schedules, assemble the required crews and equipment, and perform the work. Utilities situated on public ROW may not be eligible for Federal-aid. Utility companies are solely responsible for relocating and paying for those items.

As soon as the project location and design have advanced sufficiently so that the ROW clearance work and the utility relocation work is known, the LPA should initiate an evaluation of the plan, including on-site investigations, an estimate of costs, difficulties involved, and consideration of any plan revisions for reducing such costs and difficulties. All affected governmental agencies and utility owners should participate in these studies. When several utilities are involved, representatives of all owners should be present at the same conference in order that their plans for proposed adjustments can be properly coordinated and that consideration can be given, where feasible, to the joint use of certain facilities such as pole lines or utility corridors.

Early coordination between the LPA and utility companies is required to assure that utilities are provided with necessary and accurate information to determine the potential need for relocation, time frames necessary to complete proposed relocation work, and possible alternatives. Meetings should be held to discuss potential conflicts and possible mitigation, relocation time frames (*i.e., material ordering, bid processes, critical outages or splicing needs*) and construction or ROW constraints.

Unless the LPA has a pre-approved (*by NDOR*) procedure for accommodating utilities on LPA ROW, the LPA shall adopt and follow the procedures set forth in the current NDOR's [Policy for Accommodating Utilities on State Highway ROW](#).

8.5 Coordinating With the Utility Schedule

After identifying the utility facilities affected and discussing the time schedules with the utility owners, the LPA will prepare a work schedule. It is recommended that utility work be accomplished prior to the start of construction, however, utility work may also be accomplished concurrent with construction activities. It should be noted that, in some instances, the contractor may need to complete certain work (*layout, clearing and grubbing, etc.*) before the utility companies can perform their relocation work. Contractor claims for time delays and cost increases due to utility work being accomplished concurrent with construction may or may not receive Federal-aid participation. NDOR will review claims, for Federal-aid funding participation, on an individual basis.

The work schedule must establish reasonable timeframes for utility owners to relocate their facilities to avoid delay to the advertisement and bid letting of the project. It is important that working together, the LPA and the utility owners identify, as early as possible, the facilities to be removed, relocated, or replaced so that these time schedules can be included in the contract documents prior to bidding.

The LPA should provide the utility owners a preliminary set of ROW and limits of construction plans as soon as they are available. In addition, the LPA should advise utility owners of the project bid letting date and the anticipated construction schedule.

8.6 Utility Agreements

The purpose of the written agreement is to fully document responsibilities for financing and accomplishing the relocation work prior to the project letting. A utility agreement must be executed between the LPA and the utility whenever there are Federal funds in utility relocation. The agreement shall incorporate the requirements of [23 CFR 645 Subpart A](#) by reference and designate the method for performing the utility relocation work (*by contract or force account*) and for developing relocation costs. The method for developing relocation costs must be acceptable to NDOR and FHWA. The scope of work outlined in the agreement shall be supported by plans, specifications when required, and itemized cost estimates of the work agreed upon and shall be sufficiently informative and complete to provide NDOR and FHWA with a clear description of the work required.

Regardless of funding source, it is recommended that a written agreement be developed between the LPA and the utility.

8.7 Utility Relocation Plans & Estimates

The LPA must review and approve utility relocation plans and estimates; verifying compensable property rights and contractor information. Prior to approval, any errors or unacceptable work must be corrected. The LPA should monitor the performance of the relocation work; including revisions and possible construction conflicts.

The owner of the utility facility eligible for reimbursement should prepare the following data, and submit to the LPA as promptly as possible:

- A plan, including cross section and/or profile of the existing and proposed facilities within the affected area; and
- A detailed estimate of cost to cover all work to be performed. This detailed estimate should be broken down into separate temporary and permanent work. Salvage credit should also be separated in the same manner. All additions and betterments must be clearly identified.

The LPA must also submit these documents to the NDOR LPD Project Coordinator. NDOR will do a review of the plans to assure adequate ROW is available and to verify lateral obstacle clearances and sight distances. The estimate will be used to track project expenses.

8.8 Authorization to Proceed

Authorization by FHWA to NDOR to proceed with utility relocation may be given after:

- The utility relocation work, or ROW, or construction phase of the project is included in and approved STIP/TIP;
- The NEPA document has been completed; and
- NDOR or FHWA has reviewed and approved the plans, estimates, and agreements for the utility work and is furnished a schedule for accomplishing the work.

FHWA may authorize relocation of utility facilities prior to the NEPA document being completed whenever they have authorized ROW acquisition under the hardship and protective buying provisions of [23 CFR 710.503](#). FHWA may authorize relocation of utilities located in whole or in part on the acquired ROW.

When efforts by the LPA and utility fail to bring about a written agreement of their responsibilities, NDOR shall submit a proposal and full report of the circumstances to FHWA. Conditional authorization for the utility relocation work to proceed may be given by FHWA to NDOR with the understanding that Federal funds won't be paid for work done by the utility until NDOR's proposal has been approved by FHWA.

8.9 Construction

It may be cost-effective for certain utility adjustments to be performed by a utility with its own forces and equipment, provided the utility is qualified to perform the work in a satisfactory manner. This cost-effectiveness finding covers work on the utility's existing facilities routinely performed by the utility with its own forces. Justification would be required for the utility to perform its own force account work.

When the utility is not adequately staffed and equipped to perform such work at a time convenient to and in coordination with the associated construction, such work may be done by:

- A contract awarded by the LPA or utility to the lowest qualified bidder based on appropriate solicitation;
- Inclusion as part of the LPA's construction contract let by NDOR or the LPA as agreed to by the utility;
- An existing continuing contract, provided the costs are reasonable; and
- A contract for low-cost incidental work, such as tree trimming, awarded by NDOR, the LPA or utility without competitive bidding, provided the costs are reasonable.

Costs for labor, materials, equipment, and other services furnished by the utility shall be billed by the utility directly to the LPA. The special provisions of contracts let by the utility or the LPA shall be explicit in this respect. The costs of force account work performed for the utility by the LPA and of contract work performed for the utility under a contract let by the LPA shall be reported separately from the costs of other force account and contract items on the transportation project.

8.10 Federal Reimbursement of Utility Costs

Eligibility

All invoices should be broken down to show actual costs for all appropriate and approved expenditures. The LPA must review partial and final utility force account billings for conformance to the approved plan and estimate. At that time, any necessary corrections should be made as well as a check for betterments or ineligible work, review support documentation and proofs of payment and if the bill is acceptable, issue payment to the utility. If there are Federal funds involved, the LPA reviews and approves the bills, pays the utility companies and forwards all documents to NDOR for final approval and reimbursement. **Federal funds and/or time extensions will not participate in the relocation of utility facilities made solely for the benefit of the utility, its contractor, or a roadway contractor.**

Costs not eligible for Federal-aid include, but are not limited to, the costs associated with advertising, sales promotion, interest on borrowings, the issuance of stock, bad debts, uncollectible accounts receivable, contributions, donations, entertainment, fines, penalties, lobbying, and research programs.

Right of Occupancy

Federal Funds may be used for the adjustment, reconstruction, or relocation of utilities necessitated by the construction of a project. The following applies to the costs associated with the adjustment, reconstruction, or relocation of utilities on Federal-aid projects. The LPA or NDOR need to certify that the utility has the right of occupancy in its existing location.

- Utilities owned and operated by political subdivisions of the State which are situated within said subdivision's ROW will be eligible for a reimbursement as a project expense;
- Utilities owned and operated by private individuals, companies or corporations situated within the project ROW owned by a political subdivision of the State will not be eligible for reimbursement as a project expense;
- Utilities owned and operated by private individuals, companies or corporations situated within the project ROW owned by a political subdivision of the State by agreement will be eligible for reimbursement as a project expense provided the agreement states the governmental subdivision is responsible for such utility relocation expenses;

- Utilities owned and operated by political subdivisions of the State or private individuals, companies or corporations; situated beyond the project ROW on private property or easement; and are devoted exclusively to private use not serving the public will be treated as a ROW transaction in accordance with the applicable procedures in [23 CFR 710.203](#); and
- When the utility has the right of occupancy in its existing location and it is not necessary to adjust or replace the facilities, the taking of and damage to the utilities real property, including disposal or removal of its property, may be considered a ROW transaction in accordance with the applicable procedures in 23 CFR 710.203.

Labor Statement

Each class of labor must be billed separately, preferably at actual or average payroll rates. Reasonable composite rates, based upon actual rate, including various allowances, taxes, benefits, insurance, etc., paid by owner, will be accepted if such billing is in accordance with the utilities established practice for company work. A rate representative of the actual cost of construction overhead, such as general supervisory and engineering costs, general offices salaries and expenses, applicable to the project will be reimbursed. Average rates should be adjusted at least once annually to take into account known anticipated changes and corrections for any over or under applied costs.

Professional Service - Engineer

The LPA will be reimbursed for all direct engineering costs performed either by the LPA's or utility's engineering forces or their respective engineering consultant. Incidental engineering costs will be covered by the actual overhead rate. The salary of engineers regularly employed by a municipality will be reimbursed on the basis of the time actually expended on the project at payroll rates plus necessary expenses actually incurred. Federal funds may participate in the amount paid to consultants provided such amounts are not based on a percentage of the cost of relocation. The utility and its consultant shall agree in writing as to the services to be provided and the fees and arrangements for the services.

The procedures in 23 CFR 172, Administration of Engineering and Design Related Service Contracts, may be used as a guide for reviewing proposed consultant contracts.

Materials

Materials and supplies, if available, are to be furnished from company stock except that they may be obtained from other sources near the project site when available at a lower cost. When not available from company stock, they may be purchased either under competitive bids or existing continuing contracts under which the lowest available prices are developed. Minor quantities of materials and supplies and proprietary products routinely used in the utility's operation and essential for the maintenance of system compatibility may be excluded from these requirements. The utility shall not be required to change its existing standards for materials used in permanent changes to its facilities.

New material from stock must be charged at actual cost to the utility. The computation of costs shall include the deduction of all offered discounts and allowances. Used material shall be billed at the value at which it is carried on the utility's books.

Federal funds may be approved for the total cost of removal when either such removal is required by construction or the existing facilities cannot be abandoned in place for aesthetic or safety reasons. When the utility facilities can be abandoned in place but the utility or the contractor elects to remove and recover the materials, Federal funds shall not participate in removal costs which exceed the value of the materials recovered.

The actual and direct costs of handling and loading materials and supplies at company stores or material yards, and of unloading and handling recovered materials accepted by the utility at its stores or material yards are reimbursable. In lieu of actual costs, average rates which are representative of actual costs may be used if approved by NDOR. These average rates should be adjusted at least once annually to take into account known anticipated changes and correction for any over or under applied costs for the preceding period. At the option of the utility, five (5) percent of the amounts billed for the materials and supplies issued from company stores and material yards or the value of recovered materials will be reimbursed in lieu of actual or average costs for handling.

Physical Relocation of Utilities

Costs associated with the actual adjustment or relocation of each utility is eligible for Federal-aid. Costs for labor, materials, equipment, and other services furnished by the utility shall be billed by the utility directly to the LPA. The special provisions of contracts let by the utility or the LPA shall be explicit in this respect. The costs of force account work performed for the utility by the LPA and of contract work performed for the utility under a contract let by the LPA shall be reported separately from the costs of other force account and contract items on the transportation project. This includes the cost to acquire any replacement ROW and the construction work associated with the utility relocation.

The utility shall determine and make a written valuation of the replacement ROW that it acquires in order to justify amounts paid for the ROW. This written valuation shall be accomplished prior to negotiation for acquisition. Acquisition of replacement ROW by the LPA on behalf of the utility shall be in accordance with the Uniform Relocation Assistance and Real Property Act of 1970 and applicable ROW procedures in 23 CFR 710.203.

When the advance installation of new utility facilities crossing or otherwise occupying the proposed ROW of a planned project is underway, or scheduled to be underway, prior to the time such ROW is purchased by or under control of the LPA, arrangements should be made for such facilities to be installed in a manner that will meet the requirements of the planned project. Federal funds are eligible to participate in the additional cost incurred by the utility that are attributable to, and in accommodation of, the project provided such costs are incurred subsequent to authorization of the work by the NDOR. Federal funds may be approved when it is demonstrated that the action taken is necessary to protect the public interest and the adjustment of the facility is necessary by reason of the actual construction of the project.

Federal funds may participate in projects solely for the purpose of implementing safety corrective measures to reduce the roadside hazards of utility facilities to the transportation user.

Equipment Charges

Charges for use of a utility's equipment must be billed at rates used in computing costs of company work. Average annual or monthly rates will be accepted if standard practice of the owner is based upon the use of such averages. Billings from maintenance, repairs or parts will not be accepted. If oil and fuel are not included in the rates used, the actual amount used should be billed at actual cost. Average rates should be adjusted at least once annually to take into account anticipated changes and corrections for any over or under applied costs.

Equipment rental will be allowed only for the time that the equipment is actually and necessarily held on the job, plus time in transit from its regularly assigned base. Cost of transportation of the utility's employees to and from the site of the project will be reimbursed on the basis of the utility's accepted practice.

Retired Material and Salvage

A reasonable salvage or scrap credit consistent with the utility's practice of determining such credits value shall be given for all salvageable or scrap materials recovered from facilities replaced, whether temporary or permanent facilities. The cost of loading salvaged material, together with the cost of transportation to the utility's storehouse, plus the cost of unloading, shall constitute the complete accounting of expenses. Removal costs shall not exceed the salvage value of the material removed.

Credits

Credit to the project will be required for the cost of any betterments to the facility being replaced or adjusted, and for the salvage value of the materials removed. Credit will be required for the accrued depreciation of a utility facility being replaced or relocated.

No betterment credit is required for additions or improvements which are:

- Required by the transportation project;
- Replacement devices or materials that are of equivalent standards although not identical;
- Replacement of devices or materials no longer regularly manufactured with next highest grade or size;
- Required by law under governmental and appropriate regulatory commission code; and
- Required by current design practices regularly followed by the company in its own work, and there is a direct benefit to the transportation project.

Chapter 9
Railroad Coordination

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9.1 Introduction

As transportation systems are expanded or modernized, new railroad crossings may be needed and existing crossings updated, reconstructed, or eliminated. In other cases, a project may not be impacting the railroad system directly but involve encroachments onto railroad property. In all cases where railroad property falls within the work limits of a proposed transportation project, early and continuous coordination with the railroad company is required.

Facilities that are the responsibility of the railroad for maintenance and operation shall conform to the specifications and design standards used by the railroad in its normal practice. Facilities that are the responsibility of the LPA for maintenance and operation shall conform to the specifications and design standards/guides used by the LPA in its normal practice for Federal-aid projects.

All traffic control devices proposed shall comply with the latest edition of the MUTCD and supplemented to the fullest extent applicable by State standards.

NDOR's Rail and Public Transportation Division is available to assist LPAs in working with the railroad companies.

This chapter outlines the railroad coordination necessary when railroad property falls within the work limits of a proposed transportation project, whether the project was initiated by the railroad company or an LPA. These requirements and procedures are for all projects using Federal or State funds, in accordance with State statutes and Federal regulations contained in [23 CFR, Section 140](#), [Section 646](#), and [Section 924](#).

9.2 Rail/Highway Safety Projects

Projects on local road system involving the utilization of Federal/State Rail Safety Funds will be under the jurisdiction of the Rail and Public Transportation Division. All inspections, agreements and coordination of these projects will be coordinated by NDOR staff within the Rail and Public Transportation Division and are not covered in this document. Although these projects may involve an LPA, the responsibility for funding, inspection, completion of agreements and coordination of the project with the railroad and LPA will be the responsibility of NDOR staff in the Rail and Public Transportation Division. An LPA may be a part of the agreement and project; however, they are not responsible for the project.

9.3 Railroad Involvement in Projects

Typical involvement with a railroad may include but not be limited to such items as installation of automatic warning devices, relocation of existing automatic warning devices, circuitry upgrade of existing automatic warning devices, upgrade and/or widening of the existing crossing surface, acquisition of ROW from the railroad, reconstruction of the approach roadways and upgrades to the crossing surfaces and/or automatic warning devices to accommodate expanding roadway widths. In addition, the work could include the construction of a new grade separation, removal and replacement of an existing grade separation or improvements to an existing grade separation such as widening. **It is important for the LPA to understand that these projects are performed at the discretion of and to the requirements of the railroad company.**

9.3.1 Requesting a Project

A formal request for review of a project involving the railroad must be made in writing and directed to:

Rail and Public Transportation Engineer
Nebraska Department of Roads
Rail and Public Transportation Division
PO Box 94759, Lincoln, Nebraska 68509

The review request must include the appropriate project programming request (*See Chapter 2, Sections 5.1, 5.2 & 5.8*) and sufficient information concerning the scope of the project for the Rail and Public Transportation Engineer to determine if an on-site Diagnostic Inspection is required or if the project is basic enough to be handled with coordination between NDOR and the LPA.

9.3.2 NDOR Diagnostic Review & Recommendation

Upon completion of the project review, NDOR's Rail and Public Transportation Engineer will determine if an on-site Diagnostic review is warranted. If warranted, the Diagnostic review team will include representatives from NDOR, the railroad involved, and the LPA. The diagnostic review may include, but is not limited to:

- Railroad data such as train movement which will have train counts day and night;
- The number of tracks;



- Crossing surface information, whether it's concrete, timber, asphalt, or gravel;
- The crossing length;
- Roadway data, including traffic counts, pedestrian information, school bus operation, percent of trucks, road width, crossing angle, curb and gutter, surface of shoulder, sidewalk present, speed limits;
- Review existing warning devices and their condition;
- Review of crash history;
- Emergency services such as hospitals, police, and fire stations;
- Consideration of adjacent crossing(s);
- Review for possible future developments; and
- Determine the visibility triangle and sight distance utilizing the standards in the [Nebraska Department of Roads Rules and Regulations for Highway-Rail Grade Crossings, Title 415](#).

Once NDOR completes the diagnostic review of the proposed project, or determines that a review is unnecessary, they will inform the LPA that they may proceed with programming the project as described in Section 9.3.4 below or that project modifications are required before the project may proceed.

9.3.3 Railroad-Initiated Projects

Upon completion of the railroad/roadway crossing layout and design, the railroad will prepare a standard agreement and a petition to the LPA for execution or for further negotiation.

The railroad company is responsible for all work associated with an LPA/railroad agreement, from date of authorization to proceed with the work through final completion of the work, subsequent closing of the agreement and the completion of the final audit.

9.3.4 LPA-Initiated Projects

LPA Reviews NDOR Recommendation

NDOR will send a report, based on the diagnostic review, to the LPA explaining the findings and recommendations for the project location. The LPA may accept NDOR's recommendation and proceed with the project, negotiate NDOR's recommendations to a suitable resolution and proceed with the project, or reject the recommendations and cancel the project.

Program the Project

Once the LPA accepts NDOR's recommendations, they may program the project as described in Chapter 2, Section 5.8 of this manual.

Project Coordination

The LPA shall accomplish all engineering, environmental documentation, ROW acquisition, utility relocation coordination, and railroad coordination as outlined in the relevant sections of this manual and in accordance with the railroad agreement.

Procurement of Materials and Installation

Upon receipt of construction authorization, the railroad will order all materials and proceed with construction by force account. Acquiring the material could take six (6) to eight (8) months.

The LPA is required to inspect and document the work performed by the railroad to ensure that the project is being completed in close conformance with the plans, specifications, and approved changes, and that the railroad's billings can be verified and substantiated. Within thirty (30) days of project completion, the railroad will notify the LPA in writing that construction is completed. Once project construction is completed, the LPA, railroad and NDOR shall perform a final inspection of the project.

9.4 Grade Separations

A project for construction, rehabilitation, relocation, or modification of a rail grade separation structure may be considered by NDOR after completion of a Grade Separation Study. Keep in mind that a new grade separation project may require closing at least two (2) public at-grade crossings. This will be determined by the NDOR Rail and Public Transportation Engineer, with review of the LPA location study, and in coordination with the affected railroad company and LPA. Public comment shall be solicited by the LPA during the environmental review process if any at-grade public crossings are proposed for closure.



9.4.1 Initial Contact with NDOR

Prior to beginning any preliminary studies or engineering work for a possible grade separation project, the LPA must make a written request to:

Rail and Public Transportation Engineer
Nebraska Department of Roads
Rail and Public Transportation Division
PO Box 94759, Lincoln, Nebraska 68509

NDOR's Rail and Public Transportation Division will review the initial request to determine if the project meets the selection criteria. This determination is based on the location, exposure factor, crash costs, elimination of existing crossing(s), current vehicular delay, and availability of funding. The Rail and Public Transportation Engineer will also determine whether the proposed project is eligible for State and/or Federal Rail Safety funds.

9.4.2 Location Study

If the NDOR Public Transportation Engineer determines that the proposed grade separation meets the selection criteria and is eligible for Federal or State Rail Safety funds, the next step is for the LPA to fund and complete a grade separation study. It is important that grade separation studies evaluate and analyze the following factors and considerations: train data, vehicular data, crash history, nearby development, project structure profile, cost/benefit analysis, vehicular delay, local support and funding, rail support and funding, ROW, and environmental impacts.

When the grade separation study is complete, the LPA will send two copies to NDOR, one to the Rail and Public Transportation Engineer and the other to the NDOR LPD Project Coordinator. NDOR will review the study and determine if the project continues to meet eligibility requirements. If acceptable, NDOR will establish the project schedule; identify crossing closures, funding sources, funding splits and funding amount.

9.4.3 Program the Project

If the project proceeds past the location study, the LPA must formally program the project with NDOR and FHWA. The LPA is to complete the programming request and follow the approval process as detailed in Chapter 2, Section 5.8.

9.4.4 Program Agreement

This will be a three-party agreement between the LPA, NDOR, and railroad company. All three parties must agree on the project location, tentative schedule, crossing closures, funding, and responsibilities. For additional information regarding the specifics of this type of agreement, see Section 9.6 in this chapter.

9.4.5 Project Coordination

It is the LPA's responsibility to accomplish all engineering, environmental studies, ROW acquisition, utility relocations, and railroad coordination. NDOR will coordinate any approvals needed by NDOR and FHWA and approve the design criteria.

9.5 Shared Use Path Projects



The following section describes the process considered when shared-use paths (*bicycle/pedestrian trails*) are funded with Federal Transportation Enhancement or Safe Routes to School funds.

When shared-use path projects include or impact railroad property, the LPA will be required to enter into an agreement with the railroad. The contractor will be required to provide railroad insurance if the project construction area is on railroad property.

Shared-use path projects involving one or more railroad crossings are encouraged to consider realignment to avoid railroad crossings. If this is not possible, the following must be considered:

- The crossing **MUST** be an existing public crossing; or
- New at-grade crossings are not eligible.

9.5.1 Documented Initial Contact with the Railroad

It is the responsibility of the LPA to make the initial contact with the Railroad's Public Projects Manager. The LPA should not presume that all requests for railroad agreements will be granted by the railroad. For a railroad agreement to be granted, the railroad company must deem that the project and the rail line are compatible. The LPA should allow ample time for obtaining railroad agreements as the process can take up to one year or longer.

9.5.2 LPA Field Review

For projects that need to acquire railroad property and do not involve crossings, the LPA shall acquire the property according to the procedures outlined in Chapter 7 of this manual and work directly with the Railroad's Public Projects Manager. For projects that include crossings, the LPA may contact the NDOR Rail & Public Transportation Division for consultation on how to conduct an onsite diagnostic field review. An onsite diagnostic field review may include:

- Railroad data such as train movement which will have train counts day and night;
- The number of tracks;
- Crossing surface information, whether it's concrete, timber, asphalt, or gravel;
- The crossing length;
- Roadway data, including traffic counts, pedestrian info., school bus operation, percent of trucks, road width, crossing angle, curb and gutter, surface of shoulder, sidewalk present, speed limits;

- Review existing warning devices and their condition;
- Review of crash history;
- Emergency services such as hospitals, police and fire stations;
- Consideration of adjacent crossing(s);
- Review for possible future developments; and
- Determine the visibility triangle and sight distance utilizing the standards in the [Nebraska Department of Roads Rules and Regulations for Highway-Rail Grade Crossings, Title 415](#).

The LPA shall then document and make determination whether to proceed with the project. Although, NDOR will provide consultation services to the LPA for field reviews for trail projects involving crossings, the actual review and agreement is the responsibility of the LPA.

9.5.3 Project Coordination

It is the responsibility of the LPA to accomplish all engineering, environmental studies, ROW acquisition, utility relocations, and railroad coordination. NDOR will coordinate any approvals needed by NDOR and FHWA, including approval of the design criteria. For Full FHWA Oversight projects, a copy of the executed railroad agreement is required to be provided to FHWA as part of the final design and PS&E preparation.

9.6 Railroad Agreements

Where construction of a Federal-aid project requires use of railroad properties or adjustments to railroad facilities, there shall be an agreement in writing with the railroad company. After the project is programmed, the LPA will work out the project details with the railroad company and assemble the agreement while NDOR will review the contents of the agreement. The preparation of this agreement could be a time-consuming process and may take months to formally execute. This agreement will contain the specifications, regulations, and provisions required in conjunction with work performed on these projects. Supporting data for each project or group of projects must, when combined with the project program agreement by reference, satisfy the provisions of 23 CFR 646.216(d)(2). These provisions include:

- Method of payment (*either actual cost or lump sum*);
- For projects which are not for the elimination of hazards of railroad/roadway crossings, the extent to which the railroad is obligated to move or adjust its facilities at its own expense;
- The railroad's share of the project cost;
- An itemized estimate of the cost of the work to be performed by the railroad;
- Method to be used for performing the work, either by railroad forces or by contract;

- Maintenance responsibility;
- Form, duration, and amounts of any needed insurance;
- Appropriate reference to or identification of plans and specifications;
- Statements defining the conditions under which the railroad will provide or require protective services during performance of the work, the type of protective services and the method of reimbursement to the railroad; and
- Provisions regarding inspection of any recovered materials.

On work to be performed by the railroad with its own forces and where the LPA and railroad agree, subject to approval by NDOR and FHWA, an agreement providing for a lump sum payment in lieu of later determination of actual costs may be used for any of the following:

- Installation or improvement of grade crossing warning devices and/or grade crossing surfaces, regardless of cost;
- Any other eligible work where the estimated cost to the LPA of the proposed railroad work does not exceed \$100,000; or
- Where NDOR and FHWA find that the circumstances are such that this method of developing costs would be in the best interest of the public.

Where the lump sum method of payment is used, NDOR will make periodic reviews and analyses of the railroad's methods and cost data used to develop lump sum estimates.

Railroad agreements must be executed before the project can be advertised for bids. The LPA is responsible for all work associated with the railroad agreement, from date of authorization for the railroad to proceed with the work through final completion of the work, subsequent closing of the agreement and the completion of the final audit. All executed railroad agreements must be submitted to NDOR for review and acceptance prior to the authorization of Federal funds.

A master template agreement that NDOR uses with the railroad on an area-wide or statewide basis may be used by the LPAs. These agreements would already contain the specifications, regulations, and provisions required in conjunction with work performed on all projects. Supporting data for each project or group of projects must, when combined with these template agreements by reference, satisfy the provisions of Sec. 646.216(d)(2).

9.7 Funding Projects

Federal funds are not eligible to participate in costs incurred solely for the benefit of the railroad. For grade separations, Federal funds are eligible to participate in costs to provide space for more tracks than are currently in place. The railroad needs to establish to the satisfaction of NDOR and FHWA that it has a definite demand and plans for installation of the additional tracks within a reasonable time.

State laws requiring railroads to share in the cost of work for the elimination of hazards at railroad/roadway crossings shall not apply to Federal-aid projects. Railroad companies are not required to share costs on projects where they are not benefited unless the railroad has a specific contractual obligation with the State or a political subdivision to share in the costs. The railroad share is five (5) percent of the project costs on projects for the elimination of existing grade crossings where active warning devices are in place or ordered to be installed by a State regulatory agency. The Federal share of the cost of a grade separation project shall be based on the cost to provide horizontal and/or vertical clearances used by the railroad in its normal practice subject to limitations as shown in the appendix to [23 CFR 646 B](#) or as required by a State regulatory agency. The Federal share of railroad/roadway crossing projects may be:

- Regular pro rata sharing as provided by [23 USC 120\(a\)](#) and [120\(b\)](#);
- One hundred percent Federal share, as provided by [23 USC 120\(c\)](#); and
- Ninety percent Federal share for funds made available through [23 USC 133\(d\)\(1\)](#).

Any required railroad share of the cost shall be based on the costs for PE, ROW, and construction. Railroads may voluntarily contribute a greater share of project costs than is required. Other parties may voluntarily assume the railroad's share of project costs.

9.8 Insurance Protection

When a project includes work on railroad property, there will be certain insurance requirements for the contractor, or LPA, to meet. Per 23 CFR 646 Subpart A, Railroad-Highway Insurance Protection, there are provisions under which Federal funds may be applied to the costs of the contractor's public liability and railroad protective insurance. Railroad protective liability insurance shall be purchased on behalf of the railroad by the contractor, or LPA. The maximum dollar amounts of coverage to be reimbursed by Federal funds are limited to \$2 million per occurrence with an aggregate of \$6 million applying separately to each annual period. However, in cases involving real and demonstrable danger of appreciably higher risks, higher dollar amounts of coverage, for which premiums will be reimbursable from Federal funds, shall be allowed. These larger amounts will depend on circumstances and shall be written for the individual project in accordance with standard underwriting practices upon approval from NDOR and FHWA.

Chapter 10
Civil Rights

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10.1 Introduction

This chapter provides guidance to LPAs in complying with the Civil Rights requirements (*Title VI, ADA/504, Equal Employment Opportunity (EEO), Contractor Compliance*) and Disadvantaged Business Enterprise (*DBE*) requirements for federal-aid transportation projects. Each of these areas is addressed in more detail in the following sections. The information contained in this section has been extracted from other documents and should not be considered as a replacement or substitute for the laws, rules and regulations, agreements, circulars, and other guidance available.

10.2 Nondiscrimination: Title VI of the Civil Rights Act

10.2.1 Title VI Policy

It is the policy of the FHWA to ensure compliance with Title VI of the Civil Rights Act of 1964; [49 CFR Part 21](#), [23 CFR 200](#); and related statutes and regulations in connection with transportation projects receiving financial assistance from the FHWA. [Title VI of the Civil Rights Act of 1964](#) and related authorities protect individuals and groups from discrimination on the basis of their race, color, religion, sex, age, disability, income level and national origin in programs and activities that receive Federal financial assistance. Nondiscrimination provisions apply to all programs and activities of Federal-aid recipients, sub-recipients, consultants, contractors, and subcontractors. The LPA will create a Title VI Implementation Plan outlining the implementation of Federal requirements, including identification of an individual to serve as the LPA's civil rights specialist. The FHWA and the NDOR will ensure compliance with Title VI in all of its programs and activities whether or not those programs and activities are FHWA funded. More information can be found at www.fhwa.dot.gov/civilrights/.

10.2.2 Implementation

It is important that an LPA does not discriminate during any phase of work, either directly, through contractual or other means by:

- Denying program services, financial aids, or other benefits;
- Providing different program services, financial aids or other benefits, or providing them in a manner different from that provided to others;
- Segregating or separately treating individuals or groups in any matter related to the receipt of any program service, financial aid or benefit;
- Restricting in any way the enjoyment of any advantage or privilege enjoyed by others receiving any program service, financial aid or other benefits;
- Denying person(s) the opportunity to participate as a member of a planning, advisory or similar body; or

- Denying person(s) the opportunity to participate in any program and/or activity that receives Federal financial assistance or affording the opportunity to do so differently from those afforded others.

Assurances

LPAs must maintain a Title VI assurance signed by their current governing body. The completion of the assurance is partial fulfillment of the requirements set out in the State/LPA Project Program Agreement.

Environmental

Environmental Justice (*EJ*) is the fair treatment and meaningful treatment of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws. EJ is considered during the preliminary environmental investigation process and throughout the completion of the project. There are three fundamental EJ principles:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations;
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process; and
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

Public Hearings and Public Involvement Meetings

The attendance and concerns of Limited English Proficiency (*LEP*) persons, persons with disabilities, minority populations and low income populations at public involvement meetings and hearings must be carefully documented to comply with Title VI of the Civil Rights Act of 1964, including statistics of participants by race and gender. Public hearing announcements must be made available in languages understood by the affected population based upon the Four Factor Analysis ([See Executive Order 13166](#)). Public hearings should be held at locations that are both geographically and structurally accessible. Public announcements should indicate that to the extent possible accommodations will be provided for individuals with disabilities, in general and that interpreters, signers and alternate formatted materials will be provided, if requested.

Right-of-Way

On Federal-aid projects, all ROW activities must be conducted in accordance with Chapter 7 of this manual. The public will be provided with Title VI information and Title VI complaint procedures within each of the following ROW functions: appraisals, acquisition, relocation assistance and property management.

Construction

Federal-aid construction contracts must include provisions which require compliance with Title VI. The specific contract provision language is included in the [FHWA Form 1273](#) that must be physically inserted into all Federal-aid construction contracts (*See Chapter 11, Section 4*).

10.2.3 Monitoring

To help assure nondiscrimination and EJ are being properly addressed during the early stages of a project the LPA should:

- Schedule public meetings and request FHWA and NDOR attendance;
- Keep meeting minutes and distribute them to FHWA, NDOR and to persons or groups as requested; and
- Create focus groups to apply a systematic interdisciplinary approach which can provide for the early recognition of potential adverse impacts that might be discriminatory. It also stresses the need for interdisciplinary staff to be involved in the development and implementation of Title VI plans that LPAs are required to meet for their non-discrimination obligations.

To ensure continued compliance with Title VI and other Federal and State regulations by the LPAs, NDOR should:

- Attend public meetings;
- Review the project PS&E package; and
- NDOR will conduct periodic reviews of compliance with Federal Title VI regulations. The compliance review will focus on how effectively the LPA has implemented its approved Title VI plan. Documentation is gathered and individuals with Title VI responsibility are interviewed as part of the process. The LPA will be notified in writing of the scheduled data and the documents that will be required for the on-site review.

10.2.4 Complaints

FHWA has the overall responsibility for the investigation of all formal Title VI Discrimination complaints filed against NDOR, LPAs, contractors, subcontractors, or other third parties participating in any federally fund transportation projects. The LPA shall notify NDOR immediately of any complaints filed. Likewise, NDOR shall immediately notify FHWA of receipt of all Title VI complaints so FHWA may determine complaint investigation responsibility.

FHWA may delegate this investigation responsibility to NDOR if NDOR is not the subject of the complaint. If appropriate, NDOR may further delegate the complaint to an LPA for investigation if the LPA is not the subject of the complaint.

If a complaint is filed against NDOR, FHWA will investigate. If the complaint is against an LPA; NDOR or FHWA may investigate the allegation. A complaint may be filed by any individual or group that believes they have been subjected to discrimination or retaliation based on their race, color, national origin, sex, age, disability/handicap, or income level. A signed, written complaint should be submitted to NDOR or FHWA within 180 days of the date of the alleged discrimination. The complaint may be filed by the affected party or their representative and must include the following:

- Complainant's name, address and telephone number;
- Name and address of the agency, institution or department and the individual(s) alleged to have committed the offense;
- A description of how, why, and when the alleged discriminatory act took place, including as much background information as possible; and
- The names of any persons, if known, that the investigating agency should contact for additional information to support or clarify the allegations.

Complaints Against the LPA or Other Parties

All formal Title VI Discrimination complaints received by the LPA will be given immediately to the NDOR's Statewide Civil Rights Coordinator, who has the overall responsibility for the investigation of the complaint. Formal complaints must be submitted on the approved Complaint Form which can be obtained by contacting the NDOR Statewide Civil Rights Coordinator (402-479-4870).

Formal complaints must contain as much information as possible about the alleged discrimination. The complaint must include the basis of the complaint, pertinent details of the complaint, witnesses, and the remedy requested by the complainant. Investigation of complaints will be coordinated, as needed, with the appropriate NDOR program officials in their respective Divisions and Districts. NDOR Division and District personnel will be kept informed of the progress and outcome of the investigation as appropriate.

Informal complaints received by the LPA may be settled informally by the LPA's civil rights specialist. If the issue is not satisfactorily settled informally, or if at any time the person(s) request(s) to file a formal (*written*) complaint, the LPA should refer the Complainant to the NDOR's Statewide Civil Rights Coordinator.

If negotiations to correct violations are unsuccessful, enforcement proceedings will be initiated to bring the recipient into compliance. The complaint investigator will conduct whatever investigation is necessary to establish the facts surrounding the complaint, including witness interviews, and reviews of internal policies, procedures or regulations that may have a bearing on the complaint. Corrective action could include disciplinary action against the offender as appropriate. NDOR will provide a copy of the complaint findings, conclusions, and proposed and final resolution to both the complainant and FHWA.

Complaints Against NDOR

Anyone wishing to file a Title VI complaint against NDOR must submit the complaint in writing to the FHWA Division office at:

FHWA, Nebraska Division
Federal Building, Room 220
100 Centennial Mall North
Lincoln, NE 68580-3803

Formal complaints submitted to NDOR will be immediately forwarded to FHWA. The complaint must include the basis of the complaint, pertinent details of the complaint, any witnesses, and the remedy requested by the Complainant. FHWA will review all formal complaints it receives and conduct the necessary investigation to resolve the complaint. NDOR will cooperate fully with FHWA on the investigation of all complaints. If the discrimination complaint is found to be valid, FHWA will coordinate with the appropriate NDOR officials to ensure corrective action is taken.

10.3 Equal Employment Opportunity (EEO)

10.3.1 EEO Policy

The Federal-aid Highway Act of 1968 (*23 USC 140(a)*) and implementing regulations at [23 CFR 230](#), require that LPAs receiving federal financial assistance shall assure that employment in connection with federal construction projects is provided without regard to race, color, religion, age, disability, national origin, or sex.

The LPA is required to include notification of a Federal-aid contractor's EEO responsibilities in the advertised contract specifications. In addition, the LPA must maintain and make available apprenticeship, skill improvement or other upgrading programs, which provide equal opportunity for training and employment without regard to race, color, age, disability, religion, national origin or sex.

10.3.2 Implementation

Assurances

LPAs must maintain an EEO assurance signed by their current governing body.

Required Federal Contract Provisions

NDOR or the LPA shall physically insert the [Form FHWA 1273](#) in the contract document. Additionally, all subcontractors are required to include a hardcopy of 1273 into their contracts. LPAs need to be aware that contractor noncompliance with the EEO specifications found in form FHWA 1273 may be considered a breach of contract and that contract payment may be withheld, or the contract terminated (*See Chapter 11, Section 4*).

Construction

Federal-aid prime contractors and subcontractors personnel transactions and employment practices in the areas of recruitment and selection decisions (*hiring, promotions, terminations, training, etc.*) are to be conducted without regard to race, color, religion, sex, national origin, age, or disability.

The LPA's RC should be aware of all contractual requirements and monitor the contractor for compliance. The LPA's Construction Engineer shall adhere to the guidance found in [Appendix A of 23 CFR 230 Subpart A](#), assuring EEO in all personnel transactions.

10.3.3 Monitoring

The LPA is required to monitor the engineering consulting firm, contractor and subcontractors for the project to ensure they are meeting the required contract provisions found in [41 CFR 60](#) or [Executive Order 11246](#). The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the consultant or contractor shall make a good faith effort to employ minorities and women evenly on each of its projects.

NDOR will perform periodic reviews of the LPA, consultant and contractor to assure EEO compliance. NDOR will inform FHWA when the reviews will be performed and afford them the opportunity to participate.

It should be noted that neither NDOR nor the FHWA have the independent authority to enforce Executive Order 11246 or the provisions of 41 CFR 60. In the event that FHWA, NDOR or any sub-recipient believes that a violation of 41 CFR or Executive Order 11246-Equal Employment Opportunity has occurred, this information is to be forwarded to the Office of Federal Contract Compliance Programs (*OFCCP*).

10.3.4 Complaints

Compliance with the EEO goals will be measured against the total hours performed. For reporting EEO inequity, follow the same process and procedures for Title VI complaints detailed above in Section 10.2.4.

10.4 Labor Compliance

10.4.1 Applicability of the Davis-Bacon Act

The Davis-Bacon Act, in [40 USC 276\(a\)](#) and prescribed by 23 USC 113, dictates that mechanics and laborers working on the site of Federal-aid construction projects must be paid according to the wage decision that is part of the contract Special Provisions for the project. The US defines mechanics and laborers as those employees who perform manual labor on the site of work.

Davis-Bacon applies to any FHWA funded construction contract regardless of the level of Federal participation. The Davis-Bacon Act requirements can be excluded from Federal-aid, LPA matched transportation projects only if they meet one of the following project categories:

1. Any projects fully located on or within the existing ROW of a roadway that is functionally classified as a local road or rural minor collector. This determination will be made by NDOR.
2. Force account work performed solely by the LPA.
3. Exploratory drilling services which include subsurface utility engineering or utility location services (*these contracts provide the location of utilities for engineering or planning purposes*).
4. Railroad and Utility Adjustments performed by a public utility or railroad force or the relocation performed by a contractor engaged by the utility or railroad. However, Davis-Bacon applies when utility relocation work is part of a construction project to be performed by the construction contractor or subcontractor.

For projects requiring Davis-Bacon wages, as soon as the LPA establishes the project bid opening date and is ready to advertise the project for bidding, the LPA must check with the NDOR LPD Project Coordinator or the NDOR statewide Civil Rights Coordinator to assure that the latest modification of the wage decision is in the contract Special Provisions.

The US DOL requires that a current wage decision be included in Federal-aid construction contracts, if appropriate. Wage decisions may be modified frequently; wage decisions published in the Federal Register ten (10) or more days prior to the bid opening must be incorporated into the contract by addendum to the advertisement with notification to all plan holders.

Enforcement of the provisions in Section IV of Form FHWA-1273 is NDOR's responsibility. In addition to withholdings and liquidated damages being assessed for violations, the following may be considered for continued violations:

- Termination of the contract; or
- For more serious violations, legal prosecution and debarment.

10.4.2 Labor Interviews

For projects that required Davis-Bacon wages, LPA personnel are to conduct at least one (1) wage rate interview on each project. Labor interviews are not required on railroad and other utility adjustments. The interviewer shall note the employee's name, the classification of the employee, the actual wage paid, and the posted wage. Interviews shall be documented as shown on [DR Form 98](#) found in the appendix of this chapter.

The LPA must submit two (2) copies of a semi-annual report to the NDOR LPD Project Coordinator containing the following information:

1. Number of contractors or subcontractors against whom complaints were received;
2. Number of investigations completed (*if complaints were received*);
3. Number of contractors or subcontractors found in violation;
4. Amount of restitution due under:
 - a. Davis-Bacon Acts;
 - b. Work Hours Act of 1962,
5. Number of employees due wage restitution under Davis-Bacon Acts and/or Work Hours Act of 1962; and
6. Amount of liquidated damages assessed under Work Hours Act of 1962.

The above report is due not later than April 4 for the period from October 1 to March 31 and not later than October 5 for the period from April 1 to September 30. This report shall include all information gathered on all projects.

10.5 Americans with Disabilities Act/Section 504 of The Rehab Act of 1973

10.5.1 ADA Policy

Section 504 of the Rehabilitation Act of 1973 (*codified as 29 USC Subsection 791*) requires that any entity receiving Federal-aid must ensure that persons with disabilities are not discriminated against in any and all aspects of employment, or denied access to the goods or services that these Federal-aid fund recipients provide.

The intent of the ADA (*Public Law 101-336, codified as 42 USC 12101 et seq.*) is to “assure equality of opportunity, full participation, independent living, and economic self-sufficiency for persons with disabilities.” This law extended the protections offered for persons with disabilities.

[28 CFR, Part 35](#), requires that facilities constructed by, on behalf of, or for the use of a public entity shall be designed and constructed, so that the facility is accessible to and usable by persons with disabilities.

[49 CFR, Part 27](#) requires nondiscrimination on basis of disability in programs and activities receiving or benefiting from federal financial assistance.

10.5.2 Implementation

Assurances

LPA's must maintain an ADA assurance signed by their current governing body. A section in the LPA/NDOR Project Program Agreement details the LPA's reaffirmation of the Nondiscrimination Assurances of the ADA.

Design

State and local governments, regardless of whether they receive Federal-aid, are required to comply with the [Federal ADA Accessibility Guidelines \(ADAAG\)](#), Title 24, or local code, whichever provides the greatest access. Local-funded improvements are required to comply with the ADAAG and with Title II; whichever code offers the greatest access or protections to individuals with disabilities.

10.5.3 Monitoring

NDOR's role is to help ensure that all new and existing altered pedestrian facilities such as, but not limited to, highway rest area facilities, sidewalks, crosswalks, pedestrian overpasses, underpasses and ramps, shall be made accessible to persons with disabilities in accordance with Federal and state accessibility standards on all LPA Federal-aid projects. This monitoring will be done during: a project PIH, PS&E plan review, and final walkthrough/inspection.

10.5.4 Complaints

For reporting ADA discrimination, follow the same process and procedures for Title VI complaints detailed above in Section 10.2.4.

10.6 Disadvantaged Business Enterprises (DBE)

10.6.1 DBE Policy

It is the policy of the USDOT that DBEs, as defined in [49 CFR Part 26](#), have an equal opportunity to participate in the performance of federally funded contracts or subcontracts. To accomplish this goal, all LPAs and their contractors must take steps to ensure that DBEs are encouraged to compete for construction contracts, procurement contracts, grants, services, financial aid or other benefits, and that DBEs have full access to these opportunities. For further reference and additional information please refer to [NDOR's DBE Program Manual](#) or [FHWA's Office of Civil Rights](#).

10.6.2 Establishment of the DBE Goal

During the PS&E review, NDOR will review each project to determine if it involves work elements that are conducive for DBE participation and establish a DBE participation goal percentage. The Contractor must meet or exceed the DBE goal or demonstrate good faith efforts to meet the goal. In the establishment of a goal, NDOR considers the following criteria:

- Dollar amount of the contract to ensure that it is large enough to permit efficient subcontracting;
- The work content of the project that can be subcontracted; and
- The availability of DBE firms in the project area having the potential to do the required work.

10.6.3 DBE Contract Requirements

The DBE Contract Provisions, a current list of certified Nebraska DBE's and all DBE participation and achievement forms will be included in the contract documents to be executed by the successful bidder. The purpose of these forms is to collect data required under 49 CFR 26. Even if no DBE participation is achieved, the successful bidder must execute and return the form.

Completed DBE Participation forms must be submitted to NDOR LPD Project Coordinator at the time of contract execution. The DBE Participation forms (*CON1-PT1 & CON1-PT2*) must include the names, addresses and phone numbers of DBE firms that will participate, with a complete description of work or supplies to be provided, and the dollar value of each DBE transaction. When less than 100 percent of a contract item of work is performed or furnished by a DBE, a description of the exact portion of the work to be performed or furnished by the DBE should be included in the DBE information, including the planned location of the work. A bidder certified as a DBE should describe the work it has committed to perform with its own forces, as well as any work it has subcontracted to any DBE subcontractor, supplier, and/or trucking company.

To ensure that the appropriate credit is given toward the DBE goal, the LPA shall have the bidder provide written confirmation from each DBE participating in the contract. A copy of a DBE's quote will serve as written confirmation that the DBE is participating in the contract. If a DBE is participating as a joint venture partner, the LPA shall have the bidder submit a copy of the joint venture agreement.

10.6.4 Monitoring DBE Goal Achievement

NDOR will ensure that DBEs have a level playing field and an equitable opportunity to compete for and participate in Federal-aid contracts and subcontracts. NDOR will monitor the work performed on federally funded projects to verify that the work committed to DBEs at contract award is actually performed by the DBEs. NDOR will maintain a running tally of actual DBE attainments (*e.g., payments actually made to DBE firms*) and will ensure that DBE participation is credited toward overall or project/contract goals only when payments are actually made to DBE firms. Even though a DBE participation goal may be set on a project in the current fiscal year, that goal may not be credited toward the overall annual DBE participation goal until the work has actually been performed by the DBE and the DBE has been paid for the work.

The LPA is required to monitor DBE subcontractors to ensure they are performing a commercially useful function. A DBE is performing a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved with the DBE's employees. The DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the materials and installing (*where applicable*) and paying for the material itself. (*49 CFR 26.55 (c)(1)*)

Bulletin Board Requirements

The LPA should ensure the contractor has a bulletin board placed in a location easily accessible to both the employee and the public and should include, but not limited to the following:

- The Law;
- The Law (*En Espanol*);

- FHWA Notice (1022);
- Wage Rate Information (FHWA 1495);
- Wage Rate Information (FHWA 1495A) (En Espanol);
- Contractually required wage rates;
- Family and Medical Leave Act of 1993;
- Minor Labor Laws;
- Federal Minimum Wage;
- US Department of Labor (1321);
- Contractor's EEO Policy;
- Contractor's EEO Officer's name and telephone number; and
- Any applicable Nebraska laws and regulations.

The bulletin board should be checked for the required documents when performing wage rate interviews and/or commercially useful function reviews.

NDOR is primarily responsible for administrative work in implementing the DBE Program. The responsibilities of NDOR include:

- Acting as a liaison with minority groups, community agencies and minority or female-owned companies to solicit their participation in the DBE Program;
- Identifying the need for and assisting in implementing training courses for DBEs;
- Providing information and technical assistance to DBEs, potential DBEs, and others;
- Processing DBE certification applications and making recommendations on eligibility status;
- Participating in the on-site investigations of applicants for DBE certification;
- Monitoring DBE performance on projects;
- Administering the DBE portion of the contract close-out process;
- Assisting with the publication of newsletters and/or other informational documents;
- Investigating complaints concerning DBE eligibility status and preparing investigation reports; and
- Maintaining files and electronic databases on civil rights programs.

To assist NDOR with the DBE monitoring, at the end of every project the LPA is responsible for obtaining final contract amounts including the total DBE contracted amount. As such, the contractor and subcontractor are required to complete two DBE Goal Achievement Forms (*DR Form 441 & DR Form 442*) and submit them to the NDOR LPD Project Coordinator. These forms are found in the appendix or obtained from the NDOR LPD Project Coordinator.

Appendix

Report of Labor Compliance Interviews and EEO Compliant Questions (*DR Form 98*)

Identification of DBE Goal Achievement (*DR Form 441*)

Identification of DBE Work Performed (*DR Form 442*)

Project No.

Report No.

Contractor

Groups of Work

Report of Labor Compliance Interviews

Work Operations
Checked

.....
(Grading, Culverts, Bridges, etc.)

Sheet of

DATE INTERVIEWED	EMPLOYER (CONTRACTOR OR SUBCONTRACTOR)	EMPLOYEE	PAYROLL CLASSIFICATION	TYPE OF WORK BEING PERFORMED OR EQUIPMENT OPERATED	WAGE RATE	
					PAID	MINIMUM

Interviewer:

Submitted By:

(Project Manager)

(Date)

Return To:
Nebraska Department of Roads
Construction Division - Minority Business Office
P.O. Box 94759
Lincoln, NE 68509-4759

Date:

Nebraska Department of Roads

Identification of DBE Goal Achievement

DBE I

Project No.: Control No.:

Location: \$

Total dollar goal commitment at time of contract award:

Contractor:

Note: *This form is to be completed as accurately as possible with the understanding that final quantities may not be available at the time of completion.*

	Name of Certified DBE	Description of Work Subcontracted or Services Provided	\$ Amount of Subcontract	\$ Amount of Payment Issued	\$ Amount of Retainage
1.
2.
3.
4.
5.
6.
7.
8.
9.

By Total Actual DBE \$

(Signature)

Return To:
Nebraska Department of Roads
Construction Division - Minority Business Office
P.O. Box 94759
Lincoln, NE 68509-4759

Date:

Nebraska Department of Roads
Identification of Work Performed
DBE II

Project No.: Control No.:

Location:

DBE Subcontractor:

Prime Contractor:

Note: *This form is to be completed as accurately as possible with the understanding that final quantities may not be available at the time of completion.*

	Description of Work Subcontracted or Services Provided	\$ Amount of Subcontract	\$ Amount of Payment Issued	\$ Amount of Retainage
1.
2.
3.
4.
5.
6.
7.
8.
9.

By Total Actual Payment Received \$

(Signature)

Chapter 11
PS&E and Bid Letting

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11.1 Introduction

This chapter describes the process and procedures for the preparation, submission, and approval of the project Plans, Specifications and Estimates (*PS&E*), and supporting documents for the advertising, letting, and awarding the project. This is an extremely critical step regardless of the use of Federal funds in the project. The action "Federal authorization" means to obtain approval from FHWA to begin the advertising and bid letting process. **The LPA will lose Federal project funds if they advertise the project for bids, purchase materials, or commence work before the PS&E package has been approved and a Notice-to-Proceed is given by NDOR or FHWA.**

As the provisions in [23 CFR 635.411](#) implement the competitive bidding principles in Title 23 USC 112, these requirements apply to all transportation construction projects funded under Title 23. The LPAs may use state-approved procedures for "non-highway" construction projects located off the highway ROW (*such as Transportation Enhancement projects off the highway ROW*). State approved procedures means the LPA will need to submit their proposed procedures for a comprehensive review by NDOR at least three (3) months prior to PS&E Package Submittal to assure the procedures meet all State and Federal requirements. The LPA procedures should be submitted to NDOR for review and approval no later than by PIH field review time. This will only be done on a project-by-project basis.

11.2 PS&E Review and Letting Schedule

Environmental clearance must be given before the PS&E package is submitted for review. The process for PS&E approval can be a time consuming task. A minimum of twelve (12) weeks is typically required from the PS&E submittal and award of a construction contract. LPAs must be familiar and understand the timing of these activities:

- PS&E Review, Federal Authorization and Approval – five (5) weeks (*7 weeks for full FHWA oversight*);
- Advertising for Bids – minimum of three (3) weeks;
- Addendums – reviewed and approved during the bid advertisement period;
- Open, Evaluate, and Tabulate Bids – one (1) week;
- NDOR/FHWA Bid Concurrence – one (1) week;
- Award and Executed the Construction Contract and Notice to Proceed – two (2) weeks.

11.3 Development of the PS&E Package

For projects let by the LPA, the LPA will prepare the bid package which contains the plans, special provisions, supplemental specifications, and the bid proposal and submit it to the NDOR LPD Project Coordinator. For projects let by the State, NDOR, in coordination with the LPA, will prepare the bid package. When using Federal funds, LPAs must comply with 23 CFR Section 633 Subpart A which contains Federal regulations governing construction contracts.

The LPA may use NDOR's plans, specifications, special provisions, or supplemental specifications on a project. LPA's use of plans, specifications, special provisions, or supplemental specifications other than NDOR's should be approved by NDOR as part of the PIH report submittal. (See Chapter 6, Section 3).

It is NDOR's responsibility to monitor and enforce Federal regulations on all LPA let projects. The following is a list of items the LPA is to submit as part of their PS&E package:

- Two sets of ½-size final plans signed and sealed by a Professional Engineer or Architect registered in Nebraska;
- Two sets of specifications including: the bid proposal, required Federal contract provisions (*FHWA From 1273*), bidding instructions, and bid form. These must also be signed and sealed by a Professional Engineer or Architect registered in Nebraska;
- Two sets of any required special provisions;
- Final Engineer's Estimate;
- Final Status of Utilities report;
- Completed Clear LPA ROW Certificate or Public Interest Letter (*PIL*);
- Copies of all applicable local, state, and Federal permits (*404, floodplain, storm water runoff, etc.*);
- Copy of the fully executed Railroad Agreement (*if required*);
- Copy of all fully executed Utility Agreements (*if required*);
- Environmental commitments to be included in the project contract documents;
- Sole source justification letter (*if required*); and
- Approved Environmental Document (*Re-evaluation may be required if no project actions have been taken for three (3) years since original NEPA approval*).

The NDOR/FHWA PS&E Checklist found in this chapter's Appendix should be used as a tool by the LPA to assist in the development of the PS&E package. NDOR and FHWA also use this checklist for review and approval of the project's PS&E package.

11.4 Required Federal Contract Provisions

When using Federal funds, LPAs must comply with 23 CFR Section 635 which describes Federal regulations governing construction contracts. Following this chapter is [Form FHWA-1273](#), Required Contract Provisions, which is a set of contract provisions and proposal notices that are required by regulations promulgated by the FHWA and other Federal agencies. These provisions apply to all Federal-aid construction projects and must be made a part of, and physically incorporated into, all contracts, as well as, appropriate subcontracts and purchase orders. The following is a listing of these specific provisions in the FHWA Form 1273:

Federal Wage Rates and Provisions Relating to Prevailing Wages/Convict Labor

Applies to all Federal-aid construction contracts within the ROW of a Federal-aid roadway exceeding \$2,000 and to all related subcontracts. Davis-Bacon and Copeland Act provisions are not required for transportation construction projects located on roadways classified as local roads or rural minor collectors. The LPA or NDOR is responsible for incorporating the applicable wage rate decision into each Federal-aid contract. The US DOL requires that an amendment for a general wage rate determination be incorporated into a Federal-aid contract if notification of the change is published in the Federal Register 10 days or more prior to the opening of bids.

Nondiscrimination Clauses

Applies to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more. The basic statutory authority for a nondiscrimination provision is Title VI of the Civil Rights Act of 1964, which is implemented by 23 CFR 200. Title VI mandates that Federal assistance not be used to discriminate. Through expansion of this mandate and the issuance of parallel legislation, the prescribed basis for discrimination now includes race, color, religion, sex, national origin, age, and disability.

Title VI assures that the NDOR and LPA guarantee that no person is subjected to discrimination in connection with any activity, including any contract, for which the LPA receives Federal funds. In the event of noncompliance by a contractor and/or subcontractor, payment may be withheld or the contract may be canceled in whole or in part.

This section of the Form FHWA-1273 is essentially the Standard EEO Construction Contract Specifications, as included in 23 CFR 230, Subpart A, Appendix A.

DBE Requirements as Mandated by Federal Law

All Federal-aid construction projects, regardless of system or oversight agency are subject to the legislative and regulatory DBE requirements. The main objective of the DBE Program is to ensure that DBE firms have an opportunity to participate in LPA federally-funded contracts. Title VI of the Civil Rights Act of 1964 is the legislation that forms the foundation for the creation of the DBE Program.

By regulatory definition, a DBE is:

"... a for profit small business concern -- 1) That is at least 51 percent owned by one or more individuals who are both socially and economically disadvantaged or, in the case of a corporation, in which 51 percent of the stock is owned by one or more such individuals; and 2) Whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it."

Use of Local Hiring Preferences

Applies to all Federal-aid transportation construction projects. The LPA may not include a provision that requires a contractor to give any preference in hiring on a Federal-aid project. Furthermore, when NDOR or the LPA has a policy that requires or creates a preference for local hiring, the contracting agency may not require or encourage a contractor to comply with this policy on Federal-aid projects (*even if the hiring requirement is not included in the contract itself*).

Subletting or Assigning the Contract

Applies to all Federal-aid transportation construction projects on the NHS. Current FHWA policy requires that the prime contractor perform at least 30 percent of contract work with its own organization. This percentage shall be of the original contract price, exclusive of specialty items, but include the cost of materials and manufactured products purchased or produced by the prime contractor. The LPA may be more restrictive and specify a higher self-performance percentage. Conversely, with adequate justification, NDOR may approve a reduction or a waiver of the 30 percent self-performance requirement on a project-by-project basis.

Specialty items are defined as work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organization qualified and expected to bid on the contract. In general, these items are to be limited to minor components of the overall contract. As noted earlier, the amount of identified specialty work is deducted from the original contract amount before determining the total amount that may be subcontracted. The definition of specialty items is included in 23 CFR 635.102.

Implementation of the Clean Air Act & Federal Water Pollution Control Act

Applies to all Federal-aid transportation construction contracts and related subcontracts of \$100,000 or more. There may be facilities (*e.g., asphalt or concrete plants*) which are proposed for use in construction operations that do not meet air or water quality standards of the Clean Air Act or Federal Water Pollution Control Act. The EPA regulations, 40 CFR 15, require that these facilities be listed and not be used on government contracts. These facilities are included on the GSA "Excluded Parties List System" (*GSA List*).

Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion

Applies to all Federal-aid contracts, and related subcontracts, purchase orders, and other lower-tier transactions of \$25,000 or more. The prime contractor and lower-tier participants are required to certify as to their current eligibility status. Certification is also required of all prospective participants in lower-tier transactions. This includes subcontractors, material suppliers, vendors, etc.

Each participant in the Federal-aid program must certify "that it and its principals are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency, and that they have not been convicted or had civil judgment rendered within the past three (3) years for certain types of offenses."

The General Services Administration maintains a government-wide list of excluded parties. This web-based system titled, "[Excluded Parties List System](http://www.epls.gov/)" (*GSA List*), is located at <http://www.epls.gov/>.

Certification Regarding the Use of Contract Funds for Lobbying

Applies to all Federal-aid construction contracts and subcontracts exceeding \$100,000. Prior to receiving funds in excess of \$100,000, NDOR must submit to the FHWA a certification that it has not and will not make any prohibited payments for lobbying. This certification comes by having NDOR and the LPA sign the Agreement, which certifies to FHWA that it will agree to comply with the lobbying restrictions in [23 CFR 635.112\(g\)](#). LPAs, contractors, subcontractors, and consultants on contracts and subcontracts that exceed \$100,000 are also required to make a lobbying certification. By signing a contract or subcontract, a prime contractor or subcontract is certifying that it will comply with lobbying restrictions.

The NDOR certification is to be retained by the FHWA. Likewise, lower-tier certifications are to be retained by the next higher tier (*e.g., prime contractors retain their subcontractors' certifications, etc.*).

Any participant that has made, or agreed to make, payments for lobbying activities using non-Federal funds, is required to disclose such activities.

Noncollusion Affidavit

The submission of a noncollusion statement protects the integrity of the Federal-aid transportation program by serving as a deterrent to bid rigging activities. The certification also becomes evidence in prosecuting cases involving construction contract bid rigging.

A noncollusion statement is required from all bidders and is to be submitted as part of the bid proposal package. Failure to submit the required certification will result in the bid being considered as non-responsive and ineligible for award consideration.

The LPA and NDOR must include provisions in the bidding proposals that require all bidders to include a noncollusion statement with their bid. The FHWA, in consultation with the US DOJ, has concluded that the noncollusion statement may be either an unsworn declaration made under penalty of perjury under the laws of the US, or a sworn affidavit executed and sworn before a person who is authorized to administer oaths by the laws of the State.

Buy America Provision

Current regulations require the use of domestic steel and iron in Federal-aid transportation construction projects. All foreign steel and iron materials and products are covered by Buy America regardless of the percentage they comprise in a manufactured product or the form they may take. The regulations allow bidders and the contracting agency some latitude through minimum use, waivers, and alternate bids.

All manufacturing processes must take place domestically. Manufacturing begins with the initial melting and mixing, and continues through the coating stage. Any process which modifies the chemical content, the physical size or shape, or the final finish is considered a manufacturing process. These processes include rolling, extruding, machining, bending, grinding, drilling, and coating. "Coating" includes epoxy coating, galvanizing, painting, or any other coating that protects or enhances the value of the material.

If domestically produced steel billets or iron ingots are shipped overseas for any manufacturing process, and then returned to the US, the resulting product does not conform with the Buy America requirements. The manufacturing process for a steel/iron product is considered complete when the product is ready for use as an item (*e.g., fencing, posts, girders, pipe, manhole cover, etc.*) or could be incorporated as a component of a more complex product through a further manufacturing process (*e.g., the case for a traffic signal head*). The final assembly process does not need to be accomplished domestically so long as the steel/iron component is only installed and no manufacturing process is performed on the steel/iron component.

With prior concurrence from Headquarters, the FHWA Division Administrator may grant a waiver of the Buy America requirements for specific projects if it can be shown that:

- following the requirements is inconsistent with the public interest, or
- insufficient quantities of satisfactory quality domestic products are available.

Indian Preference on Federal-aid Projects;

Projects eligible for Indian employment preference are those located on roads within, or providing access to an Indian reservation or other Indian lands (*as defined under the term "Indian reservation roads" in Section 101 of Title 23 CFR*), and transportation projects located "near" the boundaries of reservations. Projects "near" an Indian reservation are defined as those within a reasonable commuting distance from the reservation.

Accordingly, States are encouraged to work together with Indian tribes and their Tribal Employment Rights Offices (TEROs) to develop contract provisions which will promote employment opportunities for Indians on eligible Federal-aid transportation projects. Reasonable overall employment goals for Indians, and the requirements which can be used to achieve such goals, should be agreed upon in advance and made part of the contract documents.

In setting the employment goals, consideration should be given to the scope of the contract and the potential employment requirements of the contractor beyond its core-crew. Once established, the goals should only be changed by NDOR following consultation with the Indian tribal representative and the contractor and only after good faith efforts to achieve the original goals. Sanctions for failure to meet the employment goals should be determined in advance and be made a part of the contract to facilitate enforcement.

On-the-Job Training (OJT)

Applies to all Federal-aid transportation construction projects. The objectives of the OJT Program are to:

- Provide training and improve the skills of women and minorities so that they have the opportunity and access to the higher paying skilled trade jobs and journeyman positions; and
- Broaden the labor pool to meet the projected future labor needs in the construction industry.

The OJT program involves several major components and involves shared responsibilities between FHWA, NDOR, the LPA and the contractor. These components include:

1. Development of Statewide Training Goals: NDOR has developed training goals that will be applied to LPA projects as required.

<u>Estimated Contract Amount</u>	<u>Training Hours Required</u>
Under \$1,000,000	0
\$1,000,000 to 2,000,000	500 hours
Over \$2,000,000 to 4,000,000	1,000 hours
Over \$4,000,000 to 6,000,000	2,000 hours
Over \$6,000,000 to 8,000,000	3,000 hours
Over \$8,000,000 to 10,000,000	4,000 hours
Over \$10,000,000 to 15,000,000	5,000 hours
Over \$15,000,000 to **	6,000 hours

*(**No more than 6,000 hours required regardless of dollar amount)*

2. Assignment of Contract Training Goals: For State let projects, NDOR will assign training goals for each contract. For LPA let projects, the LPA will assign their training goals based upon NDOR's training goals.

The contract training goal is the actual number of training positions or slots required on the project. The OJT Program requires that a special provision be placed in the contract which specifies the number of trainees that are to be assigned to various appropriate construction skilled crafts for actual hands-on experience. If a trainee quits or is terminated, the slot is to be refilled until a trainee completes the program. If a contractor does not attain the contract training goal for the project, the contractor could be subject to monetary penalties.

3. Development and Acceptance of the OJT Program at the Project Level Prior to Commencing Construction: The contractor shall submit to the LPA, for approval, the commitment in terms of the number of trainees to be trained for each selected classification and the training programs to be utilized.

Note: In unionized states, apprenticeship programs have been developed by the various trade unions and are registered with the DOL, Bureau of Apprenticeship and Training (BAT). These training programs are acceptable for use on Federal-aid projects but may not require employees to be or become union members.

NDOR must review, analyze, accept or reject training programs proposed by the LPA or their contractor. NDOR should ensure that:

- Proposed training programs are reasonable and realistic based on the job skill classification; and
- The number of training hours specified in the training program is consistent with the project's duration and sufficiently long enough for the trainee to obtain journeyman level status.

The contractor recruits and selects the trainees. However, the contractor may receive assistance from outside sources to accomplish this task. In unionized States, local unions may refer trainees or apprentices to the contractor.

4. Provide Training: Once the contractor's training program has been finalized and approved by NDOR, the trainees in each training slot begin hands-on training at the project site. Normally, the trainees are paid a percentage of the journeyman's wages (*Davis-Bacon rates*). The following payment plan is required in the FHWA Training Special Provisions (*23 CFR 230 A - Appendix B*):
 - 60 percent of the journeyman's wages for the first half of the training period;
 - 75 percent of the journeyman's wages for the third quarter of the training period; and
 - 90 percent of the journeyman's wages for the last quarter of the training period.
5. Determination on the Adequacy of Training: The contractor must periodically evaluate the training provided, and the trainee's progress.

6. Reporting Requirements: FHWA requires NDOR and the LPA submit this information to them on [Forms FHWA-1391](#) and [FHWA-1392](#) which are to be prepared by the LPA and contractor.
7. Responsibilities: NDOR has the primary responsibility to monitor and determine the effectiveness of OJT training. FHWA has oversight responsibility to provide guidance and assistance, and to concur in proposed project training provisions, project goals, and proposed training programs from NDOR. NDOR and FHWA share the responsibility of determining:
 - The number of trainees that complete training;
 - The number of trainees upgraded to journeyman level status;
 - The level of skills attained; and
 - Whether the statewide training program is meeting the needs of the construction industry regarding work force requirements and level of skills.
8. OJT Reimbursement Provisions: Payment for training is made by the FHWA to NDOR on a reimbursement basis. The training special provisions provide for a monetary incentive to the contractor to establish a project training program either at the rate of \$0.80 per hour; or

NDOR has the option of permitting the LPA and contractor to bid on the training program provisions as a bid item. NDOR and the LPA will be reimbursed with Federal-aid construction funds at the same pro rata share as the construction cost of the project.

Standardized Changed Conditions Contract Clauses

Applies to all Federal-aid construction projects. Due to the nature of transportation construction and the conditions under which work is performed, engineering cannot always accurately determine and describe the existing conditions at project sites. Consequently, the actual conditions encountered during construction may differ from those indicated in the contract documents, resulting in a change in type or amount of work and ultimately in the cost of construction. Also, situations may develop during construction that requires the contracting agency to order the contractor to slow down or to stop construction through no fault of the contractor. These slow downs or stoppages in the work may cause a change in construction costs.

The standardized changed condition clauses in 23 USC 112(e) must be included verbatim in all contracts, unless State statute prohibits their inclusion. Or, an alternate clause developed by the LPA may be used, upon approval of the FHWA, when the alternate clause has been developed and implemented in accordance with State statute.

The regulation requires the use of three different clauses:

1. Differing Site Conditions Clause: This clause provides for the adjustment of the contract terms if the contractor encounters:
 - Type I Condition: subsurface or latent physical conditions that differ materially from those indicated in the contract; or
 - Type II Condition: unknown physical conditions of an unusual nature that differ materially from those ordinarily encountered and generally recognized as inherent to the work.
2. Suspensions of Work Ordered by the Engineer: This clause provides for the adjustment of the contract terms if the performance of all or a portion of the work is suspended or delayed by the Engineer, in writing, for an unreasonable period of time (*not originally anticipated, customary, or inherent to the construction industry*). The contractor is required to submit a request for adjustment, in writing, to the Engineer within seven (7) calendar days of receipt of the notice to resume work. Recovery of profit on costs resulting from suspensions of work is not allowed.
3. Material Changes in the Scope of the Work: This clause provides for the adjustment of the contract terms if the Engineer orders, in writing, an alteration in the work or in the quantities that significantly change the character of work. The term "significant change" shall be construed to apply only to the following circumstances:
 - The altered character of the work differs materially from that of the original contract; or
 - A major item of work, as defined in the contract, is increased or decreased by more than 25 percent of the original contract quantity (*adjustments shall apply only to that portion in excess of 125 percent of original contract quantity, or in case of a decrease, to the actual quantity performed*).

This clause provides for adjustments resulting from formal change orders by the RC, in writing, to the extent that the impacted work is part of the contract. Either party may initiate an adjustment and both must be in agreement before the work is performed. As with the suspension of work provision, this clause does not preclude the recognition of constructive suspensions or delays.

The applicability of the above contract provisions is contained in numerous locations of Federal laws, regulations and guidance such as 18, 23, 33, 40, and 44 of the USC; 23, 28, 29, 41, and 49 of the CFR, and [Contract Administration Core Curriculum Participants Manual and Reference Guide](#).

11.5 Federal Authorization for the Construction Work Phase

After the PS&E review, NDOR will request authorization of Federal funds for the construction and construction engineering work phases from FHWA. NDOR will obligate Federal funds in the amount indicated on the most current engineer's project estimate. **For projects let by the LPA, they must NOT proceed with bid advertisement until they have received a written Notice-to-Proceed from NDOR's LPD Project Coordinator.**

11.6 Sole Source Procurement

A component of competitive bidding is allowing bidders to choose between multiple items for use in a project so that they may compete for the lowest bid. The best procedure is to write generic specifications or to list at least three specific items from different manufacturers in the project PS&E package. If the LPA decides that only one item will work for the project, the LPA must write a sole source justification letter to be approved by NDOR or FHWA.

Applying to sole source any item for incorporation into a project should be the exception and not the norm. Just because the LPA requests to use a sole source item does not mean the request will be approved. Prior to developing and submitting the sole source justification letter, the LPA should perform a search of the market of the item they want to sole source to assure no competition of comparable items is available.

Examples of items the LPA may consider to justify as sole source include but are not limited to: light fixtures, fire hydrants, traffic signal controllers, guardrail end treatments, or truncated domes. Sole source justification is preferred for uniformity, ease of maintenance, or historic compliance. An example sole source justification letter can be found at the end of this chapter in the appendix. The following items must be addressed in the letter:

- 1) What is the situation being covered?
- 2) What operating characteristics (*criteria*) are you looking for in the device?
- 3) How is this item unique from all others?
- 4) How many devices are currently available that will satisfy the criteria?
- 5) Which is the best device from an operations standpoint?
- 6) Which device offers the best cost?
- 7) Does operating characteristics override cost?
- 8) Commit to a review on the industry in case new technology is developed that would also satisfy the criteria or need.

Further guidance on this subject is available from FHWA on [Patented and Proprietary Products](#).

11.7 Pre-Bid Meeting

This optional meeting is held by the LPA after advertising the project. The purpose of the pre-bid meeting is to address prospective contractors' concerns and questions. It is recommended for more complex projects. The meeting's purpose is to encourage face-to-face discussion regarding plan intent and any areas of concern prior to bid opening. This meeting often brings plan package discrepancies to light, which can then be rectified through plan addendum. These discrepancies, if not rectified, may result in change orders or claims after the contract is awarded. The LPA shall notify NDOR and FHWA that they will hold a pre-bid meeting allowing them the opportunity to participate.

NDOR and FHWA do not prohibit the use of pre-bid meetings; however, if attendance at a pre-bid meeting is made a condition of bid responsiveness, the project advertisement and all bidding documents must reflect this requirement. The LPA and NDOR must give the contracting community adequate notice to comply.

11.8 Competitive Bidding

23 CFR 635 requires that a contract method based on competitive bidding must be used for performing work financed with Federal funds. The only exceptions to the competitive bid process are project activities done by utility or railroad companies; work performed under emergency conditions (*as outlined in Chapter 2, Section 4.8*); or when the NDOR can show that some other contract method (*Force Account Construction per 23 CFR 635 Subpart B*) is more cost effective (*by PIL*). To do this, the LPA must submit documentation through NDOR to FHWA stating what the emergency is or why the Force Account method is cost effective. No work can begin on a project until NDOR or FHWA issues approval in writing. NDOR and LPAs are prohibited from establishing any procedures or requirements for qualifications or licensing that would prevent competition.

Emergency

An emergency, as defined and explained in the programming chapter (*Chapter 2, Section 5.10*), shall be deemed to exist when repair work as provided for in the ER Program policy statement in 23 CFR 668.105 is necessary or when a major element of a transportation system has failed and the situation is such that competitive bidding is not possible or impractical because immediate action is necessary to minimize the damage, protect the facility, or restore essential travel.

The LPA shall submit documentation (*as required in Chapter 2, Section 5.10*), to NDOR for their review, identifying and describing the project, the kind(s) of work to be performed, the contract method to be utilized, the estimated cost of the work, the estimated Federal funds to be provided, and the reason(s) that an emergency exists. On projects designated for full FHWA oversight, NDOR will submit the documentation to FHWA.

Force Account Per CFR 635, Subpart B

Force account work is the direct performance of construction work by NDOR or the LPA using their labor, equipment, materials, and supplies to complete a project.

The LPA shall submit documentation, to NDOR for their review, identifying and describing the project, the kind(s) of work to be performed, the contract method to be utilized, the estimated cost of the work, the estimated Federal funds to be provided, and the reason(s) that the force account method is considered cost effective. On projects designated for full FHWA oversight, NDOR will submit the documentation to FHWA.

11.9 Other Contracting Procedures

The use of an alternative contracting procedures, type, or method depends on the work, timing, and location of a project. NDOR recommends that such techniques not be used for typical projects.

The FHWA allows NDOR to evaluate innovative contracting techniques proposed by the LPA which are competitive in nature but do not fully comply with the requirements in 23 USC 112. Federal-aid construction contracts that utilize a method of award other than the lowest responsive and responsible bid must be evaluated under [FHWA's Special Experimental Project No 14 \(SEP-14\)](#) - "Innovative Contracting". However, four practices have been used successfully by various State and LPAs and, as a result, no longer require advance approval from FHWA. These methods are: cost-plus-time (A+B) bidding, lane rental, design-build contracting, and warranty clauses. Currently, NDOR policy does not allow for design-build contracting or warranty clauses.

11.9.1 Incentive/Disincentive Clauses

Incentive/Disincentive (I/D) clauses are used to encourage early or on time completion of work where there are significant inconveniences to the traveling public. Guidance regarding this technique is contained in [FHWA Technical Advisory T 5080.10 Incentive/Disincentive \(I/D\) for Early Completion](#). I/D is a contract provision which compensates the contractor a certain amount of money for each day identified critical work is completed ahead of schedule and assesses a deduction for each day the contractor overruns the I/D time. Its use is primarily intended for those critical projects where traffic inconvenience and delays are to be held to a minimum. I/D contract provisions may be used for either final project completion or for the completion of intermediate project milestones. Project time may be defined either by a fixed completion date or by a count of calendar days. NDOR recommends a maximum dollar amount be used for incentive payment (*FHWA recommends a 5% maximum of total project cost*). There is no recommended maximum for a disincentive payment.

The following formulas may be used by the LPA to calculate incentive or disincentive amounts:

Incentive = (Daily I/D amount) x (Number of days completed ahead of schedule), and

Disincentive = (Daily I/D amount) x (Number of days completed behind schedule)

FHWA recommends that the daily I/D amount be calculated on a project-by-project basis either for the entire project or for project milestones. The daily I/D amount may include:

- Established construction engineering inspection costs;
- State related traffic control and maintenance costs;
- Detour costs; and
- Road user costs.

The daily I/D amount should not include costs attributed to disruption of adjacent businesses. It is expected to use sound engineering judgment to adjust the calculated daily amount downward (*not upward*) to a final daily I/D amount that:

- Provides a favorable benefit/cost ratio to the traveling public where the cost is the daily I/D amount and the benefit is the calculated daily savings in road user and LPA costs.
- Is large enough to motivate the contractor. If a favorable benefit/cost ratio cannot be realized and/or the resulting daily amount is not large enough to motivate a contractor, the project should not be further developed as an I/D project.

11.9.2 A + B Bidding

A+B Bidding, also referred to as Cost-Plus-Time bidding, involves time with an associated cost, in the low bid determination. The bid for award consideration is based on a combination of the bid for the contract items and the associated cost of the time, according to the formula:

$$(A) + (B \times \text{Road User Cost} / \text{Day})$$

Where:

A = the dollar amount bid for the contract items and is the dollar amount for all work to be performed under the contract.

B = the total number of calendar days required to complete the project, as estimated by the bidder. The "B" amount of the low bidder is used as the contract time.

Road User Cost = A daily dollar estimate of vehicle operating costs and delay costs to highway users resulting from construction, maintenance, or rehabilitation activity.

This formula is only used to determine the lowest bid for award and is not used to determine payment to the contractor. NDOR recommends that a maximum number of days be used.

A disincentive provision, that assesses road user costs, is incorporated into the contract to discourage the contractor from overrunning the time "bid" for the project. In addition, the FHWA recommends that an incentive provision be included to reward the contractor if the work is completed earlier than the time bid. The value of the road user cost is predetermined by the contracting agency and specified in the proposal. It is based on costs such as: road user delay time, detour costs, construction engineering costs, etc.

A + B bidding is used for projects where time of completion is a significant concern.

11.9.3 Lane Rental

The goal of the lane rental concept is to encourage contractors to minimize road user impacts during construction. Under the [lane rental concept](#), a provision for a rental fee assessment against the contractor is included in the contract. The lane rental fee is based on estimated cost of delay or inconvenience to the road user during the rental period. The fee is assessed for the time that the contractor occupies or obstructs part of the roadway and is deducted from contractor progress payments.

The rental fee rates are stated in the bidding proposal in dollars per lane per time period, which could be daily, hourly or fractions of an hour. The low bid is determined solely on the lowest amount bid for the contract items. The lane rental concept has merit for use on projects that significantly impact the traveling public. Major urban area projects are prime candidates for this approach.

11.9.4 FHWA's Special Experimental Project No. 14 (SEP-14) - "Innovative Contracting"

Any other non-traditional construction contract technique, proposed by the LPA or NDOR than those listed in the sections above, which deviates from the competitive bidding provisions in 23 USC 112, requires FHWA Headquarters' SEP-14 approval. These non-traditional contracting techniques may include best value, life cycle cost bidding, qualifications-based bidding, and other methods where cost and other factors are considered in the award process.

NDOR or the LPA may submit a [SEP-14](#) work plan through the FHWA. The FHWA reviews the request and, if appropriate, forwards it to their headquarters for review and approval. Electronic copies of work plans and SEP-14 requests for approval are encouraged.

11.10 Alternate Bids

The LPA may propose the use of Alternate Bids under certain circumstances. The proposal must be coordinated and approved by NDOR or FHWA in the case of full Federal oversight projects. When there is a cap of Federal funds available for a project, an LPA may choose “additive alternate bidding” to maximize the benefits of the funding available for a project. This should only be done in consultation with and by the approval of the NDOR LPD Project Coordinator. In general, the concept allows for contractors to bid on work outside of the basic project scope: the “additive alternate bid items”. These alternates can be “add ons” or deletions from the basic project scope, or both. If the LPA receives bids on the basic scope which are less than the Engineer’s estimate, bids on the alternate items are considered according to a predetermined order of priority, so long as the total bid price remains under the total project budget. Bids on the basic scope and the alternate items are submitted and opened at the same time. The basis for the bid to be awarded to the lowest responsive bidder though has to be specifically stated in the contract bid documents on which all contractors are bidding.

11.11 Bidding Procedures for Locally Let Projects

Before a LPA let project can be advertised and let for bids, the LPA must submit a final PS&E package, which meets all applicable Federal and State regulations and procedures and with any supporting documentation, to NDOR for review and approval or to FHWA through NDOR if the project is designated as a full FHWA oversight project. The LPA may begin advertising activities once they receive the authorization and a Notice-to-Proceed from NDOR LPD Project Coordinator. For full FHWA oversight projects, the FHWA will issue the authorization to NDOR.

Federal-aid projects are required to be advertised and available to the contractor for a minimum of twenty-one (21) days prior to letting. In rare circumstances, shorter periods may be approved by FHWA when justified. Copies of the plans, details, bills of material, schedule of items, and specifications shall be open to public inspection at the office where the bids are being received, during all business hours between the day of the first publication and the day for opening the bids and such other place as may be designated in the notice.

Only contractors prequalified by NDOR will be eligible to submit bids for construction projects using Federal funds. Prequalification status will be in force at the time of letting, opening, the time of award, and through the life of the construction contract. For STP Urban and some bridge projects that NDOR does not prequalify, the LPA must still select a contractor from NDOR’s prequalification list. [Prequalification requirements](#) may be waived by NDOR with concurrence from FHWA with sufficient justification, on a case-by-case basis, for Transportation Enhancement or Safe Routes to School projects. This waiver must be in writing and included in the PS&E approval. Considerations for waivers may include project size, scope, type and location. Subcontractors are not subject to the prequalification requirement.

The “prime” contractor must perform no less than thirty (30) percent of the total original contract price excluding any identified specialty items. Work proposed to be performed under a subcontract must be approved by the LPA in writing through a formal process. Prior to approving the subcontract, the LPA must assure that the subcontract contains all pertinent provisions and requirements of the prime contract.

11.11.1 Amendments to the Bid Documents

The LPA must submit to the NDOR LPD Project Coordinator any addendum to be issued during the advertisement period. Under no circumstances should the addendum process be used to circumvent State or Federal laws, regulations or guidance. All bidders must bid the project on the same or comparable basis, so that no particular advantage or disadvantage accrues to any potential bidder or to the contracting agency. Since an addendum issued during an advertisement period could have a profound impact, not just on bid prices, but also on the basis for bid comparisons, all prospective bidders must be made aware of any addendum, as expeditiously as possible.

NDOR must approve such addendum for project eligibility prior to bid opening. For full FHWA oversight projects, NDOR will submit the addendum to the FHWA Division office for review and approval prior to awarding the contract. The LPA shall furnish any modification to the plans, specifications, or schedule of items to all parties who obtained plans and specifications for the project. The LPA must provide documentation of the receipt of the addendum to the NDOR LPD Project Coordinator. NDOR does not accept any proposed addendums within five (5) business days of bid opening.

11.11.2 Bid Opening

The bid opening is a public forum where the bids are opened and read aloud either item-by-item, or by the total bid amount. The LPA informs the NDOR LPD Project Coordinator once the bid opening date and time is established. NDOR shall keep FHWA apprised of these activities on full oversight projects. The bid opening should identify the apparent low bidder submitting the lowest, responsive bid. A responsive bid meets all the requirements of the advertisement and proposal. If a bid is determined to be unresponsive (*bid irregularities*), it does not have to be read. However, the bidder and the reason must be announced. The LPA needs to document and retain its reasons for not reading a bid. Some reasons for not reading a bid due to irregularities include:

- Failure to sign the bid, or signature is not by authorized personnel;
- Failure to furnish or sign the required bid bond;
- Failure to include unit prices, extensions and/or lump sums;

- Failure to submit a non-collusion affidavit;
- Failure to commit to the DBE contract goals or demonstrate good faith effort to do so;
- Failure of the contractor to be prequalified, if required, for that type of work; or
- Inclusion of conditions or qualifications not provided for in the specifications.

11.11.3 LPA Bid Analysis and Evaluation

[23 CFR 635.114\(a\)](#) requires Federal-aid contracts to be awarded only on the basis of the lowest responsive bid. This requirement applies to all Federal-aid construction projects. FHWA has stressed that estimates should be accurate and credible, based on realistic current data, and while not required, it is recommended that they are kept confidential. Further, there should be written documentation for justifying the award of a contract, or rejection of the bids, when the low bid appears excessive relative to the Engineer's Estimate or rejection is being considered for other reasons. Factors that should be considered and documented by the LPA in reviewing the bids received for a project include:

- Comparison of the bids against the engineer's estimate;
- Number of bids submitted;
- Distribution or range of bids received;
- Identity and geographic location of the bidders;
- Potential for savings if the project is readvertised;
- Bid prices for the project under review versus bid prices for similar projects in the same letting;
- Urgency of the project;
- Current market conditions/workload;
- Any unbalancing of bids (*mathematically and/or materially*);
 - Mathematically unbalanced bid: a bid that contains lump sum or unit bid items that do not reasonably reflect the actual costs (*plus reasonable profit, overhead costs, and other indirect costs*) to construct the item.
 - Materially unbalanced bid: a bid that generates reasonable doubt that award to that bidder would result in the lowest ultimate cost to the LPA of NDOR.
- Which unit prices differ significantly from the estimate and from other bids (*compare the 3 lowest bidders, if applicable*)?
- Is there justification for the difference in unit prices; and
- Any other factors the LPA has determined to be important.

The LPA should analyze the bids for responsiveness and errors. The LPA and NDOR should refer to FHWA's "[Guidelines on Preparing Engineer's Estimate, Bid Reviews, and Evaluation, January 20, 2004](#)" during their bid analysis. The analysis should result in a contract award to the lowest responsive bid. Should the bid be over the engineer's estimate, the LPA shall determine, if the bid amount is appropriate and provide written justification to NDOR to award or reject the project. NDOR, and FHWA for full oversight projects, must concur in the LPA's acceptance or rejection of bids. Even if competition is determined not to be adequate, the LPA may recommend the bid be accepted based on other documented reasons.

11.11.4 NDOR Bid Concurrence

The LPA must prepare an itemized tabulation summary of all bids received and submit it to the NDOR LPA Coordinator. The tabulation must list each bid item, the bid quantity for that item, and the unit price for each item bid by all bidders. NDOR, and FHWA for full oversight projects, must concur prior to awarding a contract. The LPA must submit a request for concurrence with the itemized bid tabulation summary for the project. All applicable DBE forms must be submitted to NDOR's Contracts Office. The written request must include a statement from the LPA indicating their selection or rejection of the low bidder and their desire to proceed or not to proceed with the award of the contract. NDOR, and FHWA on full oversight projects, will review the selection and issue a written concurrence to the LPA if acceptable.

11.11.5 Awarding and Executing the Construction Contract

The LPA should award the project construction contract in accordance with Federal and State laws and policies. The LPA should contact its legal counsel for any legal concerns with the bids or the award. The LPA must provide notification to the NDOR LPD Project Coordinator of the project award. For full FHWA oversight projects, NDOR will submit the notification of award to FHWA for approval within thirty (30) days of bid opening and provide a copy of the resolution from the LPA. If the project has been assigned a DBE goal, the LPA must also include documentation from the contractor that all DBE commitments will be met. Federal funds will not be encumbered or released without this information.

Once the project has been awarded, the LPA may sign and enter into a contract with the awarded contractor. The contract should include items specified in the bid proposal, including all Federal and State requirements. The LPA must send a copy of the executed contract to both the NDOR LPD Project Coordinator and NDOR District Construction Representative. NDOR will forward a copy of the executed contract to FHWA for all full FHWA oversight projects.

11.12 Bidding Procedures for State Let Projects

LPA projects let by NDOR must follow the same Federal requirements, procedures, schedules, and bid analysis procedures as if it were to be a LPA let project. The LPA will prepare all documents needed for the PS&E review. NDOR will create the contract bidding documents, approve all PS&E documents, advertise the project, evaluate the bids, and select the low bidder for the LPA. The LPA will be responsible for concurring in the award and executing the construction contract.

For projects with full FHWA oversight, NDOR will submit the PS&E package to the FHWA Division office for review and approval prior to advertising the project. FHWA will be responsible for reviewing and concurring in the project low bid.

Appendix

NDOR/FHWA PS&E Review Checklist

PS&E Checklist for Federal-Aid Projects

State Project No.: _____

State Control No.: _____

Project Location: _____

Project Description: _____

Review Date: _____

LPA Project Rep.: _____

General:

- Is the project full of oversight according to the Project Approval and Oversight Agreement between NDOR and FHWA?
- Review Project Development Reports, schematics, and schematic file. Check plans against previous comments. Note any unresolved issues.
- Is project located within 2 miles of an airport? Has FAA/FHWA coordination been completed? If needed, has airway-highway clearance been obtained? (23 CFR 620.103)
- Drive the project to look for roadside obstacles and other safety issues. Are there obstacles that can be removed, relocated, shielded, or delineated in that order of preference?
- State or local force account (23 CFR 635.204)?
- State or local furnished materials (23 CFR 635.407), has use been approved?
- Patented or proprietary items (23 CFR 635.411), has use been approved?
- Required borrow or waste (23 CFR 635.407)?

Right of Way:

- Coordinate review with NDOR or FHWA Right of Way Officer. Confirm control of access lines where appropriate. Check conformance with approved right-of-way plans.
- Confirm LPA has preserved all right of way free from all public and private installations, facilities, or encroachments. If any encroachments exist, verify with NDOR Right of Way Officer whether they are in the Public Interest as outlined in 23 CFR 1.23(c). *(This statement should not be construed to mean only a public interest letter (PIL) is needed. The encroachment must be necessary for the highway.)*
- Confirm right of way is clear prior to authorization.
- In the rare circumstances the right of way is not clear prior to authorization, do the contract provisions contain:
 - What restrictions will be on the contractor?
 - An estimate on when the right of way will be cleared?

- A statement that a time extension may be granted if the property is not available as indicated in the contract (23CFR 635.307 and 635.309(b)).
- Right of way – Coordinate final review to assure resolution of all right of way issues. NDOR and/or FHWA Right of Way Officer to approve right of way and relocation assistance certifications.

Railroad on the project?

- Is there a signed agreement between the railroad and LPA? This agreement must be reviewed by NDOR and approved by FHWA (23 CFR 646.216(e)).
- Does the proposal include railroad protective insurance (23 CFR 646.105) and liability insurance requirements (23 CFR 646.107)?

Design Features (Check for compliance with appropriate Design Manuals):

- Design speed on title sheet?
- List applicable section of Design Manual (*Multi-lane rural, urban arterial, etc.*)
- Lane, shoulder, and bridge widths; passing and stopping sight distance; horizontal and vertical alignment; superelevation; ramp designs; weaving areas; etc.
- Do safety features comply with current standards?
- Has crash data, collision diagrams, and safety analysis been performed?
- Any design exceptions required? Documented in project file? (23 CFR 625.3)
- Is pavement design in accordance with NDOR procedures or has NDOR approved the LPA procedures?
- Are warning devices and signing provided at highway-railroad crossings? Also, check on status of railroad agreement.
- Are traffic control devices in compliance with MUTCD? (23 CFR 655.603(d)(2))
- Do specialty items meet warrants (*signals, lighting*)?
- Are number of lanes adequate for projected traffic (*capacity, weaving, etc.*)?
- Check for agreement of grades and elevations between bridge and pavements.
- Check horizontal and vertical bridge clearances. (*These should have been established in preliminary bridge layout.*)
- Do the project termini connect acceptably with the existing roadway?
- Are appropriate accommodations provided for bicyclists and pedestrians, both along the project and at intersecting roadways? If not, are there any “exceptional circumstances” for denying safe and convenient bicycle and pedestrian access? (23 CFR 652 and 2-24-99 Memorandum from Federal Highway Administrator)
- Does design of sidewalks and trails comply with Americans with Disabilities Act Accessibility Guidelines (ADAAG)? (www.accessboard.gov)
- Are bicycle and pedestrian elements addressed on 3R projects? Facilities, regardless of project scope, must be brought up to current accessibility standards in accordance with the ADA.
- Are cost-effective safety items included on 3R projects? (23 CFR 625.2)

- Structures – Coordinate review with Bridge Engineer. Compare structure features with approved preliminary bridge plans, review structures file for unresolved issues, checks for 404 and navigation permits, etc.
- Intelligent Transportation Systems (ITS) – Coordinate review to ensure that the project conforms to the Regional or Statewide ITS architecture. Is an ITS architecture conformance statement available to certify that a systems engineering analysis has been performed?

Construction Zone Safety (23 CFR 630.1010):

- Is a detailed traffic control plan required?
- Review TCP for overall adequacy. See 23 CFR 630.1012.
- Is there a need/provision for temporary signing, markers, barriers, etc.?
- Are provisions made for protecting motorists from drop-offs?
- Are crash-worthy devices such as positive separation barriers, sand barrel arrays or cash attenuators provided as needed? Are they delineated? Are relatively flat areas and deflection distances behind the barriers sufficient?

Environmental:

- Ensure that the preferred alternative in the environmental document is consistent with the STIP , TIP, and/or Safety Schedule of Improvements with regards to design concept and scope. If necessary, amend STIP and TIP, as appropriate.
- Type and date of environmental clearance.
- Is a reevaluation required for the CE/ EAFONSI, or EIS/ROD to determine if the NEPA document, findings, and commitments remain valid or is a supplemental NEPA document required?
- Are historic or archeological resources involved? Is Section 106 processing complete and documented? For Section 106 properties, ensure that Item A.4.g below is also addressed.
- Is noise analysis/attenuation designed and included in the PS&E? Are there exceptions to noise attenuation?
- Section 4(f) approved, if applicable?
- Date of wetlands finding.
- Threatened/endangered species or critical habitats involved? USFWS consultation date.
- Are floodplains involved? Finding date.
- Are the environmental commitments as approved in the environmental document incorporated into the final PS&E? (23 CFR 635.309)
- Has a copy of the environmental commitment listing been received?
- Is SW3P plan adequate? (23 CFR 635.309)
 - Have Project-Specific Locations been addressed?
- Have utilities been addressed?
 - Is status of utilities report included in the proposal?

- Is there concurrent utility adjustment with contract work? Expected clearance date.
- Where required, verify there are agreements between LPA and affected utilities.
- Is responsibility for NEPA addressed regarding utilities and Project Specific Locations (*PSLs*)?

Programming:

- What is the functional classification?
- Is the project in the STIP, TIP, and/or Safety Schedule of Improvements, including description, phase of work, termini, cost, current year?
- EPA coordination for CMAQ? Yes No

Construction Plans:

- Do the plans adequately cover the work? Is anything missing?
 - Does Title Sheet include: title, scale, location sketch, index, project length, symbols, design data (*ADT, DHV, % Trucks*), Federal and State project numbers, and reference to applicable standard specifications and plans?
 - Is the design year at least construction year+20?
 - Typical sections included?
 - Summary of quantities?
 - Traffic control plan included and consistent with the MUTCD (*23 CFR 630.1010(a)(2)*)?
- Have pay item quantities been cross-checked against the plans, summary of quantities, and proposal quantities to identify possible questionable items?
- Are safety appurtenances in accordance with AASHTO Roadside Design Guides or other guidance approved by NDOR?
- Ensure that all proposed work is within the project limits as identified on the plans.

Engineer's Estimate:

- Does the estimate include a pay item for all work included in the plans?
- Are all unit prices reasonable?
- Provide specific review of unit prices for major items (*major items include those with greater cost and/or greater quantity than other bid items*). Compare quantities with plans and proposal.
- Check to see if nonparticipating items are listed separately (*in both the estimate and plans*).
- Has there been a change in cost over 25% from the preliminary estimate(s)? Why?
- Is there an estimate for railroad work (*if needed*)?

Specifications and Special Provisions

- Are all special provisions and supplemental specifications approved for use?
- Do specifications, special provisions, or special specifications conflict with plan notes?

- Does the proposal or plans contain proprietary items? Check on alternates for patented/proprietary items. (*Name brands require two and/or equal, or public interest determination*) (23 CFR 635.411)
- Are all pay items covered by an appropriate specification that agrees with the plans for basis of payment?
- Form FHWA-1273: Required Contract Provisions, Federal-Aid contracts (23 CFR 633.102) included?
- Wage Rates (23 CFR 635.309) included?
- "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" included?
- Noncollusion provision (23 CFR 635.112(f)) included.
- Lobbying disclosure for projects over \$100,000 (23 CFR 635.112(g))
- Buy America (23 CFR 635.410)
- Does the proposal contain DBE provisions?
- Certification of nondiscrimination available?
- Does the proposal contain Standard Form LLL, Disclosure of Lobbying Activities (47 CFR Part 20, Restrictions on Lobbying)?
- Check contract time, including lead time for assembling materials. Is it realistic?
- Does the proposal contain an Incentive/Disincentive (I/D) clause (23 CFR 635.413)?
 - Has the I/D payment been specifically calculated for this project?
 - Is the I/D amount reasonable?
 - Has the I/D calculations been previously submitted for review and approval?
- Does the proposal contain any guaranty or warranty clauses (23 CFR 635.413)?
- Does the proposal have training requirements and are the training special provisions included?
- Does the proposal contain NDOR's pavement smoothness specification or acceptable reference?

Experimental features? Yes No (*FAPG G 6042.4*)

- Furnish work plan to FHWA Planning and ROW Officer and NDOR Materials and Research Engineer for approval.
- Does NDOR/FHWA concur in their incorporation into the project?
- Does the feature have a work plan approved by NDOR and FHWA?

Miscellaneous:

- Preliminary review comments discussed and resolved with NDOR/FHWA?
- Attach any conditions of approval on a separate sheet.

Chapter 12

Construction

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12.1 Introduction

NDOR has responsibility for the construction of all transportation projects funded through the FHWA and is not relieved of such responsibility by authorizing performance of the work by an LPA or other Federal agency. NDOR is responsible for insuring that projects receive adequate supervision and inspection to insure the project is completed in conformance with the approved plans and specifications. The management of these projects relating to construction supervision, project documentation, change orders, materials, disputed work, and claims shall, unless otherwise approved by NDOR and/or FHWA, comply with the policies, requirements, and procedures set forth in [23 CFR, Parts 635](#) and, the appropriate sections of [NDOR's Construction Manual](#); [NDOR's 2007 Standard Specifications for Highway Construction](#); [NDOR's Supplemental Specification to the Standard Specifications](#); and [NDOR's Materials Sampling Guide](#). Quality Assurance (QA) Procedures for Construction covered in 23 CFR 637 Subpart B pertain to projects on the NHS per 23 CFR 625.3(2), Federal-aid projects not on the NHS are to be constructed in accordance with State laws, regulations, directives, and standards.

12.2 Notice-to-Proceed With Construction

For a LPA let project, NDOR will issue the LPA a written Notice-to-Proceed with construction. On a State let project, NDOR will issue the Notice-to-Proceed to the contractor. Normally, the Notice-to-Proceed date will coincide with the tentative beginning date shown in the bid proposal. The notice may also be issued to the contractor at the pre-construction conference. **Do not issue the notice until NDOR has concurred with the lowest responsive bid. In the case of full FHWA oversight projects, FHWA will concur in the lowest responsive bid.**

12.3 Pre-Construction Conference

The purpose of the pre-construction conference is to discuss important details regarding the construction of the project, such as constructability, specifications, plans, method of payment, and contractor's progress schedule (*see Section 12.6*). Other items that should be discussed are the necessary utility adjustments, railroad permits and requirements, availability of right of way, maintenance of traffic, special provisions, and responsibilities of the LPA, NDOR, and the contractor. At this meeting, all involved parties should express any and all concerns regarding the construction project. Special attention should be given to the following items:

Interim Completion Dates	Phasing Requirements
Special Provisions	Project staffing (<i>Project Manager, RC, etc.</i>)
Change Order Approval Process	Claims Resolution Processes
QC/QA Measures	Protection and restoration of property

Status of Utility Relocations	DBE goals and Davis-Bacon Wages
Environmental Commitments	NDOR/FHWA points of contact
Coordination of major local events	

The LPA must make a written record of attendance and items discussed. The LPA will keep a copy of the written record (*or the reasons for not holding the pre-construction conference*) in the project file and provide copies to NDOR and FHWA.

12.4 Construction Administration

The LPA, NDOR, and FHWA share in the responsibility of construction administration. Each of these agencies will have differing responsibilities depending on the level of project and program oversight.

The LPA serves as the main contact for the contractor, NDOR, FHWA and any other agency having an interest in the project. The LPA is responsible for overseeing the construction activities, which will include the day-to-day review and inspection of project construction activities and the record keeping necessary to acceptably document these activities. The LPA shall also have a qualified project inspector on the project site each day the contractor (*or subcontractor*) is working on the project. The inspector must verify that work performed and materials incorporated are as specified in the contract documents, the project is built in accordance with approved plans and specifications, and that quantities are documented sufficiently to make payments for completed work.

LPA Quality Control (QC) responsibilities for construction administration and inspection include, but are not limited to, the following:

- Appoint a qualified full-time public employee to be in RC of the project for the duration of the construction. The LPA RC must be certified with NDOR as detailed in Chapter 15, Section 3.
- Maintain project field diaries, files, and records. Prepare a weekly report of working days charged.
- Furnish a professional engineer and/or architect for the duration of the project's construction. If the LPA needs to hire a consultant to act in this capacity, the consultant must be on the NDOR certified consultant list to do the LPA's requested work;
- Conduct a pre-construction conference and document the proceedings;
- Monitor the construction contract documents for compliance;

- Perform construction surveying and staking related to the project;
- Review work zone traffic control devices daily. Require the contractor to promptly replace and/or adjust the traffic control devices to ensure the public can pass safely with the least amount of interference. This work must be in conformance with the MUTCD. Daily review shall also include periodic nighttime traffic control inspection to ensure adequate retro reflectivity and placement of the temporary traffic control devices;
- Provide railroad companies with official notice to proceed for flagging services, track work, temporary train rerouting, and other items in accordance with the LPA/Railroad Agreement;
- Make all project decisions in a timely manner to avoid undue delay;
- Ensure that proper controls are exercised when measuring and calculating items of work;
- Respond to any complaints or questions by the public in a timely manner;
- When a change order or time extension is required, the change order review and approval process must be followed as detailed in Section 12.9 of this chapter;
- Provide for and ensure that all materials incorporated in the project are tested, sampled, and/or certified according to the LPA's QC measures and to the plan specifications;
- Verify the existence and sufficiency of required material specifications;
- Inspect the project for compliance with NEPA;
- Monitor and require compliance by the contractor with contract provisions such as prevailing wage, EEO, and DBE legal requirements;
- Estimates and payments should promptly be paid to the contractor for completed work and railroads for completed force account work and flagger services;
- Prepare a set of As-built plans to be submitted to the NDOR; and
- Make timely decisions should a contractor file a contract complaint, dispute or claim, with due consideration of all facts involved according to the project's approved Claims Management Process as summarized in Section 9.12 of this chapter.

NDOR QA responsibilities for construction administration include, but are not limited to, the following:

- Appoint a State Representative to the project. He or she will monitor the provisions set forth in the construction contract, discuss any project concerns with the LPA and report any unresolved issues to the NDOR LPD Project Coordinator and the LPA RC. This monitoring will include, but is not limited to: field visits, attending the preconstruction conference/progress meetings, and participating in the final inspection;

- Attend the pre-construction conference and reassure that the change order review and approval process is discussed, confirm the policy for preparing and approving progress estimates, and assure environmental commitments will be incorporated into the project;
- Be a resource to the LPA on technical and/or administrative issues unique to or not expected by the LPA. In this role, NDOR will communicate and support the LPA and not direct the contractor;
- Be a resource to the LPA for the prompt resolution of contractor complaints, disputes, and claims. Assist the LPA with the approval to the resolution of complaints, disputes, or claims that extend the project construction time frame and/or increase project costs;
- Review the construction contract, permits, agreements, and become familiar with the project site and plans prior to the start of construction;
- Follow the Change Order review and approval process as outlined in Section 12.9 of this chapter. NDOR or FHWA will review and respond to change orders within five (5) business days of receipt;
- Review, verify, and accept all appropriate requests by the LPA for reimbursement for Federal and/or State funds. Requests for reimbursement must be signed and recommended by the NDOR State Representative prior to reimbursement. Contract quantities must have accurate records and be sufficiently detailed to withstand an audit;
- Review and monitor the LPA's documentation pertaining to the construction activity, daily work logs, field reports, materials, and progress estimates;
- Visit the project site at least on a weekly basis or more often a circumstances allow. The NDOR State Representative will observe the construction activity, assure that the traffic control is done in accordance to the plans and MUTCD, confirm the erosion control is properly placed and retained as per the plans and specs, monitor the environmental commitment, verify that the inspection efforts commensurate with the construction work, and check documentation for materials sampling, testing, and certification.
- Monitor and provide guidance on Federal and State contract provisions in the areas of EEO, DBE, and Prevailing Wage Compliance;
- Monitor the environmental stewardship for the project;
- Be a technical resource and provide assistance, when requested, to the LPA in the areas of testing, certification and QC/QA.

FHWA will function in the same fashion as NDOR on full FHWA oversight projects with the exception that the LPA shall transmit all calls and correspondence through the NDOR LPD Project Coordinator. Construction inspections may include the following:

Inspection-In-Depth

This process is a thorough on-site review to evaluate a specific contract item, combination of items, or major phase of a project. Inspections-in-depth may be accomplished on an individual project basis or on several projects with the findings summarized as an area-wide or statewide review.

Project Inspection

This inspection is an on-site review to evaluate the LPA's activities, the quality and progress of the work, and if appropriate, to follow up on findings from previous inspections.

Final Inspection

This review determines the extent to which the LPA has exercised its control to assure that the project has been completed in reasonably close conformance with the plans, specifications, and authorized changes.

12.5 Construction Engineering Agreement

Costs for Construction Engineering (*CE*) are eligible for Federal-aid providing Federal requirements have been followed. The LPA may select a consultant (*see Chapter 4*) to perform this function if they lack staff or the expertise needed to perform the engineering and management duties during construction. **A consulting firm cannot perform both the preliminary engineering and construction engineering services on the same project.** If the LPA intends to claim Federal-aid for CE costs, a LPA/Consultant Engineering Agreement for CE services must be prepared, reviewed, and approved by NDOR or FHWA, on full Federal oversight projects, prior to the start of construction. The LPA must use NDOR's standard template agreement. Please contact the NDOR LPD Project Coordinator for a copy of this agreement and assistance in preparing this document.

12.5.1 Monitoring Construction Engineering Consultants

To improve the monitoring of consultants hired to perform CE and testing services, the following is required:

- The LPA shall hold a meeting with the consultant before the work begins to assure that the consultant clearly understands the expectations of the LPA in carrying out the CE services. This meeting could be held immediately, prior to, or after the pre-construction meeting;

- The LPA will require the consultant to provide minutes of the meeting. Some topics for discussion at this meeting may include, but are not limited to:
 - The LPA RC's position as it relates to expected consultant inspection practices and work methods.
 - What is expected of the consultant concerning billable hours in the event of a rain day or other contractor shut down.
 - The consultant's role in shutting down a contractor for non-compliance with the contract.
 - Pertinent safety issues.
 - Preparation and submission of timely pay estimates.
 - Timely project finalization and submittal of contract documents.
 - Familiarization of the consultant with applicable manuals.
- The LPA shall schedule sufficiently frequent meetings, based on project complexity, to ensure consultant activities are properly monitored. These meetings will include a review of project records and site visits. These meetings will be documented by the LPA's Daily Report, interim evaluation, or other appropriate means; and
- An interim evaluation shall be completed each time a project site is visited by the LPA.

12.6 Construction Schedule

The Contractor shall complete all requirements on or before the expiration of the contract time allowance. The Contractor shall develop and submit a progress schedule to the LPA RC for approval. The schedule shall be presented and briefed to the LPA RC at the preconstruction conference. The Contractor shall furnish the schedule to the LPA RC and the NDOR State Representative. This schedule and any supplemental schedule shall show:

- Completion of all work within the specified contract time;
- The proposed order of work for all bid items;
- Projected starting and completion times for major phases of the work and for the total project; and
- Whether portions of the work are to be accomplished by the Contractor or a Subcontractor.

The schedule shall be developed using a method that will clearly and unmistakably identify the critical path of interrelated tasks or items of work required to complete the project. *(The critical path is defined as the sequential path of activities through a network diagram from beginning to end of the project which provides for the completion of the project in the least amount of time.)* The Contractor shall provide sufficient material, equipment, and labor to meet the completion times in this schedule. Progress estimates will not be made until the Contractor's original schedule is approved.

The LPA may accept a progress schedule indicating an early completion but cannot guarantee their resources will be available to meet the accelerated schedule. No additional compensation will be allowed if the Contractor is not able to meet his/her accelerated schedule due to the unavailability of the LPA's resources.

If the Contractor's progress falls behind his/her schedule, the LPA may put the Contractor on notice and direct the Contractor to take whatever action is necessary to expedite completion of the work. Additionally, the LPA RC may request that the Contractor submit, within seven (7) days, a revised progress schedule that demonstrates how and when the Contractor intends to complete the work. The LPA may suspend progress payments until the revised schedule is submitted if the Contractor fails to submit a revised progress schedule within seven (7) days.

If the Contractor fails to make satisfactory arrangements to adjust his/her performance and schedule within seven (7) days, his/her qualification for submitting bids at future lettings may be suspended until the Contractor's performance and schedule demonstrate that the contract will be completed by a time satisfactory to the LPA. The LPA will also issue a written decision as to whether to allow the Contractor to proceed or to stop work and terminate the contract.

When the Contractor desires to change the approved schedule, he/she must submit the proposed revised schedule to the LPA for approval at least seven (7) days before any significant deviation from the currently approved schedule.

The LPA is responsible for reviewing the contractor's working days, contract time requirements, and allowing time extensions according to their own requirements. These requirements must be consistent with other similar projects not using Federal-aid. Contract time extensions proposed after acceptance of the contract must have written approval of the LPA. These time extensions or alterations to the construction schedule will be handled by change order and/or supplemental agreement. The LPA requirements or procedures must be reviewed and approved by NDOR on either a project basis or through the adoption of standards by the LPA that have been reviewed and approved by NDOR. For projects receiving full FHWA oversight, the FHWA Division office will review the contract time requirements based on NDOR's approval of LPA standards or on a project basis.

Monitoring the construction schedule can determine the responsible party for project delays. The LPA shall maintain a written record of project progress. This record must indicate factors which may affect the schedule of work.

12.7 Construction Field Reports and Project File

Project documentation is a key element in the administration of a Federal-aid project. The LPA must keep daily reports to record work in progress. The daily reports will record the hours worked by all persons and equipment usage.

In certain cases, the LPA should record project activities in greater detail, similar to force account detail. Accurately document this information in the following cases:

- Where work is being paid for based on the cost of labor, equipment, and material;
- When there is an anticipated change in the character of work;
- When there is a potentially significant overrun or underrun of materials or time; or
- When there is disputed work or a potential claim.

The narrative portion of the report should include a description of the contractor's operation and the location where the work was performed. It should include statements made by the contractor or agency personnel, which are pertinent to the work. The report must contain the name of the contractor and/or subcontractor(s) performing the work. The LPA must establish a separate record file for each Federal-aid project. The project file must contain all data pertinent to the work and to the requirements of the specifications. In general, project files should support:

- Adequacy of field control;
- Conformance to contract specifications; and
- Contract payments to the contractor.

The file must be complete, available at a single location, and organized and maintained in a manner that permits inspection by NDOR and FHWA personnel during any project inspections or process reviews or random checks. In general, when an LPA lets a project, either through NDOR or the LPA's letting process, the LPA may use NDOR's project monitoring system, "SiteManager" or their own record keeping system.

12.8 Preservation/Architectural Standards

Preservation/Architectural projects receiving Federal-aid must be designed in compliance with the local governing building code authority; the National Fire Protection Association (*NFPA*) 101 Life Safety Code 1994; the US Secretary of the Interior's Standards for Rehabilitation (*36 CFR 67*); and the ADAAG.

The LPA may hire a consultant for construction contract administration for projects that include preservation or architectural work to assure that the project is in compliance with the PS&E documents. The specific list of the architect's responsibilities for construction contract administration is included in the agreement between the LPA and the architect (*consultant*), and in the general conditions of the contract for construction. Refer back to Section 12.5 on Construction Engineering Agreements.

The LPA should consult with the SHPO or the THPO during the construction phase of a project to assure the project is implemented in compliance with the [US Secretary of the Interior's Standards for Rehabilitation \(36 CFR 67\)](#).

Should the LPA hire a professional architect, the architect's responsibilities during construction contract administration, under the LPA's oversight, may include, but are not limited to:

- Observe the construction work for conformance to plans, specifications, and estimate;
- Process the contractor's shop drawings, product data, and samples;
 - Only shop drawings that alter or modify the approved plans and specifications should be considered as project changes and will need approval by NDOR or FHWA prior to incorporation of the item or items into the project. This is typically done through a change order.
- Review the results of construction tests and inspections;
 - Any failed materials tests shall be adequately documented.
 - The failed materials shall be retested or an engineering determination documented why the failed material was accepted. Documentation shall include discussion on whether the material was reworked or not prior to retesting.
 - Retests shall be referenced to the failed test(s).
- Evaluate contractor requests for architectural changes during construction, including consultation and approval, from the SHPO;
 - Submit the appropriate change order document to NDOR or FHWA for review and determination for participation.
- Address and resolve claims brought by the owner and contractor; and
 - Submit the appropriate documents to NDOR or FHWA for review and determination for participation.
- Administer the completion and closeout process for the owner;
 - Project completion notification must be given to NDOR or FHWA so they may schedule a Final Project Inspection.

When hiring a consultant for Architectural/Preservation oversight (*similar to construction engineering*), the LPA must comply with required NDOR consultant selection procedures (see *Chapter 4, Sections 6 or 7*). A standard consultant agreement must be prepared by the LPA RC and must be executed with their consultant prior to start of construction. Similar to CE related services, construction contract administration expenses from an architect are only eligible for Federal-aid if the agreement has been executed prior to expenses being incurred.

12.9 Change Orders

Peculiarities such as unforeseen site conditions, utility conflicts, and geological changes can arise during project construction; and the LPA may need to make changes to the plans, specifications, and the contract to account for these conditions. Change orders are used to make the design a better fit for the actual field conditions. In addition, a change order may result in a better product at no substantial increase in cost or time.

A change order is classified and distinguished by the significance and the nature of the change in parameters. The classification of the change is either “major” or “minor.”

For full FHWA oversight projects, major changes require advanced consultation with and written approval by FHWA prior to any of the work being done. Minor changes require that FHWA be notified prior to work being done, and the notification can be verbal or by email. Approval of minor changes is still required, but it can be done after the change order has been written.

Work orders require the same approval procedures.

All change orders need to clearly indicate which items are nonparticipating for Federal-aid funding. This determination must be clearly noted and documented in the comment section of the change order ***unless the change order is prepared using software that automatically identifies and publishes whether the items are “participating” or “nonparticipating”***.

Additionally, all change orders need to identify whether the document has been created to add or include any item which has the ***potential*** for being attributed to a design error or omission. The maker should keep in mind that such an identification on the document is not a final determination that a design error or omission has occurred. Marking the change order in this way is only intended to flag it to show that the maker feels that the ***potential*** exists.

Field staking errors should be included in the general characterization of “design errors or omissions.”

Major Changes

Major changes to the contract plans or specifications include:

Changes in geometric design that affect the operating or safety characteristics of the facility.

- Changes in structural design.
- Changes to typical section.

- Settlement of a contractor's claim which exceeds \$100,000.
- Changes to staging or the traffic control plan other than those necessary to implement the intent of the original plans and specifications. For example: replacing a bridge half at a time when the original concept was to close the road and detour all traffic.
- Cost reduction proposals (*value engineering*).
- Single changes extending contract completion time (*including suspensions of work, when applicable*) by more than thirty (30) calendar days or fifteen (15) working days, depending on the time method in affect on the contract. The change order should provide the time needed to accomplish the work, and any time extension granted in the change order (*or subsequent time extension document*) must be based on the amount of time spent on the extra work when the extra work was deemed to be the controlling operation.
- Combined changes resulting in an absolute value increase of \$100,000 total cost when all items affected by the changes are considered, unless covered by another of these criteria.
- Individual existing line item changes (*overruns*) exceeding \$100,000 or a change which requires the addition of a new or modified pay item required to complete the work in accordance with the contract, the value of which exceeds \$100,000.
- Orders for force work (*work to be done by NDOR or the LPA*);
- Changes to the contract plans or specifications shown in the project documents approved by FHWA (*unless the change has been previously approved and covered in an existing specification OR fits under the "Minor Changes" definitions shown below*).
- Changes that affect public involvement, environmental mitigation, or environmental Commitments.
- Waiver of Buy America provisions.
- Changes to the scope of work or extension of the contract limits shown in the project documents approved by FHWA.
- ROW access control revisions for projects on the National Highway System (NHS).

Note: Reference is made to Paragraph 2. of Subsection 104.02 of the NDOR *Standard Specifications*. In that subsection, the NDOR has defined that any item which constitutes 10% of the value of a group of work shall be considered a "major" item of work. It also defines that when a "major" item of work overruns or underruns by more than 25%, a "significant change" to the character of the work has occurred and certain rules apply. It should be noted, however, that the definition of a "major" item of work in the *Standard Specifications* is not necessarily related to the definitions of "Major Changes" and "Minor Changes" presented here.

Minor Changes

Minor changes to the contract plans or specifications include:

- The addition of a new or modified pay item required to complete the work in accordance with the contract, the value of which does not exceed \$100,000.
- Combined changes resulting in an absolute value increase of less than \$100,000 total cost when all items affected by the changes are considered, unless covered by another of these criteria.
- An adjustment to the approved *Standard Specifications* or a project's special provisions.
- Changes caused by outside agencies such as utilities and/or railroads.
- Single changes extending contract completion time (*including suspensions of work, when applicable*) by no more than thirty (30) calendar days or fifteen (15) working days, depending on the time method in affect on the contract. The change order should provide the time needed to accomplish the work, and any time extension granted in the change order (*or subsequent time extension document*) must be based on the amount of time spent on the extra work when the extra work was deemed to be the controlling operation.
- Design plan changes which do not reflect a significant change in structural design or typical section (*plan errors may or may not be participating changes*).
- An administrative contract change or contingency-type change order that adjusts contract quantities to the current contract amounts or final As-Built quantities or adds contingency items to contract, regardless of cost, as permitted by the *Standard Specifications* or Contract Special Provisions.
- ROW access control revisions for projects not on the National Highway System (*NHS*).

The change order must provide sufficient detail to show that the work is necessary, consistent with specifications, within the scope and intent of the LPA agreement, and approved by the LPA RC. All change orders must be reviewed and approved by the NDOR State Representative (*and by FHWA on full oversight projects*).

Minor changes may be incorporated into the project prior to approval but are subject to a nonreimbursement determination. The LPA should discuss any change order request with the NDOR State Representative (*and FHWA on full oversight projects*) prior to initiating the change to avoid this possibility.

The LPA must assure that the contractor does not perform “major” change order work prior to approval by NDOR (*and FHWA on full oversight projects*). Work done prior to this approval may become ineligible for Federal or State reimbursement.

For both LPA and NDOR let projects, the LPA must coordinate a Change Order Review and Approval Process with the NDOR State Representative prior to the beginning of the construction (*typically at the pre-construction meeting*). It is recommended the LPA follow the procedures outlined in the next sub-sections. The LPA is required to use NDOR's Standard Change Order Form or a form approved by NDOR.

12.10 Construction Materials Quality Control/Quality Assurance

The quality of materials and workmanship on a project must conform to the contract plans, specifications, and approved changes so that the public funds expended will have purchased a safe, economical, and fully functional transportation facility. It is the LPA's responsibility to ensure measures are taken to assure this quality.

1. Projects on NHS

The [Nebraska Quality Assurance Program for Construction](#) will be incorporated.

2. Projects off the NHS

In general, QC/QA is a process employed to ensure a certain level of quality in a product or service. The basic goal of QC/QA is to ensure that the products, services, or processes provided meet specific requirements and are dependable, satisfactory, and fiscally sound. Therefore, the LPA must provide all steps necessary, through verification sampling and testing, to validate that a high quality product is being produced during construction and incorporated into the project.

Materials Sampling and Testing Requirements

LPAs wanting to use their own sampling, testing, and acceptance procedures of materials that are incorporated into a project must have those procedures approved by NDOR or FHWA.

The LPA sampling and testing procedures shall consist of:

- Frequency guide schedules for verification sampling and testing which will give general guidance to personnel responsible for the program and allow adaptation to specific project conditions and needs;
- Identification of the specific location in the construction or production operation at which verification sampling and testing is to be accomplished; and
- Identification of the specific attributes to be inspected which reflect the quality of the finished product.

LPAs not wanting to develop their own sampling and testing procedures or whose procedures have not been approved by NDOR or FHWA shall utilize [NDOR's Materials Sampling Guide](#).

Prior to pre-construction meeting, a worksheet identifying the materials sampling and testing frequency which meets or exceeds the frequencies included in the NDOR's Materials Sampling

Guide is developed. LPA will be responsible to develop this required worksheet projects not let through NDOR. The NDOR's Materials and Research Division is responsible for developing this worksheet for all the projects let through NDOR.

Materials shall be sampled and tested by qualified individuals (*testers*) using calibrated testing equipment. Only qualified laboratories will be allowed to participate in the testing program.

Qualifications

1. Tester

Each tester must be qualified through NDOR and/or ACI. The NDOR Quality Assurance Managers will be responsible for certifying individuals throughout the state. The testers will be certified through successful completion of training provided by NDOR, or ACI. Each tester will be certified for a period of five (5) years for each specific test. NDOR will maintain a list of all certified testers. The NDOR State Representative will be responsible for checking the tester's certification at the construction site. The NDOR Quality Assurance Managers will also visit the project site at least once during the construction to ensure the materials are being sampled and tested by certified individuals.

2. Equipment

The materials testing equipment shall be calibrated based on the manufacturer's recommendation. The calibration certification shall be available for inspection at all times. The NDOR State Representative will be responsible for checking the equipment calibration documentations.

3. Laboratory

Only qualified labs are eligible to perform materials testing.

Labs performing material testing shall be qualified by one of the following methods:

- AASHTO Materials Reference Laboratory (*AMRL*)
- NDOR Qualified Labs including:
 - NDOR Branch labs,
 - Contractor's lab conducting acceptance testing (*if the specification requires the contractor to perform the acceptance testing, the verification tests will be done by State branch labs*),
 - Other NDOR-qualified independent labs, and
 - Consultant qualified labs.

NDOR takes an active role in each project as it is being constructed. A NDOR State Representative will be assigned to every LPA Federal-aid project. The NDOR State Representative, though not physically on the project every day, is responsible for providing QA

reviews to ensure that: sufficient project oversight is being performed, adequate record-keeping is being achieved, the work is performed satisfactorily and that project expenses are being paid accurately, with supporting documentation, and according to the requirements established in the plans, standard specifications, and contract. The NDOR State Representative will act as a liaison between the LPA and NDOR when correspondence, contract documentation, or other exchange of information is needed between the parties.

12.11 Project Documentation for the Construction Work Phase

The LPA is responsible for accepting quantities of work preparing documentation to support payment for work performed by the contractor. The documentation shall provide validation that the quantity for payment has been determined in accordance with contract requirements with necessary measurements, calculations, weight tickets, etc., and that the work was done in close conformity to the approved plans and specifications.

Any LPA project documentation shall be available to NDOR and FHWA for review. The LPA must retain project files and documents for three (3) years from the date of final project from NDOR payment.

Project Documentation

The LPA shall keep daily reports to record work in progress. The daily reports shall record the hours worked by construction personnel and equipment:

- Where work is being paid for based on the cost of labor, equipment, and material;
- When there is an anticipated change in character of work;
- When there is a potentially significant overrun or underrun; or
- When there is disputed work or a potential claim.

The detail should be sufficient to permit review of the contractor's costs of the work in a manner similar to force account. Equipment should be identified sufficiently to enable determination of the applicable rental rates and operator's minimum wage. In some cases, it may be desirable to record dates of arrival or departure of equipment, as well as idle time for breakdown or other reasons.

The narrative portion of the report should include a description of the contractor's operation and the location where the work was performed. It should also include statements made by the contractor or project personnel, which are pertinent to the work. The report must also contain the name of the contractor or subcontractor performing the work.

When the report is used to determine compliance with the labor provisions of the contract, include the following additional information:

- The names or identification numbers of the contractor's personnel;
- The respective classifications of the work being performed; and
- The number of hours worked on the date covered by the report.

Reporting for labor compliance shall be done on a random spot-check basis only. The number of reports for labor compliance purposes should vary with the size and duration of the contract and the degree of compliance revealed by checking previous reports. One report per week for each operation being performed on the project should be used as an initial guide. The frequency may be reduced after a high degree of compliance has been verified.

The LPA daily reports discussed are required in addition to the extra work reports submitted by the contractor. Although the contractor is required to file an objection to the working day count within fourteen (14) days, claims often fail to surface until the latter stages of a job when the remaining working days are few. For this reason, it is especially important that a complete and accurate daily field diary be maintained. For purposes of making the initial assessment of working days and any subsequent review, the following information (*if applicable*), should be recorded or documented daily in the LPA's field diary:

- The current controlling operation;
- The weather;
- The work performed;
- Unusual or adverse weather or soil conditions encountered;
- Other unusual occurrences impacting work on the project;
- The times that major work operations halted and resumed and the reasons why;
- Changes in the workforce affecting work on the controlling operation;
- Major deviations from the contractor's approved progress schedule; and
- Conversations pertaining to any of the above.

The need for this information is not always apparent until the work is completed or until a request has been made for reconsideration of the charging of working days.

Project Files

The LPA must establish a separate record file for each Federal-aid transportation project. The project file shall contain all data pertinent to the work and to the requirements of the specifications. In general, project files should support:

- Adequacy of field control;
- Conformance to contract specifications; and
- Contract payments to the contractor.

The file must be complete, available at a single location, and organized and maintained in a manner that permits inspection by NDOR and FHWA personnel during project inspections, process reviews or random checks.

Whenever the LPA is unable to produce requested data or information, it will be assumed by reviewing personnel the required actions were either never performed or not properly recorded. Organized project files can eliminate these negative assumptions.

The NDOR State Representative shall periodically inspect, during construction, LPA project files for compliance with Federal and State requirements. Organization and content of the project file is one indicator of the effective and efficient management of the project by the LPA RC. It also minimizes resources necessary for conducting process reviews.

LPA Federal-aid project files shall be organized and include the following information:

- Project Personnel;
- Correspondence;
 - Contractor.
 - General.
- Weekly record of working days (*if contract time is specified*);
- Materials Data;
 - Certificate of Proficiency (*NHS only*).
 - Independent Assurance Sampling and Testing.
 - Report of Witness Tests.
 - Project Acceptance Test Results and Initial Tests.
 - Project Independent Assurance Tests.
 - Report of Comparison Between Independent Assurance Tests (*IAT*) and Acceptance Tests.
 - Summary of Independent Assurance Testing.

- Notice of Materials to be Used.
- Notice of Materials to be Furnished.
- Notice of Materials to be Inspected.
- Report of Inspection of Material.
- Field Laboratory Assistant Reports.
- Certificates of Compliance.
- Material Testing Summary Log.
- LPA Daily Reports;
 - Consulting engineer (*if used for CE*).
 - Structure engineer (*if used on project*).
- Contract Item Pay Quantity Documents;
- Contract Change Orders;
- Extra Work Reports;
- Progress Pay Estimates and Status of Funds;
- Labor Compliance and EEO records;
- Contractor's Payrolls;
- Final Report;
- Materials Certificate; and
- DBE Records.

Other sections of this chapter explain the contents of the above listed file categories. Larger and more complex projects usually require a more detailed record-keeping system. During project construction activities the LPA and NDOR shall monitor the contractor for Title VI, EEO, Labor, ADA, and DBE compliance as applicable and covered in detail in Chapter 10.

Construction Records for Accounting Procedures

On State let projects, the procedures outlined in [NDOR's Construction Manual](#) shall be followed. On LPA let projects, a similar accounting system should be used. The essential elements of the system are:

- It must contain a file of source documents supporting payments made to contractors. Source documents shall be any written record(s) prepared by the administering agency (*LPA or NDOR*) which clearly record;
 - To what specified portion of work it applies.

- The necessary measurements and/or calculations by which the quantity is determined.
- The name of the individual who made the determination.
- The calculations on the source documents are to be checked in accordance with good engineering practice and the name of the checker included. Checking should be performed as soon as practicable, but in any event prior to payment of a final estimate. Quantities from source documents must be entered in the appropriate project records;
- It should contain a separate item sheet for each contract item and any other appropriate accounting category such as; adjustments of compensation; extra work payments; payments for materials not yet incorporated into the work; and deductions;
- It should contain a contingency balance and anticipated changes sheet, on which the current estimated probable final cost of the work is recorded; and
- It must provide for retention of the records in accordance with the LPA/NDOR Project Program Agreement. This agreement requires that records be retained by the LPA for a period of three years (3) from the date of final payment under the project program supplement.

Progress Estimates must be prepared and a copy submitted to the NDOR Controller Division through the NDOR LPD Project Coordinator: with each invoice requesting reimbursement. The LPA may use its own format. The progress estimate shall be used as part of the backup for the invoice.

Availability

Use of a uniform project recordkeeping system, together with diligent maintenance of the system, greatly facilitates process reviews and minimizes negative findings. Good records of all construction activities clearly demonstrate to FHWA and NDOR that project supervision and control were attained on the project.

12.12 Claims

A claim can be defined as a demand for additional compensation that is formally submitted to the LPA RC outside of the normal process for change approvals. In simple terms, a continued demand for payment is termed a claim if it has been previously denied under the LPA's or NDOR's normal procedures for change approval.

The LPA may be subjected to claims by the contractor who performs the work. The terms of the project between the LPA and the contractor exist in the contract, the specifications and the plans. There are certain terms that are not stated in the contract documents. These are known as implied terms. For instance, there is an implied warranty that the plans and specifications are free from defects and, unless stated otherwise, that there will be safe and continuous access to all areas within the project's boundaries. Claims arise from both stated and implied terms.

Federal funds may participate in a case-by-case basis to the extent that any contract adjustments made are supported and have a basis in terms of the contract and applicable State and Federal law. The LPA must inform NDOR and FHWA of the details of the claim at an early stage so that coordination of efforts can be satisfactorily accomplished.

Every claim has two distinct elements, entitlement and damages. The contractor must prove entitlement. Examples of entitlement include: work not shown on plans, conflict between plans and specifications, third party delays, and unforeseen conditions. Damages are the costs incurred over and above normal costs and which are caused by the claim event. Each claim must have both of these elements. If a contractor encounters a situation where there would be an entitlement but no monetary impact, there is no claim. Likewise, there is no claim when a contractor claims additional costs but cannot establish an entitlement.

The contractor must make reasonable efforts to mitigate damages. Mitigation might include resequencing, reducing, remobilizing, or changing manpower. The contractor is entitled to recover the costs of mitigation. Certain types of disputes by their nature may result in a claim. Claims may be due to plan discrepancies or omissions, allowable costs in calculating change orders, unforeseen site conditions, quantity variations, interferences, and delays. Delays require careful analysis to determine who is responsible. The contractor must demonstrate that the delay was critical, that the delay in question affected the overall project schedule, and was a controlling operation with respect to project completion.

Excusable delays are those that are unforeseeable and beyond the control of the contractor. Excusable delays may be either compensable or noncompensable. Delays caused by the LPA, such as lack of site access, late approval of shop drawing, and redesign, may be compensable but would be considered as ineligible for Federal-aid reimbursement. Delays caused by third parties outside the contractor's control, such as area-wide labor disputes, floods, transportation industry delays, fire and vandalism may be noncompensable. Nonexcusable delays are always noncompensable. These delays, such as subcontractor delay, late mobilization, production longer than scheduled, and equipment breakdowns are caused by the contractor or under his control.

The contractor is solely responsible for proof of entitlement and proof that additional costs were incurred.

The contractor shall give the LPA written notice, before the work begins, of each instance where he/she intends to file a claim. This notice requirement allows the LPA the opportunity to mitigate the claim situation and to begin to keep careful and specific records of the contractor's activities, manpower, equipment, and materials that are related to the claim.

When requesting Federal-aid for a claim, the LPA must provide the legal and contractual basis for the claim, together with the cost data and other facts supporting the award or settlement. Federal-aid in such instances shall be supported by an LPA audit of the actual costs incurred by the contractor unless waived by NDOR or FHWA as unwarranted. Where difficult, complex or

novel legal issues appear in the claim, such that evaluation of legal controversies is critical to consideration of the award or settlement, the LPA must include a legal opinion from its counsel stating the basis for determining the extent of the liability under local law, with an appropriate level of detail considering the magnitude and complexity of the issues involved.

In cases where the LPA receives an adverse decision in an amount more than it can support or settles a claim in an amount more than it can support, NDOR or FHWA can agree to participation up to the appropriate Federal matching share when it involves a Federal-aid participating portion of the contract, provided that:

- NDOR or FHWA was consulted and concurred in the proposed course of action;
- All appropriate courses of action had been considered; and
- The LPA pursued the case diligently and in a professional manner.

Federal funds will not participate:

- If NDOR or FHWA determines that LPA employees, officers, or agents acted with gross negligence, or participated in intentional acts or omissions, fraud, or other acts not consistent with usual State practices in project design, plan preparation, contract administration, or other activities which gave rise to the claim;
- In punitive damages, anticipated profit, or any award or payment of attorney's fees paid to an opposing party in litigation; and
- In tort, inverse condemnation, or other claims erroneously styled as claims "under a contract."

Payment of interest associated with a claim will be eligible for Federal-aid provided that the payment to the contractor for interest is allowable by State statute or specification and the costs are not a result of delays caused by the LPA, NDOR, or the contractor. The interest rates must not exceed the rate provided for by the State statute or specification.

The Contractor's attorney fees are not eligible for Federal-aid. The basis for this determination is that there is no statutory authority for the payment of attorney fees. However, the LPA's or NDOR's administrative costs, including attorney fees related to the defense of claims, are reimbursable. Such costs are reimbursable at the same participation rate as the related construction project.

FHWA does not participate in anticipated profit because this is in the realm of the contractor's risk.

Where the LPA affirmatively recovers compensatory damages through contract claims, cross-claims, or counter claims from contractors, subcontractors, or their agents on projects on which there was Federal-aid participation, the Federal share will be the Federal pro rata share applied

to the amount recovered of the project or projects involved. Such recovery will be credited to the project or projects from which the claim or claims arose.

If needed, NDOR will provide support to the LPA and help the LPA understand the claims process.

12.13 Termination of Contract

All contracts exceeding \$10,000 must contain suitable provisions for termination by the LPA, including the manner in which the termination will be carried out and the basis for settlement. In addition, such contracts must describe conditions under which the contract may be terminated for default as well as conditions where the contract may be terminated because of circumstances beyond the control of the contractor.

Prior to termination of a Federal-aid contract, the LPA must consult with and receive the concurrence from NDOR or FHWA. The extent of Federal-aid participation in contract termination costs, including final settlement, will depend upon the merits of the individual case. However, under no circumstances will Federal funds participate in anticipated profit on work not performed.

Normal Federal-aid plans, specifications, and estimates, advertising, and award procedures are to be followed when NDOR or the LPA awards the contract for completion of a terminated Federal-aid contract except as follows:

- If the surety awards a contract for completion of a defaulted Federal-aid contract or completes it by some other acceptable means, NDOR or FHWA will consider the terms of the original contract to be in effect and that the work will be completed in accordance with the approved plans and specifications. No further NDOR or FHWA approval or concurrence action will, therefore, be needed in connection with any defaulted Federal-aid contract awarded by a surety. Under this procedure, the construction amount eligible for Federal-aid on the project should not exceed the amount representing what the cost would have been if the construction had been completed as contemplated by the plans and specifications under the original contract.

When NDOR or the LPA awards a contract for completion of a Federal-aid contract previously terminated for default, the construction amount eligible for Federal-aid on the project may not exceed whichever amount is the lesser;

- The amount of the payments made under the original contract plus payments made under the new contract; or
- The amount of what the cost would have been if the construction had been completed according to the plans and specifications under the original contract.

12.14 Liquidated Damages

The LPA must establish specific liquidated damages rates applicable to projects. The rates may be project-specific or may be in the form of a table or schedule developed for a range of project costs and/or project types. These rates must, as a minimum, be established to cover the estimated average daily CE costs associated with the type of work encountered on the project. The amounts must be assessed by means of deductions, for each calendar day or workday overrun in contract time, from payments otherwise due to the contractor for performance in accordance with the contract terms.

The rates established are subject to NDOR or FHWA approval either on a project-by-project basis, in the case of project-specific rates, or on a periodic basis after initial approval where a rate table or schedule is used. In the latter case, the LPA must periodically review its cost data to confirm that the rate table/schedule reflects the actual average daily CE costs associated with the type and size of their projects. Where rate schedules or other means are already included in the LPA or NDOR specifications or standard special provisions, the LPA must submit verification that the amounts are adequate to NDOR or FHWA for review and approval. After initial approval by NDOR or FHWA of the rates, the LPA may review the rates every two (2) years and provide updated rates as necessary for NDOR or FHWA approval. If updated rates are not warranted, the LPA must also report this to NDOR or FHWA for their review and acceptance.

The LPA may, with NDOR or FHWA concurrence, include additional amounts as liquidated damages in each contract to cover other anticipated costs of project-related delays or inconveniences to the LPA or the public. Costs resulting from winter shutdowns, retaining detours for an extended time, or similar costs, as well as road user delay costs, may be included.

Appendix

NDOR Standard Change Order Form

**Nebraska Department of Roads
Change Order Report**

Date: DATE

Page: X of X

Change Order Nbr: 00X

Contract ID:
Change Order Description:

CO/SA #: _____

Vendor:

Primary Project Information:

Primary Project Location:

Contract Desc:

Change Order Approval Date:

Letting Date:

Change Order Type:

Force Acct ID:

Zero Dollar Change Order:

Project Information:

Project Location:

Item Nbr	Catg	Item Code	Unit	Unit Price	Bid Qty	Total Approved Qty	This CO Qty	Amount of Change
Item Description		Suppl Description		CO Item Description				This Change: \$ -
								Prev Revised: \$ -
								New Revised: \$ -
								Bid Amount: \$ -
								Revised Total: \$ -
								Pct Change: \$ -

Item Nbr	Catg	Item Code	Unit	Unit Price	Bid Qty	Total Approved Qty	This CO Qty	Amount of Change
Item Description		Suppl Description		CO Item Description				This Change: \$ -
								Prev Revised: \$ -
								New Revised: \$ -
								Bid Amount: \$ -
								Revised Total: \$ -
								Pct Change: \$ -

Total Value for Change Order 00X \$ -

FHWA REMARKS HERE

FHWA Federal Representative Date

NDOR State Representative Date

Authorized by (contractor's signature) Date

Title

LPA Responsible Charge Date

Chapter 13
Reimbursements

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13.1 Introduction

This chapter describes the procedures the LPA must follow to obtain Federal and/or State reimbursement for expenses on their projects. It is important to understand that funding for LPA Federal-aid projects are not disbursed as a grant. Instead, the LPA will pay the consultant or contractor directly and then submit a request for reimbursement of eligible expenses to the NDOR LPS Project Coordinator.

Title 23 USC, requires NDOR to administer all funds apportioned and allocated to the State of Nebraska. In addition, [49 CFR Part 18](#) (*referred to as the "Common Rule"*) are the uniform administrative requirements that NDOR and the LPA are also required to follow to administer the Federal funds. For projects administered by the LPA, NDOR is responsible for monitoring activities (*49 CFR 18.40*) and providing information to assure compliance with applicable Federal requirements.

Projects are designed and constructed and reimbursements are made under the terms of an LPA/NDOR Project Program Agreement. No work on any part of the project can proceed until Federal funding has been approved (*obligated/authorized*) by FHWA and the LPA has received approval notification by NDOR. Approved funds will be distributed by NDOR to the LPA.

13.2 Number and Timing of Submittals

The LPA will typically submit invoices no more than once every month, numbering them sequentially for each work phase. Generally, the LPA should expect reimbursement within three weeks of acceptance and approval of a properly prepared invoice submittal by the LPA. If the invoice requires correction or adjustment, the expected reimbursement date would start from the time the corrected or adjusted invoice is approved. If payment is not received within this time, the agency should contact the NDOR LPS Project Coordinator. NDOR may request from the LPA a statement of costs to date at any time by submitting a written request.

13.3 Billing Procedures

Federal funding must be approved prior to incurring costs and claiming reimbursement by the LPA. The NDOR will process invoices by requesting payment from the FHWA for the cost of completed work which meets eligibility requirements. All costs submitted for reimbursement must be supported by original source documents (*49 CFR 18.20 (a)(6)*).

All reimbursement requests must contain proper documentation supporting the payment of eligible expenses (*49 CFR 18.20 (a)(6)*). Besides the required documentation, there is a process in which reimbursements will be made. The following steps describe the billing procedures:

1. The LPA reviews the progress report and payment invoice from the engineer or contractor for accuracy and acceptance. The LPA will verify all work completed (*e.g. quantities and hours worked*) is accurate, in agreement with the LPA/NDOR Project Program Agreement,

and segregated by funding source. The progress report should provide enough detail to inform the NDOR LPS Project Coordinator of progress made in completing the work, of anticipated barriers and of potential solutions to barriers and problems. The LPA's progress report should also describe the specific items of completed work for which an invoice for reimbursement is being submitted. While the completed work may exceed the amount invoiced, the LPA should never invoice for more work than was completed as indicated in the invoice for that time period. If nonparticipating costs are involved, the LPA must include them on the invoice and deduct them from the total.

2. The LPA is required to pay the engineer's and contractor's payment invoices (*less retention, if applicable*) within fourteen (14) days or by the terms specified in the contract (*whichever is the longer term*) with the engineer or contractor.

Final payments and retention are to be made thirty (30) days after the receipt of a proper invoice or LPA acceptance of the completed work or services, whichever is later.

3. The LPA submits a reimbursement request for PE and ROW expenses directly to the NDOR LPS Project Coordinator or a Construction payment request to the NDOR State Representative. The reimbursement request may vary, but the following information **must** be included:

- A formal letter requesting reimbursement of eligible expenses including a certification statement. The LPA RC will certify that the work shown on the invoice has been performed; completed in accordance with terms of agreement or approved plans and specifications; has verified the cost(s) shown are true and correct; and in no way represents any degree of duplication of payments that have or will be received. This letter must be signed by the LPA RC.
- Date of invoice. Invoices must have a current date;
- Invoice number. This is a serially-assigned number that begins with #1. This progress billing number allows the LPA to determine that it has received all the invoices for the project;
- Federal-aid project and control numbers, e.g. URB-5012(1), C.N. 25681;
- Phase of work headings such as PE, ROW, Utility, CE, and/or Construction;
- Time period when claimed project participating costs were incurred and paid;
- Detailed cost breakdown of expenses with supporting documentation (*as detailed in Section 13.4*);

- The LPA share of the payment or any non-participating costs;
 - Cumulative costs to date; and
 - Proof of payment.
4. All invoices received from the LPA must be approved by the NDOR State Representative (*if a construction payment*) and the NDOR LPS Project Coordinator prior to payment. NDOR reviews the request for acceptance and all back-up documentation. When NDOR receives a proper invoice, the LPA can expect progress payment (*less retention*) to be issued according to terms specified in the contract between NDOR and the LPA. Generally payment would be made within forty-five (45) days. Final Payments and retention are to be made thirty (30) days after the receipt of a proper invoice or LPA acceptance of the completed work or services, whichever is later.

When an invoice is determined improper or if it includes unallowable costs (*see Section 13.5 for a listing of unallowable costs*), NDOR must return the invoice to the LPA as soon as possible, but no later than seven (7) days after receipt of the improper invoice. NDOR is required to identify all defects that prevent payment. If an invoice requires adjustment, the NDOR LPS Project Coordinator will return the invoice to the LPA and have them submit a revised invoice for the correct amount.

If approved, the NDOR Local Projects Section will submit the original invoice to NDOR Controller Division for payment processing and maintain one copy for their files. All back-up documentation will be stored electronically for each invoice. If an invoice is determined improper and is returned to the LPA, time for prompt payment is not started until an acceptable invoice is received.

5. NDOR will pay all allowable costs and reimburse the LPA through Electronic Funds transfer.

13.3.1 Inactive Obligations

FHWA defines an inactive obligation as a project for which no expenditures have been charged against Federal funds for the past twelve (12) months. NDOR will review inactive obligations and revise the Federal funds obligated (*available for expenditure*) for a project to reflect the current cost estimate.

Once the LPA receives approval to proceed on a project, work should begin, funds expended and invoices generated. If the project proceeds as expected or is delayed for a legitimate reason (*e.g. contractor claim or litigation*) it is considered a valid obligation and no action is required. However, if the project does not proceed, incur costs and submit invoices it is considered an Inactive Obligation and action is required.

NDOR's review will determine if unexpended project funds should be de-obligated (*taken back*) or should remain obligated. NDOR will notify the LPA if the funding is to be de-obligated and give the LPA fourteen (14) days to provide substantive documentation (*e.g. invoices, work tickets, payroll*) that the project is active and should remain open. If NDOR determines the support is insufficient to keep the project open, NDOR will advise FHWA and the LPA and initiate an electronic action to close the project. When the project is ready to proceed and if Federal funds are available at that time, the LPA may request NDOR re-open the project.

13.3.2 Non-completed Projects

If a project is not completed, the LPA sponsoring the project will be required to repay the amount of federal or state funds reimbursed to date. Section 102(b) of title 23, United States Code, as amended by SAFETEA-LU, requires repayment of all Federal-aid reimbursements for PE costs on any project that has not advanced to ROW acquisition or construction within ten (10) years after Federal-aid first made available. NDOR and FHWA may waive the repayment requirement due to special circumstances. A written request from the LPA, with sufficient justification, should be sent to the NDOR LPS Project Coordinator for consideration.

A time extension from FHWA for repayment of Federal funds on a project that has been stalled may be made. The request should be accompanied with sufficient justification. Shifting political priorities, insufficient transportation budgets and staffing should not be considered stand alone justifications for time extensions. The LPA is responsible for any project cost overruns not authorized by NDOR.

13.3.3 Invoice Review Checklist

The LPA and NDOR may use the following items and questions as assistance in processing invoices:

- Has the LPA submitted all required documents so the project can be processed with FHWA for federal fund reimbursement?
- Is the NDOR/LPA Project Program Agreement and any supplements or consultant agreements currently executed by both NDOR and the LPA? Have the agreements expired (*cannot authorize payment on expired agreements*)?
- Are the reimbursable phases of work authorized by FHWA?
- Were all the federally eligible costs incurred after the Federal Authorization date?
- Are authorization dates referenced on the invoice?
- Is the invoice in the proper format?
- Is this invoice number in the right sequence (*see previous billing, e.g. if the most recent invoice received was No. 6, is the current invoice no. 7*)?

- Was the original invoice, progress report and the required support documentation submitted? Do the invoice, progress report and support documentation reconcile?
- Is this the first construction invoice? If so, a copy of the award package must be included (*exception: force account done by LPA's work force*). For construction progress invoices, the LPAs progress payment to the contractor must be submitted along with the invoice.
- Is the LPA current with submittal of DBE quarterly reports (*notify LPA if report is delinquent and warn that reimbursement may be withheld*)?
- Is the date of the invoice current (*resubmitted invoices must be redated*)?
- Does the invoice have the LPA's letterhead, address, and signed certification statement from the LPA RC?
- Is the invoiced amount less or equal to the total authorized funds and for this project?
- Has the LPA exhausted Federal funds for the phase?
- Does the invoice show the correct project number and correct pro rata share?
- Is the correct Federal Appropriation code (*i.e. Q240*) shown for each phase of work and does it agree with the NDOR/LPA project program agreement?
- Was the indirect cost reimbursement rate applied only to direct costs included in the direct cost base?
- Does the invoice show current and cumulative costs to date? Are all calculations correct?
- Does the invoice have a contact person's name and phone number?

13.4 Identification of Eligible Work Phase Expenses

Allowable project costs must adhere to 23 USC and the applicable United States Office of Management & Budget Cost Principles [49 CFR 18.22](#) & [2 CFR 225](#) (*formerly OMB Circular A-87*), agency program regulations, the terms of LPA/NDOR Project Program Agreements.

If an LPA is not adequately staffed to provide the necessary preliminary and/or construction engineering oversight, they must obtain prior approval (*documentation showing approval prior to incurring a specific cost*) from NDOR before engaging with a qualified consultant to provide the professional services. NDOR and the LPA are responsible for ensuring that the Federal requirements are adhered to by the consultant.

13.4.1 Preliminary Engineering

PE is the initiation, planning, surveying, design, and related work preparatory to the advancement of a project to physical construction. For LPA projects, the PE costs will be separated into two different categories.

1. Preliminary Design (*includes environmental studies*)
2. Final Design

The invoices must present actual direct labor, actual overhead, and actual direct non-labor costs, as well as a prorated amount of the fixed fee. The prorated fixed fee amount shall be based upon the actual direct labor and overhead costs billed for that period relative to the consultant's estimated total direct labor and indirect non-labor costs. Each invoice must indicate the hours worked and each individual's actual labor cost.

The date of notice to proceed for the construction contract is the cutoff for charging to preliminary engineering. During the construction phase of a project, when a major change takes place that requires additional preliminary engineering work, the preliminary engineering phase may be reopened on a case-by-case basis after approval from FHWA.

13.4.2 Right-of-Way

Eligible ROW expenses include: the preparation of ROW plans and legal descriptions, appraisal for parcel acquisition, review of appraisals, preparation for and trial of condemnation cases, management of properties acquired, furnishing of relocation advisory assistance, attorney fees, and judgments in condemnation cases, any condemnation appeals with supported justification, or supported justification for not appealing a condemnation decision.

ROW expenses will not be reimbursed for any tract until all required documentation as outlined in Chapter 7 is submitted to, and approved by, the NDOR ROW Division. All miscellaneous expenses incurred by the LPA while acquiring ROW, which are submitted to NDOR for reimbursement, must be accompanied by pertinent documentation to substantiate reimbursement.

13.4.3 Utilities

When requested by the LPA, Federal funds may participate, at the pro rata share applicable, in an amount actually paid by the LPA for the costs of utility relocations. Federal participation is subject to the provisions of [23 CFR 645.103\(d\)](#). Typically, if the utility has a compensable property interest in its present location, it would be entitled to reimbursement. If the utility were located on public ROW by permit or franchise agreement, the relocation would generally be non-reimbursable.

13.4.4 Railroad

Project expenses are allowable on grade separations, crossing upgrades, projects involving the elimination of hazards of railroad ROW and on other projects where a railroad company is not obligated to move or to change its facilities at its own expense. Railroad costs must be incurred per [23 CFR 646, Subpart B](#).

13.4.5 Construction

Eligible construction costs include the actual costs to construct the facility and its appurtenant facilities. It also includes: removal, adjustment or demolition of buildings or major construction; utilities or railroad work that is a part of the physical construction of the project; and administrative settlement cost of contract claims. Progress payments must be based on measurements of work performed and materials accepted so the contractor can be fairly compensated and public funds will not be expended on work that has not been completed.

For all LPA projects, the LPA RC must maintain, in the project office files, the records necessary to show how the progress estimate quantities were determined. Each progress estimate must stand on its own when subjected to an audit. The LPA Construction Engineer/Architect documents and establishes pay quantities. The LPA RC verifies measurement and quantity determinations for all pay items. Below are some guidelines used to identify the minimum requirements to support payments for Federal-aid claims:

Quantity Tickets

A quantity ticket is the general document to support the receipt of quantities of material or services at the project site. The LPA and NDOR will ensure that quantity tickets contain:

- State project and control numbers;
- Date of delivery;
- Bid item number;
- Initials of the person accepting the goods or services;
- Unit of measure;
- Truck number of hauling vehicle; and
- Record of gross, tare, and net weights.

Volume

When items are measured and paid on the basis of volume, the LPA will have a receiver assigned at the point of delivery to issue or receive load tickets and to make periodic computations.

Cross Section

Excavation items are generally measured by field cross sections. The project manager should ensure that the project is properly staked and measured. At a minimum, the supporting documents should show the date the section was measured and who performed the measurement.

Measurements Detailed in Contract Plans

For these pay items, measurements or sketches are needed to determine the pay quantities (*need to show the limits of the actual work*).

Items Measured by the Hour/Day

Items that are measured and paid for by these methods should be approved by the project representative or inspector and signed by the contractor.

Lump Sum

Project records should identify the item, the date the material was received or the date the work was accomplished. If partial lump sum payments are made, a record should be generated to identify how the lump sum payment was calculated.

Linear Feet

Records for material measured by length should show the length measured, and the initials of the persons making the measurement and date measured.

Area Measurements

Records for materials or work measured by the area should show the length and width measured, date measured and the initials of the person making the measurements.

Per Unit

Records for material or work measured by per each unit should provide a listing showing the location of each item constructed or placed and the initials witnessing the placement and date of placement.

Time and Material

Typical items include consultant and force account items. Charges should be supported by time charges (*time and attendance records or summary documents*), and receipts for miscellaneous charges. All costs must be broken down into eligible direct and/or indirect cost components. Claims should be reasonable, allowable and approved by the LPA RC.

13.4.6 Construction Engineering

CE is the supervision and inspection of construction activities, construction staking/surveying, testing of materials incorporated into construction, checking shop drawings, and calculating measurements needed for the preparation of pay estimates.

The invoices must present actual direct labor, actual overhead, and actual direct non-labor costs, as well as a prorated amount of the fixed fee. The prorated fixed fee amount shall be based upon the actual direct labor and overhead costs billed for that period relative to the LPA's or consultant's estimated total direct labor and indirect non-labor costs. Each invoice must indicate the hours worked and each individual's actual labor cost.

13.4.7 LPA Salaries & Wages

Subject to appropriate authorization requirements, Federal-aid may participate in the cost of LPA employee salaries, wages, and related payroll expenses incurred for periods of time public employees are actively directly engaged in project-related activities. All employee wage reimbursement requests must include the project description, project number, pertinent work phase, dates of service and the individual's name, position, and exact actual wage rate.

13.5 Unallowable Project Costs

In order for an expense to be eligible for reimbursement on any particular work phase, all requirements as indicated in this manual must be met and all Federal and State regulations must have been followed. FHWA can only pay for allowable charges. For example, if the consultant replaces a piece of equipment during the job for a surveying task order, the consultant cannot charge the equipment replacement to the project because it is standard for the survey company to have the equipment, which it likely will use on other jobs. The NDOR LPS Project Coordinator may adjust the reimbursement request downward if it includes unallowable costs or if it includes incomplete or unacceptable services. The NDOR LPS Project Coordinator will immediately notify the LPA of any downward adjustments to the invoices.

The following list of unallowable costs (*a cost for which the LPA cannot be reimbursed*) is not comprehensive but is intended to assist the LPA in determining whether items are eligible for Federal participation:

Bad Debts: Any losses arising from uncollectible accounts and other claims and related costs;

Contingencies: Contributions to a contingency reserve or any similar provisions for unforeseen events;

Contributions and Donations: Political or otherwise;

Entertainment: Costs of amusements, social activities, and incidental costs relating thereto, such as meals, beverages, lodgings, rentals, transportation, and gratuities;

Fines and Penalties: Costs resulting from violations of or failure to comply with Federal, State, and local laws and regulations;

Interest and Other Financial Costs: Interest on borrowings (*however represented*), bond discounts, cost of financing and refinancing operations, and legal and professional fees paid in connection therewith, except when authorized by Federal legislation;

Material not Incorporated into the Project: If there is a residual inventory of unused or salvaged materials exceeding \$5,000 in total aggregate fair market value upon termination or completion of the project, and if the materials are not needed for any other Federal-aid project, the LPA shall credit the Federal share back to FHWA (*salvage guardrail*). NOTE: Excess riprap, aggregate base, etc taken to a maintenance yard is not eligible for FHWA funding.

Underrecovery of Costs Under Grant Agreements: Any excess of cost over the Federal contribution under one grant agreement is unallowable under other grant agreements.

Unauthorized Engineering Services: Any non-approved consultant work that is performed outside of the scope of services as outlined in LPA/Consultant Engineering Agreement.

Change Orders: Any construction change orders not approved by the NDOR State Representative or FHWA; or

Other: Any LPA or consultant expenses when working non-specific project matters or a non-eligible work phase.

13.6 Direct and Indirect Costs

Direct costs are expenditures incurred solely for a specific Federal-aid project. These include contract payments, ROW acquisition, direct material, salaries, wages, fringe benefits and related costs, which become eligible when an individual participates in project-related activities. Typical direct costs chargeable to federal-aid projects are:

- Compensation of employees for the time devoted and identified specifically to the performance of the project phase for which the federal-aid was approved. This is usually permissible up to and including the first level of supervision dedicated to the project;
- Costs of materials consumed, or expended specifically for the purpose in which the participating federal/state funds were authorized;
- Equipment and other approved capital expenditures;
- Expense items or services contracted, or furnished specifically for the project to carry out the purpose in which the participating Federal funds were authorized; and
- Supervisory activities above the first level of supervision are recoverable as indirect costs.

At the discretion of the LPAs, indirect costs may be included when seeking reimbursement for their federal-aid projects. Computation of indirect cost rates are based on:

- 2 CFR 225 (*formerly OMB Circular A-87*), Cost Principles for State, Local and Indian Tribal Government; and
- Cost Principles and Procedures for Establishing Cost Allocation Plans and Indirect Cost Rates for Agreements with the Federal Government (*ASMB C-10*), issued by the United States Department of Health and Human Services.

An LPA desiring to claim indirect costs must furnish a copy of its Indirect Cost Allocation Plan (*ICAP*) that has been approved by the LPA's Federal cognizant agency. The cognizant agency concept was established by OMB to provide for a single agency to represent all others in dealing with grantees in common areas. In this case, the cognizant agency reviews and approves grantees' LPA's indirect cost rates. Approved rates must be accepted by other

agencies, unless specific program regulations restrict the recovery of indirect costs. OMB has designated the following as Federal agencies as cognizant for ICAP:

- City of Lincoln Department of Transportation
- City of Omaha Housing and Urban Development
- Lancaster County Housing and Urban Development
- Douglas County Health & Human Services

(Source – Federal Register January 6, 1986 Part V)

LPA's not included in the above list, should submit their ICAP for approval to the Federal agency providing it the most grant funds. http://www.whitehouse.gov/omb/grants_attach/)

Guidance on Cost Allocation Plans and Indirect Cost Rate Proposals is available in [2 CFR 225](#) (formerly OMB Circular A-87) and [ASMB C-10](#).

If the cognizant Federal agency has approved the LPA's Indirect Cost Rate Proposal and Central Service Cost Allocation Plan for a time period/fiscal year, the LPA must send a copy to the NDOR Audit Section and include a copy of the Federal approval letter. After the NDOR Audit Section has notified the LPA that it has accepted the federal approval letter, the LPA may include indirect costs on its invoices.

If a LPA's Indirect Cost Rate Proposal and Central Service Cost Allocation Plan have not been approved by the cognizant Federal agency, then the NDOR Audit Section will perform the review. If NDOR Audit Section approves the Indirect Cost Rate and Central Service Cost Allocation Plan, they will issue an approval letter. The LPA may bill for indirect costs once they receive the approval letter.

Invoices claiming indirect cost prior to receipt of a written approval letter from NDOR will either be reduced or returned to the LPA unpaid. If Federal-aid participates in indirect cost reimbursement, all invoices must include a line item for indirect cost, showing the calculations.

Indirect costs rates are calculated on an annual basis, so there may be several rates on a project. If the fluctuation causes a depletion of project funding, the LPA will be responsible for making up the difference.

13.7 Project Retention

Project retention is a pre-specified percentage of project costs that is withheld by NDOR from reimbursement to the LPA. Project retention is held on almost every Federal-aid project. The standard amount of retention withheld is five (5) percent of the Federal share of project costs, up to a maximum of \$25,000. In this case, the State will pay 95 percent of the Federal share (*typically 80 percent*) until 95 percent of the project costs, or 95 percent of the maximum Federal share has been reimbursed. The retention is withheld to ensure LPA compliance with Federal

and State requirements and provisions, and to cover NDOR incurred costs. NDOR will pay the retention to the LPA at the time of final settlement.

13.8 Final Reimbursement

Prior to the final reimbursement, an audit will be required of the project records and project expenses (See *Chapter 14, Section 5*). The final reimbursement will include the retention amount withheld less any adjustments required by the audit and NDOR incurred expenses. The LPA must provide a final invoice and a final report of expenditures, showing actual project costs (*including claims*) within 180 days of project completion.

Final Invoice Review:

The LPA and NDOR should use the following questions to assist in reviewing the final invoice:

- Have all project tasks been completed, inspected, and approved prior to the date of the final bill being submitted?
- Does the final invoice amount agree with the final detail estimate/final report of expenditures?
- Does the invoice request all the funds specified in the Federal authorization?
- Has final inspection been performed?
- Are all the proper documents included (*final project reports, proper signatures from authorized parties, material certifications, etc.*)?

NDOR and the LPA will ensure that all required work for the project has been completed and required documents are maintained to close out the project. Payment from NDOR shall be limited to federal funds available as prescribed in the LPA/NDOR Project Program Agreement for each project. NDOR shall submit all claims received from the LPA for Federal-aid participation to FHWA in the normal manner and compile accurate cost accounting records.

13.9 Documentation

Source documentation (*timesheets, lodging receipts, etc.*), accounting records, project records (*construction diary, etc.*) must be retained for three (3) years following the date on which the LPA receives reimbursement of their final invoice from the NDOR as per the LPA/NDOR Project Program Agreement.

As per [49 CFR 18.42\(e\)](#), FHWA, NDOR or any of their authorized representatives have the right of access to review/audit any LPA project documents (*invoices, field reports, etc.*) at any stage of the project.

Chapter 14
Project Closeout

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14.1 Introduction

This chapter summarizes the steps needed to ensure a project is properly closed. After the completion of the physical work, the LPA and NDOR work together to finalize the project. This process ultimately leads to the final payment and release of the contractor from further responsibility for the project. In addition, the LPA must gain acceptance of the project from all participating agencies, determination of an agreement on the final value of the contract, and the completion of all remaining contract requirements.

Closing projects assists in managing obligation authority, such that large amounts of unexpended obligated funds do not remain unused on dormant projects. FHWA final acceptance is performed after all required paperwork has been submitted by the LPA to NDOR and NDOR requests the project be closed. When a Federal-aid project is closed, any unexpended funds should be transferred to a new or existing Federal-aid project involving the same class of funds.

14.2 Final Walk-Through and Inspection

When work on a project has been completed, the LPA will conduct a final project walkthrough/inspection. The NDOR State Representative must attend the final project walkthrough along with the LPA RC, project construction engineer, and contractor. NDOR is responsible for the final acceptance on all Federal-aid projects. FHWA must be invited to the final inspection for any full FHWA oversight project. The team should determine the need for any corrective or additional work and create a punch list detailing this work. The LPA will provide the punch list to the contractor in writing along with a specified time frame or specified date for completion of the prescribed work.

It is the responsibility of the LPA to do any necessary follow-up to assure that the contractor completes the punch list work in a timely manner. Upon completion of all physical work, including punch list work, the LPA shall forward to the NDOR State Representative a written acceptance and final project certification (*DR Form 299*).

14.3 Final Contractor Payment

When the final project invoice is received from the contractor, the LPA RC should verify:

- Documentation showing all project work has been completed, inspected, and approved;
- Costs billed are allowable, acceptable, and reasonable;
- Mathematical accuracy of all progress and final invoices;
- Changes increasing or decreasing the original project financial plan (*budget*) are properly documented and approved; and
- Actual project costs reconcile to the amended project budget.

When the verification has been completed and the LPA determined the invoices to be acceptable, the final payment, including local retention withheld from progress payments will be made to the contractor.

To eliminate or minimize interest payments and provide adequate time for processing through NDOR, it is essential that the final records be completed and reviewed in the District Office as soon as possible after the actual completion date. This will require that the final measurements and computations be completed to the greatest extent possible during the time that construction is in progress and will require the taking of final cross sections for grading work (*only when plan quantities are disputed*) as early as possible.

After the LPA has made the final payment to the contractor, a claim for reimbursement (*invoice*) should be prepared and submitted to NDOR. Any LPA share of the progress or final cost should be identified and deducted on the invoice to arrive at the total requested reimbursement. When NDOR receives a proper invoice, the LPA can expect payment to be made according to terms specified in the contract between NDOR and the LPA. Generally, NDOR will pay the LPA within forty-five (45) days as prescribed in the Nebraska Prompt Payment Act (*State Statutes 81-2401 through 81-2408*). Again, payment timing is from the receipt of a proper invoice. If an invoice requires correction, the forty-five (45) day clock would start on the day the corrected invoice is received.

A “proper invoice” requires the following documentation be included, verified, and approved by the LPA or NDOR:

- An itemized breakdown of all amounts by work element specified in the contract;
- For each Subcontractor:
 - A listing of amounts included for work performed.
 - A listing of the total amount.
 - A listing of amounts previously paid.
- Any additional supporting data/documentation required by NDOR or FHWA;
- Certification by the Contractor (*to LPA*) or LPA (*to NDOR*);
 - Amounts requested are project related and in accordance with the contract.
 - Payments to the Contractor (*by LPA*) and subcontractors (*by Contractor*) have been made in a timely manner.
 - The invoice does not include any amounts withheld or retained by the LPA (*from Contractor*) or the Contractor (*from Subcontractors*).

State law provides that, "if the contractor has furnished the LPA all required records and reports, the LPA shall pay the contractor interest on the amount retained and on final payment due the contractor beginning the sixty-first (61) day after the work under the contract has been completed, as evidenced by the completion date established in the LPA's letter of tentative acceptance, and running until the date when payment is tendered to the contractor.

The contractor is allowed fourteen (14) calendar days from the date of notice as evidenced by the date of the letter of notification to:

- Reply to the project construction engineer's written notification of optioned pit material quantities and costs involved in a project (*such reply shall be directed to the NDOR State Representative*).
- Provide signed records or documents, such as Change Orders, and Supplemental Engineering Agreements, requested in writing by NDOR.
- Provide all required records and reports, such as payrolls, material certifications, etc., requested in writing by NDOR.

In the event the time interval stated above is exceeded, deductions to the interest time period will be made for the actual number of days to complete the action which will occur beyond the original sixty (60) calendar days; and

The acceptance letter must include the correct completion date which shall be in agreement with the completion date as shown in the Project Construction Engineer's/Architect's weekly working day and progress reports. This date will be the last day on which any work is performed on the project, and may be several days after the last working day charged. This condition will occur when minor finishing or cleanup work is required prior to tentative acceptance.

14.4 Notification of Project Completion

Along with the written acceptance of the project, the LPA must submit a [Notification of Project Completion and Materials Certification Form](#) (DR Form 299). If applicable, a "Time Extension/Liquidated Damages" document must be provided by the LPA summarizing contract time extensions granted through the change order process and/or providing details of any liquidated damages charged the contractor. The completed forms will be used by NDOR to initiate close-out of the project in both the State and FHWA systems and prompt NDOR in preparing any final settlements between the LPA and NDOR. A copy of these forms can be found in the appendix of this chapter or obtained from the NDOR LPD Project Coordinator.

No later than the time the DR Form 299 is submitted, the LPA must submit two (2) copies of the final invoice to NDOR. The final invoice must be marked Final Invoice and be accompanied by a detailed itemization of total project costs. The final invoice should be submitted in the same manner as progress payment invoices. **Any project invoices submitted after the DR Form 299 is approved, will NOT be eligible for Federal or State reimbursement.**

NDOR will assure that all necessary actions have been completed and project documentation has been submitted to FHWA prior to requesting FHWA close the project. Some environmental commitments may remain such as: plant establishment, wetlands restoration, etc. in which a new separate contract may be used to track/monitor the commitments until acceptance by the respective resource agency.

14.4.1 Verifying DBE Goal Achievement

NDOR assures that contractors and subcontractors on Federal-aid projects comply with the provisions of 49 CFR 26, and the DBE program. NDOR will advise the LPAs and their contractors, through contract specifications, that discrimination on the basis of race, color, national origin, or sex, in the award and performance of Federal-aid contracts, is prohibited. Failure by the LPA and contractor to carry out these nondiscrimination requirements shall constitute a breach of contract and may result in termination of the contract or such remedy as NDOR and FHWA deem appropriate. Also refer to Chapter 10, Section 6 in this manual for further information on DBE requirements.

In order to verify achievement of the DBE commitments on applicable projects, two DBE achievement forms ([DR Form 441](#) and [DR Form 442](#)) must be completed and submitted to NDOR. DR Form 441 will be filled out and submitted by the prime contractor, indicating the DBE firms used, actual work performed, the total amount of money paid to the DBE firms, and the date on which it was paid. DR Form 442 will be filled out and submitted by the DBE subcontractor, indicating the name of the DBE firm, actual work performed, the total amount of money received from the prime contractor, and the date on which it was received. Both of these forms can be found in this chapter's appendix.

14.5 As-Built Plans

The LPA must provide both the NDOR State Representative and the NDOR LPD Project Coordinator a set of As-built plans (*electronic submittals are preferred*).

The As-built plans must be an exact representation of the completed work. The As-built plans should include the location of underground obstructions, removals, and all utility locations. Any revised plan sheets must be included and the sheets they replace should be discarded. All special plan sheets must be included. The sheets need to be corrected to show the final quantities, including additional items of work.

Black pen must be used in the preparing these plans. Lines, dimensions, and notations shown in the original plans, which have been eliminated or corrected, shall be "X'd" (*crossed*) out and boxed with solid lines. Dashed lines shall be used to indicate any As-built lines, dimensions, or tie points which do not conform to the original plans. In striking out figures and notations, care should be used to avoid obliterating the original figures. In the event appreciable errors are noted in the locations of side roads, section lines, property fences, buildings, roadway structures, or other important landmarks, the corrected locations shall be shown.

The front sheet must be labeled "AS-BUILT PLANS" and include the following:

- Work performed by: (*Name of Contractor, list all prime contractors*)
- Prepared by: (Name) (Title) (Date)
- Approved by: (Project Manager) (Title) (Date)

Refer to NDOR's Construction Manual for details of As-Built plan content.

14.6 Project Audit

Prior to NDOR's final reimbursement to the LPA, every project will be submitted to the NDOR Audit Section for an audit review of the costs submitted for reimbursement. The objectives of the cost audit review are to provide reasonable assurances that the submitted amounts are accurate; are supported by adequate accounting records; resulted from accomplished and duly authorized work; and, are allowable in accordance with laws, regulations, policies and procedures applicable to the project. If consultant/subconsultant costs are submitted for reimbursement, they will also be subject to audit review to determine if costs and fixed for profit are in accordance with the agreement and that overhead costs are in compliance with the requirements of the cost principles contained in [48 CFR Part 31](#).

The nature and extent of NDOR's cost audit review testing and examination procedures will be determined on a case-by-case basis after an evaluation of the risk of material misstatement in project costs and potential for noncompliance with the terms of the agreement, applicable laws, regulations, policies and procedures. Opinions expressed in the LPA's A-133 audits will also be taken into consideration, when applicable.

If circumstances warrant, cost audit requirements can be waived, but this does not relieve the LPA of its responsibility to submit appropriate project documentation. It is the LPA's responsibility to supply NDOR with the following: consultant/subconsultant agreements, source documentation (*timesheets, lodging receipts, etc.*), accounting records, and project records (*construction diary, truck tickets, etc.*). Consultant/subconsultants should provide similar source documentation for their direct labor cost, direct non-labor costs, and overhead costs.

Based on the results of the cost audit review process, final reimbursement to the LPA will be adjusted to exclude ineligible costs and include any additional costs that NDOR determines are Federal-aid eligible.

14.7 Final Cost Settlement with LPA

The final settlement between NDOR and the LPA will be made after final inspection, acceptance, an audit, and after final costs have been determined by NDOR. Projects will be considered final when accepted by NDOR and when the final project payment is made. After final payment is made to, or by the LPA, NDOR will proceed with closing out the project with FHWA.

14.8 Records and File Retention

The following is a list of records and documents the LPA must retain for their project correspondence file. These records and documents **must be kept for a period of three (3) years** after the final payment made or as required in the LPA/NDOR Project Program Agreement, except for the construction contract which must be retained for ten (10) years:

- Initial project programming requests or application forms;
- All project agreements (*program, engineering, utility, railroad*);
- Notice of program agreement execution – Notice-to-Proceed (*NTP*) with project from NDOR;
- Copy of the RFP, public advertisement, evaluation forms, selection letters;
- Preliminary Engineering (*PE*) agreement, scope, and fee review letter from NDOR;
- Notice of PE agreement execution – NTP with PE from NDOR;
- Design data sheets (*if applicable*);
- NBIS/Bridge data sheets (*if applicable*);
- Plan-in-Hand report;
- Project milestone construction estimates;
- Design exception documents & approval (*if applicable*);
- Design coordination meeting minutes and any documented project decisions;
- NEPA determination forms;
- Copy of the approved environmental document;
- Copies of all applicable environmental permits;
- Notice of environmental approval/clearance and NTP with ROW activities from NDOR;
- Preliminary ROW package which includes plans and estimate;
- Approved preliminary ROW package review and NTP with appraisals from NDOR;
- All property appraisals and review appraisals;

- Approved appraisal review and NTP with negotiations and acquisitions from NDOR;
- All property ROW acquisition documents;
- Utility coordination documents (*if applicable*);
- Railroad coordination documents (*if applicable*);
- LPA and NDOR ROW certificates;
- Status of utilities;
- Sole source letter (*if applicable*);
- Final engineer's construction estimate;
- Full set of ½-size construction plans and As-built plans;
- Contract bidding document/specifications;
- Approved PS&E package review – NTP with bid advertisement/letting from NDOR;
- Bid tabulations, bid analysis notes, and LPA letter of recommendation to award;
- NDOR bid concurrence – NTP with construction;
- Construction Engineering (*CE*) agreement, scope, and fee review letter from NDOR;
- Notice of CE agreement execution – NTP with construction engineering from NDOR;
- Pre-Construction Meeting Minutes (*if applicable*);
- Copy of the construction contract (*hold for 10 years*);
- All work phase progress estimates/billings/reimbursement requests with verification and supporting documents;
- Copies of all approved change orders with NDOR acceptance (*if applicable*);
- Payroll records and affidavit of wages paid;
- Notification of project completion and material certification documents (*includes the DR 299*);
- Final inspection documents and recommendation of project close-out; and
- Any correspondence related to project decision making.

14.9 Project Maintenance

Title 23 USC 101(a)(14) defines maintenance as, "...the preservation of the entire highway or roadway, including surface, shoulders, roadsides, structures, and such traffic-control devices as are necessary for safe and efficient utilization of the highway or roadway." Title 23 USC further requires NDOR to maintain each project constructed with Federal-aid until such time that it no longer constitutes a part of the Federal-aid system. NDOR delegates such maintenance activities to the LPA in the LPA/NDOR Project Program Agreement. FHWA approval is not required on a project level for maintenance.

Activities that may be considered maintenance include: sealing pavement joints, spot-repair of bridge coating systems, replacement of damaged roadway or trail signs, pavement patching, seismic retrofit, and scour protection. While these type activities were at one time universally considered ineligible for Federal-aid, changes in highway legislation since 1991 have made them eligible for Federal-aid under certain conditions as preventive maintenance activities.

FHWA will review the LPA maintenance activities through process reviews and program reviews as deemed necessary. Any specific instances of inadequate maintenance or concerns regarding NDOR's overall maintenance/preventive maintenance program will be brought to the attention of NDOR and the LPA by FHWA.

APPENDIX

Notification of Project Completion Form (*DR Form 299*)

Notification of Project Completion Form (*Enhancement Projects*)

DBE Achievement Form (*DR Form 441*)

DBE Work Performed Form (*DR Form 442*)

Notification of Project Completion and Materials Certification

This certificate must be furnished to the Department of Roads before the project can be closed out.

To: Nebraska Department of Roads
Urban/Rural Engineer, Local Projects Division

City/County of _____, Nebraska

Project Name: _____

State Project No.: _____ State Control No. _____

Prime Contractor Name: _____ Final Contract Amount:
\$ _____

Subcontractor Name(s): _____ Final Subcontract Amount
\$ _____
\$ _____
\$ _____
\$ _____
\$ _____

The **City/County** certifies that all the work on this project is complete and accepted by the City/County as of _____ 20____, and the project was constructed according to the plans and specifications approved by the Nebraska Department of Roads (NDOR). Materials testing requirements of the contract were met and test reports are on file with the City/County. All required manufacturer's certificates of compliance and the manufacturer's certified test reports met contract requirements and also are on file with the City/County.

Exception(s) to the plans and specifications: Yes No

If Yes, attach additional sheet(s) to this form explaining the exception(s).

By signing this Notification of Project Completion and Materials Certification form, I, _____ representing the City/County of _____, Nebraska, hereby acknowledge this certification is to be furnished to the Federal Highway Administration in connection with this project being funded with federal-aid highway funds and is subject to applicable state and federal laws, both criminal and civil.

City/County of _____

LPA Project Construction Manager/Engineer

LPA Responsible Charge

____ / ____ / 20 ____

Comment(s) by the State Representative/District Engineer: Yes No

If Yes, attach additional sheet(s) to this form with comments.

This completes all work on this project.

I recommend closeout:

with audit without audit.

I Concur:

NDOR District Project Representative

NDOR District Engineer

____ / ____ / 20 ____

____ / ____ / 20 ____

Local Projects Division Urban/Rural Engineer

____ / ____ / 20 ____

Notification of Project Completion and Materials Certification

This certificate must be furnished to your Project Coordinator before the project can be closed out and reimbursement settlement finalized.

The _____ **certifies** that all of the work on Project Number
(Project Owner, i.e., City/County/Agency)

_____ Control Number, _____ , _____
(Project Name)

is complete and accepted by the _____ as of _____ 20 ____
(Project Owner)

and the project was constructed according to the plans and specifications approved by the
Nebraska Department of Roads (NDOR). Materials testing requirements of the contract were met
and tests reports are on file with the _____ . All required manufacturer's
(Project Owner)

certificates of compliance, and the manufacturer's certified tests reports met contract
requirements and also are on file with the _____ . The
(Project Owner)

as-built plans for this project are enclosed with this certificate.

By signing this Notification of Project Completion and Materials Certification form, I,

_____, the _____ of
(Title)

_____, hereby acknowledge this certification
(Project Owner City/County/Agency Name)

is to be furnished to the Federal Highway Administration in connection with this project being
funded with federal-aid highway funds and is subject to applicable state and federal laws, both
criminal and civil.

Local Project Manager

Local Project Owner Representative

____/____/20____

NDOR State Representative

Return To:
Nebraska Department of Roads
Construction Division - Minority Business Office
P.O. Box 94759
Lincoln, NE 68509-4759

Date:

Nebraska Department of Roads

Identification of DBE Goal Achievement

DBE I

Project No.: Control No.:

Location: \$

Total dollar goal commitment at time of contract award:

Contractor:

Note: *This form is to be completed as accurately as possible with the understanding that final quantities may not be available at the time of completion.*

	Name of Certified DBE	Description of Work Subcontracted or Services Provided	\$ Amount of Subcontract	\$ Amount of Payment Issued	\$ Amount of Retainage
1.
2.
3.
4.
5.
6.
7.
8.
9.

By Total Actual DBE \$

(Signature)

Return To:
Nebraska Department of Roads
Construction Division - Minority Business Office
P.O. Box 94759
Lincoln, NE 68509-4759

Date:

Nebraska Department of Roads
Identification of Work Performed
DBE II

Project No.: Control No.:

Location:

DBE Subcontractor:

Prime Contractor:

Note: *This form is to be completed as accurately as possible with the understanding that final quantities may not be available at the time of completion.*

	Description of Work Subcontracted or Services Provided	\$ Amount of Subcontract	\$ Amount of Payment Issued	\$ Amount of Retainage
1.
2.
3.
4.
5.
6.
7.
8.
9.

By Total Actual Payment Received \$

(Signature)

Chapter 15
Quality Management

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15.1 Introduction

Program oversight of the LPA program is required by numerous sections of Title 23 and the supporting regulations. NDOR has established a program to fulfill these requirements. FHWA shall also periodically review the monitoring of LPAs by NDOR. This chapter outlines the LPA program quality requirements as well as the administrative and technical mechanisms that NDOR will use to manage both engineering and construction quality.

15.2 Quality Management Approach

Quality management is the daily stewardship of the Federal-aid program including project and program oversight and program assistance. In order to develop an effective quality management system, NDOR must consider the experience of the LPA's personnel, the experience of consulting firms assisting LPAs, the quality of the plans that will be used to implement the project, and construction quality issues. Quality management is an important component of the administration of the Local Federal-aid program.

FHWA and NDOR accomplish their stewardship of the LPA program by actively providing engineering expertise, technical assistance, technology deployment, program assistance and program delivery, and oversight to assure accountability for the use of public resources. FHWA and NDOR's oversight responsibilities are not only to assure the program is carried out in accordance with all applicable laws, regulations, and policies, but also to continually evaluate the program and improve processes.

Quality is the degree to which a product or service satisfies defined expectations representing a balance of identified requirements. Quality Control (QC) is an independent checking of the work and use of control points to ensure a high level of confidence that each project will meet expectations. Quality Assurance (QA) is a function that identifies, documents, and reviews for improvement of the processes that deliver products. Both the LPA and NDOR are jointly responsible for quality management. Refer to Section 15.5 of this chapter for a detailed summary of QC/QA responsibilities.

The QC/QA program has the following three major components:

1. Project documentation, studies, and plans which are prepared and submitted by the LPA to NDOR.
2. A QC process to ensure that projects are developed in accordance with this manual and all other applicable Federal and State guidance.
3. A QA process to be performed by an independent third party. QA is achieved through randomly selected reviews of the work from the two components above to make sure the process of developing project deliverables and QC is performed consistently.

The findings from the QA report are then communicated to the entity submitting project documents and the entity conducting QC, and to improve the process for future projects. In most cases, the QA activities will be conducted after a project is complete, however, this activity can also be conducted while a project is being designed or constructed.

15.2.1 Implementing the QC/QA Process

QC and QA will be implemented for two major processes.

1. Administrative (*supervision and oversight*), such as complying with the LPA Guidelines Manual for Federal-aid Projects (*and all other applicable Federal and state guidance*) for managing and administering all components.
2. Technical (*i.e. technical issues related to design and construction*).

Several entities are involved in the development of project documents, QC and QA. Those entities include:

- FHWA;
- LPA;
- NDOR Local Projects Division, and all the other Divisions who support the Section;
- NDOR District; and
- NDOR Controller Division.

The goal of this section is to identify the roles and responsibilities of each of these entities for each of the processes as identified above as “administrative” and “technical”.

15.2.2 Roles & Responsibilities for Administrative Activities

Administrative activities include the development and implementation of processes, procedures, and policies to carry out the Federal-aid program.

FHWA

FHWA will accomplish stewardship by actively providing engineering expertise, technical assistance, technology deployment, and program assistance to assure accountability for the use of public resources. The FHWA’s role ensures that the program is delivered in conformance with the LPA Guidelines Manual for Federal Aid Projects and all applicable Federal and State rules and regulations. FHWA may conduct process reviews to assure that the other entities involved have provided proper QC/QA for tasks associated with a Federal-aid project.

LPA

The role of the LPA is to properly execute and document all phases of the project. The LPA will ensure proper QC/QA controls are in place to administer all project phases in compliance with the LPA Guidelines Manual for Federal Aid Projects and all applicable Federal and State rules and regulations.

NDOR Local Projects Division

The role of the Local Projects Division is to ensure the work completed by the LPA is in compliance with the LPA Guidelines Manual for Federal Aid Projects and all applicable Federal and State rules and regulations. This Division, with help from other NDOR Divisions, will perform QC/QA activities on the LPA's project submittals and documents for all project phases. The Local Projects Division will develop programmatic action plans to implement program improvements.

NDOR District Personnel

The role of the NDOR State Representative is to provide QC/QA for documentation of activities during the construction phase of the project.

NDOR Controller Division

The role of the NDOR's Controller Division Audit Team is to perform the QA activities for this process. Controller Division Finance Section is to perform QC for the reimbursement process.

15.2.3 Roles & Responsibilities for Technical Implementation Activities

Technical implementation activities are those which require specific technical competencies and expertise. Environmental, design, and construction monitoring are typical areas that require such competencies and expertise to design, build, and operate a transportation facility.

FHWA

FHWA will accomplish stewardship by actively providing engineering expertise, technical assistance, technology deployment, and program assistance to assure accountability for the use of public resources. The FHWA's role ensures that technical aspects of projects are delivered in conformance with the LPA Guidelines Manual for Federal Aid Projects and all applicable Federal and State rules and regulations. FHWA may conduct process reviews to assure that the other entities involved have provided proper QC/QA for tasks associated with a Federal Aid project and to provide guidance for process improvement.

LPA

The LPA is in responsible charge of implementing the technical aspects of the project such as completing NEPA reviews, preparing NEPA documents, writing specifications, bid letting, inspecting the construction activities, and the sampling and testing of construction materials. They are also responsible for providing QC reviews for all the above activities. In the event that the LPA is not adequately staffed to provide technical delivery of the project, they may choose to utilize a consulting firm as an extension of their staff. Using a consultant does not relieve the LPA for the overall responsibility of quality control to ensure conformance with the LPA Guidelines Manual for Federal Aid Projects and all applicable Federal and State rules and regulations. For example:

- When the LPA or their consultant prepares bridge or roadway plans, a second engineer within the LPA or its consulting firm will QC the design for compliance with design criteria and standards.
- The LPA ensures the consultant has a QC plan in place to review the inspection records during the construction phase.

NDOR Local Projects Division

The role of the Local Projects Division is to QC certain technical aspects of the project design and construction. This Division, with help from other NDOR Divisions, will perform QC/QA activities and review technical content on all project phases including, but not limited to: programming, consultant selection, NEPA, ROW, preliminary and final design, PS&E review and letting, award concurrence, construction, and closeout. For example:

- The Local Projects Division will review the design plans to ensure minimum design standards are met, that ADA improvements are incorporated into the project and accurate estimates are provided;
- ROW plans will be sent to the NDOR ROW Division for review. Plans are checked to ensure they meet the requirement of the LPA ROW Manual.

NDOR District Personnel

The role of the NDOR State Representative, for the technical process, is to perform certain QC activities, as well as QA activities during the construction phase. The NDOR State Representative will conduct the QA review during the construction phase on all the LPA projects. For example, the NDOR State Representative will:

- Observe critical construction activities such as bridge deck pours to make sure the inspectors are enforcing the requirements of the project plans and specifications;
- Check to make sure the materials sampling and testing is being conducted by certified individuals; and
- Ensure the materials are being tested by qualified labs per Section 12.10.

NDOR Controller Division

The role of the NDOR's Controller Division Audit Team is to perform the QA activities for this process. Controller Division Finance Section is to perform QC for the reimbursement process.

15.3 Qualifications

To obtain qualification to administer a Federal-aid project, the LPA will need to demonstrate that it has adequate project delivery systems and sufficient accounting controls to properly manage Federal funds. Retaining this qualification requires that an LPA conform to this manual and all Federal requirements.

The NDOR will determine whether an LPA possesses adequate:

- Personnel expertise which includes education, documented training or proficiency, and past experience;
- Policies, procedures, and processes that comply with applicable State and Federal law; and
- Record keeping and accounting systems.

The LPA must also designate one or more trained full-time public employees either from within the LPA's organization, or through an interlocal agreement with another public agency, to be in Responsible Charge (*RC*) of its projects. The named public official(s) will actively participate with NDOR in project decision-making as the project progresses.

The LPA does not abdicate its responsibilities or approval authority when it elects to use consultant services. It is the State's role to assure that the LPA is equipped and organized to manage the consultant's project level activities.

The LPA must have established and documented practices for each of the following project administration components and must identify the individual(s) responsible for the management of these processes:

- Consultant Services Evaluation and Selection;
- Consultant Services Management;
- Change Order Process;
- Dispute Resolution/Claims Management Process;
- Finance, Accounting and Record Keeping;
- Title VI of the Civil Rights Act of 1964 (*Title VI*);
- Disadvantaged Business Enterprise (*DBE*);
- Davis-Bacon and/or State Prevailing Wages;
- Uniform Relocation and Real Estate Acquisition Act of 1970 (*Uniform Act*); and
- The National Environmental Policy Act of 1969 (*NEPA*).

A LPA may only administer those parts of project delivery that have been authorized by NDOR and outlined in project agreements. NDOR will determine if the LPA is capable of coordinating day-to-day project activities and making sound management decisions.

15.3.1 Responsible Charge (RC)

A person or persons in RC are vital to ensuring the eligibility of a LPA program to administer Federal funds. RCs are expected to be competent and experienced managers of transportation infrastructure projects.

Successful candidates will typically be a Professional Engineer, Licensed Land Surveyor, County Highway or City Street Superintendent, or possess a degree in engineering or construction management. A person without the above credentials, but with significant experience administering Federal-aid projects, may successfully complete the requirements.

Depending on the size and scope of the LPA's program, a LPA may need more than one RC in order to be adequately staffed. Training will be provided by NDOR and Nebraska's Local Technical Assistance Program (*LTAP*) staff. The objectives of the training will be to demonstrate competencies in core function areas. The following are some of the core function areas:

- Program Management;
- Consultant Procurement;
- Environment;
- Engineering;
- Reimbursements;
- Civil Rights;
- Contract Advertisement and Award;
- Right-of-Way;
- Construction Contract Administration; and
- QC/QA.

In order to become a RC, an individual must successfully complete training. NDOR defines successful completion of training as achieving a passing score on training exams. Training will be delivered by various methods including online training and face-to-face training.

In the event an individual does not achieve a passing score after the training, he or she will be given an opportunity to retake the exam once without repeating the training. This re-examination will occur no sooner than two weeks after the failed test. Should the individual fail the re-examination, he or she will be required to repeat the same training courses.

In order for an individual to maintain RC status, he or she must:

- Participate in an annual workshop, which will be based on recommendations of the QA/QC program, and
- Complete a minimum of 15 hours of professional development training annually.

NDOR will maintain training records of RCs in order to verify the training component of LPA qualification.

15.3.2 Process to Become a Qualified LPA

Subsections 15.3 and 15.3.1 describe the basic requirements for qualification. The process for qualification involves a review of the LPA by NDOR to determine if the LPA has complied with the applicable requirements of Section 15.3. Following successful completion of this review, the LPA will be qualified in a probationary status. Every local program in the state will be required to go through the probationary period. During the probationary period, the NDOR will verify that the LPA has sufficient proficiency administering Federal-aid projects to leave probationary status. NDOR anticipates that successful completion of a minimum of two representative projects, utilizing this manual, will be needed to make this determination.

Probationary Status

The probationary time frame is an opportunity for NDOR to evaluate and measure the implementation of the LPA's processes. LPAs with active projects must obtain probationary status by September 1, 2009. This date may be adjusted by NDOR on a case-by-case basis, depending upon the availability of training, and the progress of process audits and interviews. Following this date, NDOR will issue Notice-to-Proceed for new phases of a project only to those LPAs that have achieved probationary status. The state and FHWA will determine when the LPA has successfully concluded the probationary status. The LPA is qualified when it has completed successfully the probationary process.

15.4 Program Oversight

NDOR will conduct routine annual reviews to provide assurances that NDOR and the LPAs comply with the LPA Guidelines Manual for Federal-Aid Projects and all other applicable Federal and state guidance, and will also conduct periodic reviews to assess and evaluate the effectiveness of program management, project delivery and internal controls.

The results of all reviews and any accompanying recommendations for improvement will be provided in writing to FHWA and as appropriate to LPAs. Final decisions on actions to be taken with respect to report recommendations will be made by appropriate NDOR and FHWA administrative officials.

15.4.1 Quality Assurance Reviews

A quality assurance review is a planned, systematic review to provide confidence that quality controls are properly established and that projects conform to those requirements.

Every year, a random sample of projects will be selected for review. The sample universe will include all active projects and will encompass projects from all LPA programs that receive Federal funds. Appropriate techniques will be applied to ensure that the annual sampling process results in the selection of a representative number of LPA entities and that all stages of work are subject to some degree of review.

Reviews will involve the examination, inspection and validation of documents and records associated with an active LPA project. They will focus primarily on the information maintained at the LPA office but will also extend to files and documentation kept by the LPS, other NDOR Divisions and, when appropriate, by NDOR District personnel. In most cases, the NDOR audit team representative(s) will perform the review of the LPA's records on-site at the LPA office. Typical areas that will be reviewed include, but are not limited to:

- LPA and NDOR program/project management activities;
- Training for, knowledge of, and experience in Federal-aid program and construction;
- Communication processes;
- Recordkeeping and filing of project documentation;
- Completion of Project Development Checklist and other pertinent checklists;
- Timely submittal of required documents, requests, plans, estimates, bills, etc.;
- Adherence to authorization dates and completion deadlines;
- PE and CE consultant selection, agreements, and billings;
- ROW process was in accordance with the Uniform Act;
- Advertising and award of construction contract;
- Construction administration, change order approvals, pay estimates;
- LPA financial accountability and adequacy of supporting cost records; and
- Final inspections and acceptance.

Results of the LPA quality assurance reviews and recommendations for changes or corrective action will be provided in writing to the sampled LPAs and appropriate NDOR and FHWA administrative officials. LPA officials will be notified of findings or recommendations before the written report is finalized. At that time, LPA should provide any clarifications or raise any objections that need to be noted.

Each May, a comprehensive written report compiling the results and improvement recommendations in the individual LPA reports will be provided to appropriate NDOR and FHWA administrative officials.

15.4.2 LPA Compliance Reviews

Compliance reviews will be conducted when a deficiency is identified in QA reviews or identified by quality control activities to determine:

- If the LPA implementation of the Federal-aid project conforms to applicable laws, regulations, and policies,
- If the LPA is carrying out its roles and responsibilities as established by the LPA Federal-aid Guidelines Manual and the LPA's program agreement with NDOR, and
- The level of corrective action and possible sanctions that are appropriate.

15.4.3 NDOR Functional Area Process Reviews

Functional area process reviews are an in-depth review of processes and program areas based on a broader perspective than individual project reviews. Functional areas that experience repeated compliance difficulties, or areas where efficiencies and streamlining would be beneficial, are considered with these reviews. Process reviews evaluate the effectiveness of the processes, procedures, and products in individual functional areas, as well as the internal operations of NDOR. The process review is an NDOR initiated review and, depending on the nature and reasons for the review, may involve the assistance of FHWA. Depending on the nature and reasons for the review, it is likely that NDOR technical experts from throughout NDOR's Divisions and Districts may be called upon to assist.

15.4.4 Annual Single Audits

LPAs are subject to the single audit requirements of U.S. Office of Management and Budget OMB Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations. A single audit is required if the LPA expends more than \$500,000 in Federal funds from all sources (*i.e. FHWA, FTA, FAA, HUD, HHS, etc...*) during their fiscal year. If an LPA obtains an A-133 audit, the LPA should submit a copy of the report to the NDOR Controller Division – Audit Section – PO Box 94759 – Lincoln NE 68509-4759. If the LPA's Single Audit Report contains findings that relate to Federal funds passed through NDOR, the NDOR will review those findings and issue a management decision regarding the LPA's response to those findings, and ensure that the LPA takes appropriate and timely corrective action.

The OMB Circular provides for sanctions for non-compliance with Federal Single Audit requirements which could include withholding Federal funds until the requirement is satisfactorily completed. Important information regarding the [Federal Single Audit](#) is available at the OMB website.

15.4.5 Other Federal Audit Activities

For purposes of closing out Federal aid projects, NDOR will rely primarily on the final cost audit review process as described in Chapter 14, Section 14.4. Consideration will also be given to the opinions expressed in the LPA's A-133 Single Audit Reports, when applicable. NDOR may need to schedule limited scope audit reviews if NDOR or the Federal-aid funding agency identify the need for such a review. NDOR, the US General Accounting Office, and the US DOT or its operating agencies (*FHWA, etc.*) each have the right to review, examine or audit the LPA's books and records pertaining to Federal-aid projects. **The LPA shall retain project records for a period not less than three years from project close-out by NDOR.**

15.5 Project Oversight

As stated in Section 15.2, Quality Control (QC) is a process employed to ensure a certain level of quality in a product or service. The basic goal of QC is to ensure that the products, services, or processes provided meet specific requirements and are dependable, satisfactory, and fiscally sound. Quality Assurance (QA) is a planned and systematic set of activities necessary to provide confidence that requirements are properly established and products or services conform to the specified requirements.

The table below identifies NDOR's QC/QA plan identifying activities and agency responsibilities during project delivery. Colored lines or cells are key points of authorization. A listing of acronyms follows the table.

The LPA must provide quality control for deliverables prior to submittal.

Seq. No.	QC/QA Activity	QC	QA	Document	Chapter
1	Review of LPA qualifications	LPD PC and NDOR Audit Section	NDOR Audit Team	Checklist	2
2	LPA Title VI Plan review	LPD PC, NDOR Audit Team	NDOR Audit Team	Onsite review form	10
3	LPA Project Programming Request Design Review	LPD PC, LPD UH, NDOR DE and LPD Engineer	NDOR Audit Team	Checklist	6
4	LPA Project Programming Request eligibility review	LPD PC	PMD and LPD UH	DR Form 530 and LPA resolution	2
5	LPA project programming request reviewed for RR involvement	LPD PC, NDOR RPT, NDOR DE, and LPD Engineer	NDOR Audit Team	LPA's written response to NDOR's recommendations - LPD to determine if the project is viable	9
6	Verify LPA program funding availability	LPD PC	PMD	N/A	2
7	Project schedule and letting date review	LPD PC and PPDD ES	NDOR Audit Team	Checklist	6
8	Project program agreement NDOR review	LPD PC and PPDD	NDOR Audit Team	Checklist	2
9	Project program agreement design review	LPD PC	NDOR Audit Team	Checklist	6
10	Verify PE phase is included on the TIP/STIP	LPD PC	PMD and FHWA	STIP is on website - Screen Shot	2
11	Project setup meeting review	LPA, LPD PC and PPDD ES	NDOR Audit Team	Checklist, design criteria document and "red flags" report	5 & 6
12	Review PE scope of work and cost estimate.	LPD PC, BR DIV, RD DIV, TRF DIV, M&R, PPDD ES, and ROWD	NDOR Audit Team	Checklist. Approved scope and cost estimate. Written comments and correspondence.	4, 6, & 7

Seq. No.	QC/QA Activity	QC	QA	Document	Chapter
13	Verify PE contract basis of payment	LPD PC	NDOR Audit Team	N/A	4
14	Verify category of QBS-Small or Large Purchase?	LPD PC	NDOR Audit Team	N/A	4
15	Concur in PE selection panel, selection criteria and RFP	LPD PC	NDOR Audit Team	Checklist and written concurrence	4
16	Request obligation of funds for PE/NEPA	LPD PC	PMD and FHWA	Checklist	2
17	Verify authorization of Federal funds for PE/NEPA	LPD PC	NDOR Audit Team	Screen shot of FMIS, DR-333/4/5, NDOR issues NTP letter to LPA authorizing advertising of the RFP	4
18	Verify that the PE RFP advertisement was done correctly	LPD PC	NDOR Audit Team	Proof of publication	4
19	Concur with the PE short listed firms	LPD PC	NDOR Audit Team	Checklist and written concurrence	4
20	Concur with the final PE selection	LPD PC	NDOR Audit Team	Checklist and written concurrence	4
21	Verify selected PE firm's Title VI compliance	LPA and LPD PC	NDOR Title VI Coordinator	Checklist	10
22	Concur with the firm's PE pre-audit overhead rate	PPDD AS and NDOR Controller Audit Section	NDOR Audit Team	Approved existing audit	13
23	Concur with the PE final scope and fee	LPD PC	NDOR Audit Team	Checklist and written concurrence. An administrative adjustment may be needed to keep the authorization in line with the cost estimate.	4

Seq. No.	QC/QA Activity	QC	QA	Document	Chapter
24	Review PE agreement	LPD PC	NDOR Audit Team	Checklist, agreement signed as to form and NDOR letter to LPA to issue NTP letter to consultant with PE.	4, 6, & 10
25	Ensure Environmental Justice - Design	LPD PC and PPDD ES	NDOR Audit Team	DR Form 98	10
26	Verify proximate utilities	LPD PC	NDOR Audit Team	Checklist	8
27	Invite RR to Plan-in-Hand	LPD PC	NDOR Audit Team	Invitation to RR	9
28	Verify RR concurrence of TS&L	LPD PC	NDOR Audit Team	LPA's transmittal indicates cc: railroad RR written concurrence of TS&L	9
29	Review Traffic Study <i>(if applicable)</i>	LPD PC and TRF DIV	NDOR Audit Team	Concurrence memo from Traffic Division	6
30	Review Plan-in-Hand (30%) plans	LPD PC, BR DIV and M&R	NDOR Audit Team	Checklist and marked up PIH plans	6
31	Verify Proximate historic properties	PPDD ES and FHWA	NDOR Audit Team	Checklist	5
32	Plan-in-Hand field review	LPD PC, PPDD ES and LPD UH	NDOR Audit Team	PIH report and checklist; Public Partic checklist; Design Exceptions <i>(if any are anticipated at this phase)</i> with justification initial report	6
33	Verify utilities at Plan-in-Hand	LPD PC	NDOR Audit Team	PIH Report and checklist	8
34	Threatened and Endangered Species Review	PPDD ES, and FHWA	USFWS	Matrix <i>(under development as of March 2009)</i>	5
35	Review Plan-in-Hand report	LPD PC, PPDD ES and LPD UH	NDOR Audit Team	PIH report checklist and Signed PIH Report	6

Seq. No.	QC/QA Activity	QC	QA	Document	Chapter
36	Review NEPA Determination Form	LPS PC, PPDD ES, PPDD EM, and FHWA	FHWA (PCE)	NEPA Determination Form and Checklist	5
37	Review public involvement applicability	LPD PC and PPDD ES	NDOR Audit Team	Checklist	6
38	Review Public Involvement Plan (PIP)	PPDD ES and FHWA	NDOR Title VI Coord annual report	PIP and checklist	5
39	Review Public Involvement Title VI compliance	LPD PC, and PPDD ES	NDOR Audit Team	Checklist and provide written comments	10
40	Review and approve Purpose & Need Statement (CE, EA or EIS) prior to public meeting	LPD PC, PPDD ES and PPDD EM	FHWA	Checklist	5
41	Verify functional design (60%) submittal	LPD PC and LPD UH	NDOR Audit Team	PIH report and checklist; Public Partic checklist; Design Exceptions (if any are anticipated at this phase) w/justification initial report	6
42	Review public meeting transcript	PPDD ES and FHWA	NDOR Audit Team	Checklist	5
43	Review avoidance/minimize/mitigation plan	PPDD ES and USACE	NDOR Audit Team	Checklist	5
44	Threatened and Endangered Species Review	PPDD ES, FHWA and USFWS	NDOR Audit Team	Matrix (under development as of March 2009)	5
45	Review draft Cat Ex Document	PPDD ES, PPDD EDM+MGR and FHWA	NDOR Audit Team	Checklist and NDOR written comments	5
46	Review draft EA Document	PPDD ES, PPDD EDM+MGR and FHWA	NDOR Audit Team	Checklist and NDOR written comments	5
47	Review draft EIS Document	PPDD ES PPDD EDM+MGR and FHWA	NDOR Audit Team	Checklist and NDOR written comments	5

Seq. No.	QC/QA Activity	QC	QA	Document	Chapter
48	Final review and signoff of the NEPA Document	PPDD ES, LPD PC and FHWA	NDOR Audit Team	Circulation List	5
49	Verify PE invoices for Payment	LPD PC	NDOR Audit Team	Checklist	4
50	Review PE scope of work and cost estimate for Supplemental Agreement	LPD PC, BR DIV, RD DIV, M&R, PPDD ES and ROWD	NDOR Audit Team	Checklist, approved scope and cost estimate and written comments.	4, 6, & 7
51	Concur with the PE final Scope and fee for the Supplemental Agreement	LPD PC	NDOR Audit Team	Checklist and written concurrence. An administrative adjustment may be needed to keep the authorization in line with the cost estimate.	4
52	Review Supplemental PE Agreement	LPD PC, PPDD AS and NDOR State Rep	NDOR Audit Team	Checklist, agreement signed as to form and NDOR letter to LPA issuing a NTP for additional PE services.	4
53	Verify project phase included on TIP/STIP	LPD PC	PMD and FHWA	STIP is on website - Screen Shot	2
54	Request obligation of funds for Final Design	LPD PC	PMD and FHWA	Checklist	2
55	Verify authorization of Federal funds for Final Design	LPD PC	NDOR Audit Team	Screen shot of FMIS, DR-333/4/5, NDOR issues NTP letter to the LPA for Final Design services	4
56	Review design for ADA	LPD PC and NDOR PS&E	NDOR Audit Team	Checklist	10
57	404 Permit Application Review	PPDD ES and USACE	NDOR Audit Team	Checklist	5
58	Review 70% bridge plans	BR DIV and LPA	NDOR Audit Team	Checklist	6

Seq. No.	QC/QA Activity	QC	QA	Document	Chapter
59	Review 90% (LOC) plans	LPD PC	NDOR Audit Team	Checklist	6
60	Verify ROW phase is included on the TIP/STIP	LPD PC	PMD and FHWA	STIP is on website - Screen Shot	2
61	Request obligation of funds for ROW	LPD PC	PMD	Checklist	2
62	Verify authorization of funds for ROW	LPD PC	NDOR Audit Team	Screen shot of FMIS; DR 333/4/5, and a NDOR NTP letter issued to the LPA for ROW	7
63	Review ROW plans	LPD PC and ROWD	NDOR Audit Team	Checklist - written communication to LPA if corrections must be made.	7
64	Verify Submittal of plans - Utilities	LPD PC	NDOR Audit Team	Date of each submittal to utility and date of final review entered into database.	8
65	Verify Submittal of plans - RR	LPD PC	NDOR Audit Team	LPA's transmittal letter to RR	9
66	Review utility's rehab plan (60% plan level)	LPD PC	NDOR Audit Team	Checklist	8
67	Concur in eligibility of utilities (betterment vs. non-betterment)	LPD PC	NDOR Audit Team	Checklist	8
68	Review draft Utilities Agreement	LPD PC	NDOR Audit Team	Checklist and provide written comments	8
69	Concur with the final Utilities Agreement	LPD PC	NDOR Audit Team	Checklist	8
70	Verify RR concurrence of appraisal plans	LPD PC	NDOR Audit Team	RR written concurrence	9

Seq. No.	QC/QA Activity	QC	QA	Document	Chapter
71	Review ROW cost estimate	ROWD Chief Appraiser	NDOR Audit Team	Checklist and written (or e-mail) ROWD approval of the document and NDOR issues a NTP letter of authorization to proceed with appraisals.	7
72	Review ROW Compensation Estimates (Waivers), Appraisals and Appraisal Reviews	ROWD Appraisal Section	NDOR Audit Team	Checklist; ROWD approval of the document and NDOR issues a NTP letter of authorization to proceed with acquisition (except relocation assistance parcels); for relocations, proceed to Benefits Study.	7
73	Review Relocation Assistance Benefit Studies	ROWD Relocation Supervisor	NDOR Audit Team	Checklist; stamped and signed document, and NDOR issues a NTP letter for acquisition and relocation	7
74	Review Relocation Assistance Claims	ROWD Relocation Supervisor	NDOR Audit Team	Checklist, stamped and signed document	7
75	Review ROW acquisition files	ROWD Chief Negotiator	NDOR Audit Team	Checklist and ROW certificate	7
76	Review administrative settlements	ROWD Chief Appraiser, ROWD Manager and FHWA	NDOR Audit Team	Form AP14	7
77	Verify RR concurrence with the final plans	LPD PC	NDOR Audit Team	RR written concurrence	9
78	Review draft RR agreement	LPD PC	NDOR Audit Team	Checklist; NDOR issues a NTP letter for ROW activities	9
79	Concur with RR agreement	LPD PC	NDOR Audit Team	Checklist	9
80	Review environmental commitments file	LPD PC and PPDD ES	NDOR Audit Team	Checklist	5

Seq. No.	QC/QA Activity	QC	QA	Document	Chapter
81	Review final plans	LPD PC	NDOR Audit Team	Checklist	6
82	Verify receipt of Utilities Agreement	LPD PC	NDOR Audit Team	Checklist	8
83	Review documents required for PS&E submittal	LPD PC	NDOR Audit Team	Checklist	6
84	Review Bid package for Title VI requirements	LPD PC and PS&E	NDOR Audit Team	Checklist	10
85	Review DBE goal percentage	CD CM	FHWA and NDOR Audit Team	PS&E Checklist	10
86	Verify receipt of Status of Utility Report	LPD PC	NDOR Audit Team	Checklist	8
87	Review RR special provisions	LPD PC	NDOR Audit Team	Checklist	9
88	Verify utility phase is included on the TIP/STIP	LPD PC	PMD and FHWA	STIP is on website - Screen Shot	2
89	Request obligation of funds for utilities	LPD PC	PMD and FHWA	Checklist	2
90	Verify authorization of funds for Utilities work done before construction	LPD PC	NDOR Audit Team	Checklist and NDOR NTP letter to the LPA for utility work	8
91	Verify PE invoices for Payment	LPD PC	NDOR Audit Team	Checklist	4
92	Review CE scope of work and cost estimate	LPD PC, BR DIV, RD DIV, TRF DIV, M&R, PPDD ES and ROWD	NDOR Audit Team	Checklist. Approved scope and cost estimate. Written comments and correspondence.	4
93	Verify CE contract basis of payment	LPD PC	NDOR Audit Team	N/A	4

Seq. No.	QC/QA Activity	QC	QA	Document	Chapter
94	Verify category of QBS-Small or Large Purchase	LPD PC	NDOR Audit Team	N/A	4
95	Concur in CE selection panel, selection criteria and approve RFP	LPD PC	NDOR Audit Team	Checklist and written concurrence	4
96	Verify CE phase is included on the TIP/STIP	LPD PC	PMD and FHWA	STIP is on website - Screen Shot	2
97	Request obligation of funds for CE	LPD PC	PMD and FHWA	Checklist	2
98	Verify authorization of funds for CE	LPD PC	NDOR Audit Team	Screen shot of FMIS; NDOR issues a NTP letter to the LPA authorizing utility and railroad work (<i>work during construction</i>) and to advertise the CE RFP	2
99	Verify that the advertisement for CE services were done correctly	LPD PC	NDOR Audit Team	Proof of publication	4
100	Concur with the CE short listed firms	LPD PC	NDOR Audit Team	Checklist and written concurrence	4
101	Concur with the final CE selection	LPD PC	NDOR Audit Team	Checklist and written concurrence	4
102	Verify selected CE firm's Title VI compliance	LPA and LPD PC	NDOR Title VI Coordinator	Checklist	10
103	Concur with the firm's CE pre-audit overhead rate	PPDD AS and NDOR CD Audit Section	NDOR Audit Team	Approved existing audit	13

Seq. No.	QC/QA Activity	QC	QA	Document	Chapter
104	Concur with the CE final scope and fee	LPD PC and NDOR State Rep	NDOR Audit Team	Checklist based on construction monitoring plan.	4
105	Review CE agreement	LPD PC	NDOR Audit Team	Checklist, agreement signed as to form and NDOR letter to LPA issuing a NTP for CE services.	10
106	Verify construction phase is included on the TIP/STIP	LPD PC	PMD and FHWA	STIP is on website - Screen Shot	2
107	Review PS&E package	LPD PC and NDOR PS&E	NDOR Audit Team	Checklist; communicate package deficiencies to LPA in writing; get letter from LPA confirming that they have corrected the deficiencies; NDOR issues a NTP letter authorizing the LPA to advertise.	11
108	Request obligation of funds for Construction	LPD PC	PMD and FHWA	Checklist	2
109	Verify authorization of funds for Construction	NDOR PS&E and LPD PC	NDOR Audit Team	Screen shot of FMIS; NDOR issues a NTP letter to the LPA authorizing utility, and railroad work (<i>work during construction</i>) and to advertise the project for bids.	11
110	Review Construction Cost Estimate	LPD PC and NDOR PS&E	NDOR Audit Team	Checklist	11
111	Verify advertisement	LPD PC	NDOR Audit Team	Proof of advertisement	11
112	Review and approve bid addendums	NDOR PS&E and FHWA	NDOR Audit Team	Checklist, and written approval or rejection.	11
113	Verify concurrence of non-responsive bids	NDOR PS&E and FHWA	NDOR Audit Team	LPA's justification (<i>written reason</i>), and NDOR's written concurrence.	11

Seq. No.	QC/QA Activity	QC	QA	Document	Chapter
114	Review and concur in contract award	NDOR PS&E and FHWA	NDOR Audit Team	Checklist and bid concurrence or rejection letter.	11
115	Approval of subcontractors – State let	NDOR State Rep	NDOR Audit Team	SiteManager (entry by Constr. Div.)	12
116	Approval of DBE subcontractors - State let	NDOR State Rep	NDOR Audit Team	SiteManager (entry by Constr. Div.)	12
117	Approval of subcontractors – Local let	NDOR State Rep	NDOR Audit Team	SiteManager (entry by Constr. Div.)	12
118	Approval of DBE subcontractors – Local let	NDOR Construction Division	NDOR Audit Team	SiteManager (entry by Constr. Div.)	12
119	Review pre-construction meeting agenda and minutes	NDOR State Rep	NDOR Audit Team	Approved Agenda	12
120	Verify materials testing requirements	RC and NDOR State Rep	NDOR Audit Team	Spreadsheet	12
121	Review Utilities reimbursements	NDOR State Rep	NDOR Audit Team	Checklist, invoice copy, supporting docs.	8
122	Verify installation of RR devices	NDOR State Rep	NDOR Audit Team	Checklist	9
123	Approve final Utility payment	NDOR State Rep	NDOR Audit Team	Checklist	8
124	Verify intent to achieve DBE goals	NDOR Construction Division	NDOR Audit Team	DR Forms 441, 442, and 449	10
125	Verify CE invoices for Payment	LPD RC and NDOR State Rep	NDOR Audit Team	Checklist	4
126	Review Scope of Work and estimate for Supplemental CE Agreement	LPD PC, BR DIV, RD DIV, M&R and NDOR State Rep	NDOR Audit Team	Checklist, and written comments	4, 6, & 7

Seq. No.	QC/QA Activity	QC	QA	Document	Chapter
127	Concur with the CE final scope and fee for the supplemental agreement.	LPD PC	NDOR Audit Team	Checklist and written concurrence.	4
128	Review Supplemental CE Agreement	LPD PC, PPDD AS and NDOR State Rep	NDOR Audit Team	Checklist, agreement signed as to form and NDOR letter to checklist, and written comments to LPA issuing a NTP for additional CE services.	
129	Verify Contractor's and CE's Title VI compliance	LPA	NDOR State Rep and NDOR Title VI Coordinator	Checklist	10
130	Verify labor/wage rate and EEO compliance	LPA	NDOR State Rep and NDOR Audit Team	DR Form 98	10
131	Verify DBE activities	LPA	NDOR State Rep and NDOR Audit Team	Checklist	10
132	Review change orders	RC and NDOR State Rep	NDOR Audit Team	Change Order form	12
133	Review reimbursements	RC and NDOR State Rep	NDOR Audit Team	Approved invoice	12
134	Review materials sampling/testing activities	LPA and RC	NDOR State Rep	Daily Checklist	12
135	Review environmental compliance during construction	RC	NDOR State Rep, PPDD ES and NDOR Audit Team	Environmental Compliance Inspection Form	5, 12
136	Review construction project files	RC	NDOR State Rep and NDOR Audit Team	Checklist	12

Seq. No.	QC/QA Activity	QC	QA	Document	Chapter
137	Verify pay quantities	RC	NDOR State Rep	SiteManager entry or written supporting documentation.	12
138	Review construction site activities	LPA	RC and NDOR State Rep	Diary	12
139	Review construction progress payments	RC	NDOR District Engineer	Signed progress payment	12
140	Review project construction diaries	RC	NDOR State Rep	Checklist	12
141	Review project - final walkthrough	LPA RC, NDOR State Rep, CE and Contractor	NDOR Audit Team	DR Form 299 and punchlist	14
142	Verify finals records	RC, NDOR State Rep and NDOR Finals	NDOR Audit Team	Final checklist	12
143	Verify achievement of DBE goals	FHWA	NDOR Audit Team	Checklist	14
144	Verify overhead rates	NDOR Audit Section	NDOR Audit Team	Exit Audit	13
145	Verify a financial audit	FHWA	NDOR Audit Team	Final Audit	14
146	Verify final CE invoice for Payment	LPD PC and NDOR State Rep	NDOR Audit Team	Checklist	4
147	Verify closure of consultant contracts	LPD PC, Controller Division and P&PD AS	NDOR Audit Team	Checklist	4
148	Verify permits may be closed out	LPD PC	NDOR State Rep and PPDD ES	Date of each submittal to permit agency and date of final review entered into database.	5
149	Verify appropriate maintenance of the completed project.	LPA	NDOR Audit Team	Audit Report	14

QC/QA Table Acronyms List

ADA - Americans with Disabilities Act

Appr Sec - Appraisal Section - NDOR Right-of-Way Division

BR DIV - Bridge Division - NDOR

Cat Ex - Categorical Exclusion

CD CM - Construction Division Civil Rights Manager

CE - Construction Engineering Services

Chf Appr - Chief Appraiser - NDOR Right-of-Way Division

Chf Neg - Chief Negotiator - NDOR Right-of-Way Division

DE - District Engineer - NDOR

EA - Environmental Assessment

EEO - Equal Employment Opportunity

EIS - Environmental Impact Statement

FHWA - Federal Highway Administration

FMIS - Financial Management Information System - FHWA

LOC - Limits of Construction

LPA - Local Public Agency

LPD PC - Local Projects Division Project Coordinator - NDOR

LPD UH - Local Projects Division Unit Head - NDOR

M&R - Materials and Research Division - NDOR

MPO - Metropolitan Planning Organization

NDOR Finals - NDOR Construction Division Finals Unit

NDOR RPT - NDOR Rail & Public Transit

NDOR State Rep - NDOR District Project State Representative

NTP - Notice to Proceed

PE - Preliminary Engineering Services

PIP - Public Involvement Plan

PPDD ES - Planning and Project Development Division Environmental Section - NDOR

PPDD AS - Planning and Project Development Division Agreement Section - NDOR

PPDD EM - Planning and Project Development Division Environmental Section Manager - NDOR

PS&E - Plans, Specifications and Estimates

PMD - Program Management Division - NDOR

QBS - Quality Based Selection

RC - Responsible Charge

RD DIV – Roadway Design Division – NDOR

Rel Supv - Relocation Supervisor - NDOR ROW Division

ROWD - Right-of-Way Division - NDOR

STIP - State Transportation Improvement Plan

TIP - Transportation Improvement Plan

Title VI - Title six of the Civil Rights Act of 1964

TRF DIV - Traffic Division - NDOR

TS&L - Type, Size and Location

USACE - United States Army Corps of Engineers

USFWS - United States Fish and Wildlife Service

15.6 Deficiencies

15.6.1 Procedural Deficiencies

A procedural deficiency is a finding that a LPA's practices and procedures fail to conform to the LPA Guidelines Manual for Federal-aid Projects or other applicable Federal and State guidance.

Examples of some of the most common LPA procedural deficiencies are:

- Continued submission of NEPA documents that contain poor quality work, errors, and omissions;
- Continued submission of plans, specifications, or estimates that contain errors and omissions;
- Continued submission of ROW plan, appraisal or acquisition documents that contain errors and omissions;
- Continued lack of proper communication with NDOR's LPD Project Coordinator;
- Lack of proper or sufficient project documentation and maintaining an unorganized project correspondence file.

15.6.2 Major Deficiencies

A major deficiency is a finding by NDOR and/or FHWA of an error of commission or omission, which violates Federal or State law or regulation that, if uncorrected, would prevent Federal or State financial participation in all or a portion of the project.

Examples of some of the most common major deficiencies are:

- Failure to initiate a reevaluation of an environmental document prior to obligation of construction, when changes in project scope have created additional impacts;
- Failure to initiate a reevaluation of an environmental document during construction, prior to initiating plan changes that create additional impacts;
- Failure to fulfill mitigation commitments or adhere to restrictions identified in the approved NEPA document;
- Failure to obtain an approved public-interest-finding allowing the LPA to specify the use of publicly owned equipment, mandatory borrow/disposal sites, patented/proprietary materials, or agency-furnished materials;
- Failure to obtain materials certificates and/or perform the required materials testing.
- Failure to maintain the completed project (*roadway and appurtenances constructed with Federal funds and/or mitigation sites*), or portions of the project,
- Failure of the LPA to provide adequate supervision of the project; or
- Failure of the LPA to ensure that the contractor posts all specified posters, notices and wage determinations at the job site.

15.6.3 Unrecoverable Project Deficiency

An unrecoverable project deficiency is a deficiency that violates one or more of the policies and objectives of Title 23 of the USC and the project has proceeded to the point that the deficiency cannot be corrected.

Examples of some of the most common unrecoverable project deficiencies are:

- Project phases performed prior to inclusion on an approved TIP/STIP;
- Any activities (*such as preliminary engineering, ROW or construction*) performed prior to authorization;
- Violation(s) of environmental permit requirements or conditions, or failure to secure required permits or NEPA approvals;
- Failure to comply with consultant selection procedures;
- Design work (*over and above what is required for NEPA compliance*) prior to NEPA approval;

- Awarding a project when Form FHWA-1273 was not included in the bid documents;
- Acquiring ROW prior to NEPA approval (*except for hardship and protection with FHWA prior approval*);
- Performing ROW activities in violation of the Uniform Relocation Assistance and Real Properties Policy Act, as amended, even if there are no Federal funds in ROW;
- Providing false statement(s) on ROW Certification;
- Failure to open the bids publicly, failure to read the bids aloud, or failure to discuss reason(s) for not reading bid(s) aloud, and awarded the contract;
- Award of the construction contract to other than the lowest, responsive bidder for bids based on competition;
- Negotiations with bidder(s) prior to competitive award;
- Award of the contract to a suspended or debarred contractor;
- Failure to construct a project in substantial compliance with the plans and specifications;
- Failure to provide a full-time public employee to be RC of the project;
- LPA bidding in competition or entering into subcontracts with private contractors;
- Awarding a contract that includes provisions requiring a contractor to give any preference in hiring (*with the exception of Native Americans living on or near a reservation on eligible projects*);
- Permanently incorporating steel or iron or coatings thereon from a foreign source in amounts exceeding the minimal use provisions (*without the proper Buy America waiver*);
- Performing routine maintenance as a contract item or under a contract change order;
- Payments to a contractor for items of work that was designated for a DBE but performed by others; or
- Failure of the LPA to enforce contract requirements relating to Federal statutes including the provisions of Form 1273.

15.7 Sanctions

LPAs with identified deficiencies in their Federal-aid program are subject to sanctions. During the investigation of deficiencies, NDOR will initiate a meeting with the LPA. The intent of the meeting is to discuss information relevant to, and obtain a clear understanding of, the deficiencies. Depending on the severity and circumstances of the deficiency, NDOR and FHWA may impose one or more of the following sanctions:

- Suspend future programming of Federal-aid projects until corrective action is implemented;

- Require additional or remedial training;
- Freeze progress payments for a Federal-aid project until the project's deficiency is corrected;
- Withdraw a portion of Federal and/or State funds for a project;
- Withdraw all Federal and/or State funds from a project; and
- Revoke the LPA's qualification to administer Federal-aid transportation projects;

NDOR is responsible for notifying the LPA of sanctions imposed. Whether or not sanctions are imposed against a LPA, the LPA shall be expected to develop an action plan and implement it to correct the deficiencies. LPAs will be given adequate time to develop and implement their action plan. Failure to correct the deficiencies in a timely manner shall be grounds for imposing additional sanctions, up to and including revocation of the LPA's qualification to administer Federal-aid transportation projects.