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1 Introduction

1.1. About the Federal-aid Guide

1.1.1. What is the Federal-aid Guide for?

The Federal-aid Project Development Guide for Local Public Agencies (the Federal-aid Guide) exists to provide information and instructions to Local Public Agency (LPA) staff in order to help them successfully develop their Federal-aid transportation projects.

1.1.2. How should the Federal-aid Guide be used?

For LPAs that are unfamiliar with Federal-aid procedures, the Federal-aid Guide serves as an overview and introduction to the Federal-aid process. For those LPAs that frequently use Federal-aid funds for their transportation projects, the Federal-aid Guide also serves as a reference tool to quickly locate more detailed information on a specific topic.

The Federal-aid Guide is not intended to include all the details of the Federal-aid process. Instead, where appropriate, the Federal-aid Guide references other documents that provide additional detailed instructions concerning specific parts of the process. In other words, the Federal-aid Guide provides a central location from which all of the information relevant to development of LPA Federal-aid transportation projects may be located.

Most of the detailed information referenced by the Federal-aid Guide is contained in the Instructional Memorandums to Local Public Agencies (I.M.s). To view or print a referenced I.M., simply click on the hyperlink provided, shown with blue, underlined text. The Iowa DOT does not provide printed copies of the I.M.s; however, all I.M.s are available on-line in Adobe Acrobat’s Portable Document Format (PDF).

Although the Federal-aid Guide is written using an informal style, in some places, it is necessary to use technical terms or phrases. When such terms or phrases are used, they are defined in Appendix B - Glossary of Terms. To jump to the glossary entry for a defined term or phrase, simply click on the green, dotted-underline text.

1.1.3. What does the Federal-aid Guide cover?

The focus of the Federal-aid Guide is Federal-aid project development. However, it also provides some guidance for a wider range of project activities – beginning immediately after funding approval and continuing up through construction and final reimbursement.

The Federal-aid Guide is applicable to any transportation project that is funded in whole or in part with Federal Highway Administration (FHWA) program funds that are passed through the Iowa Department of Transportation (iowa DOT) to a local government or other government agency. Examples of such programs include traditional highway and bridge programs such as the Surface Transportation Block Grant (STBG) Program and Highway Bridge Program (a subsidiary of the STBG program); and other transportation-related programs such as Transportation Alternatives Program (TAP) and Federal Recreational Trails program and the Iowa Clean Air Attainment Program (ICAAP). The Federal-aid Guide is also applicable to projects funded with Federal-aid earmark or demonstration funds that are subject to FHWA requirements, as specified in Title 23, United States Code and its associated regulations.


1.2. Working with the Iowa DOT

1.2.1. Roles and Responsibilities

With respect to an LPA Federal-aid transportation project, the Iowa DOT serves as both an advisor and a monitor. With each role, the Iowa DOT has different responsibilities. As an advisor, the Iowa DOT is responsible for providing guidance and assistance to LPAs to help them successfully implement their Federal-aid transportation projects. As a monitor, the Iowa DOT is
responsible to the FHWA for administering and overseeing the various Federal-aid transportation programs that are available to LPAs. This oversight is accomplished by numerous reviews and approvals of project activities, as outlined in the I.M.s applicable to those activities.

Certain project activities also require approval by FHWA (for example, a design exception for a project on the National Highway System). A complete list of activities requiring FHWA approval is contained in Attachment A of the Stewardship and Oversight Agreement between the Iowa DOT and the FHWA Iowa Division. When approval is required by FHWA, this will also be noted in the I.M. that addresses that project activity.

In addition, for certain projects, the FHWA must also review and approve certain project activities. In the current Stewardship and Oversight Agreement, these are referred to by FHWA as Projects of Division Interest (PoDI) and Projects of Corporate Interest (PoCI). Such projects will have a project-specific Stewardship and Oversight Plan which details the specific project activities requiring FHWA review and approval. These activities are selective and may change over time. If a project is designated as either a PoDI or PoCI, the FHWA Iowa Division will notify the Iowa DOT, and in turn, the Iowa DOT Administering Bureau will notify the LPA and provide a copy of the project-specific Stewardship and Oversight Plan. As of February 12, 2017, FHWA has stated they will no longer identify PoCIs. If a project was identified as a PoCI going forward, it will be treated as a PoDI. For more information, refer to FHWA’s PoDI and PoCI Guidance.

1.2.2. Who do I Contact?

The administration and oversight of these Federal-aid programs is a combined effort of many different divisions and offices within the Iowa DOT. However, the LPA’s primary point of contact with the Iowa DOT will be the Administering Bureau. Unless specified otherwise, all project submittals, correspondence, and questions should be directed to the Administering Bureau.

The Iowa DOT Local Systems Bureau is responsible for providing written guidance, including the Federal-aid Guide, I.M.s, and other information, to both the Administering Bureau and LPAs. The Local Systems Bureau also provides assistance with the interpretation and implementation of that guidance. When policy or procedural questions require the assistance of the FHWA, the Local Systems Bureau serves as a liaison between the FHWA and the Administering Bureau or LPAs.

2 Federal-aid Basics

Before beginning any project activities for which Federal-aid reimbursement will be requested, read this section carefully! This section of the Federal-aid Guide explains several critical activities and their sequence in the Federal-aid process. To have a successful Federal-aid project, it is crucial that the LPA officials working on the project understand and comply with these basic requirements of the Federal-aid process.

2.1. Project Programming

All Federal-aid projects must be included, or “programmed,” in the appropriate Regional Planning Affiliation (RPA) or Metropolitan Planning Organization (MPO) Transportation Improvement Program (TIP). All of the RPA and MPO TIPs are then combined, along with Iowa DOT Federal-aid projects, to form the Statewide Transportation Improvement Program (STIP).

As discussed in Section 2.3 below, project activities for which Federal-aid reimbursement will be requested must receive FHWA Authorization before those activities begin. However, before any project activities can receive FHWA Authorization, the project must be included in the STIP. Therefore, project programming is a critical first step in the Federal-aid process.

The LPA is responsible for working with the applicable RPA or MPO to ensure that their project is included in the TIP / STIP and is programmed with an adequate amount of funds for the correct Federal Fiscal Year (FFY). Funds should be programmed in the FFY(s) in which FHWA Authorization will need to occur; not on the basis of when actual expenditures will occur. For example, if utilizing Federal-aid on the construction phase of a project, FHWA Authorization would occur during the Iowa DOT letting process and all related Federal-aid funds shall be programmed in the FFY in which the authorization will occur for the anticipated letting. This would be true even if the construction project was expected to take multiple
construction seasons to complete. The FFY begins October 1, and ends September 30. For example, FFY 2021 began October 1, 2020 and will end September 30, 2021. FHWA Authorization for the October letting would occur approximately 6 weeks before letting, so for projects scheduled for an October letting, they would need to be programmed in the previous FFY.

Project programming information for the TIPs is submitted, reviewed, and transmitted to the Iowa DOT for inclusion in the STIP using the Transportation Project Management System (TPMS). TPMS is a web-based tool developed by the Iowa County Engineers Association Service Bureau (ICEASB) to assist local agencies with project programming and development tracking. While this tool was initially developed for the counties, it is also available for use by cities and consultants. For more information about TPMS or to request access to this system, call the ICEASB at 515-244-0779.

2.2. Funding Agreement

Another important initial step in the Federal-aid process is execution of a funding agreement between the Iowa DOT and the LPA. When funding has been awarded, the LPA should submit a copy of the approved funding application, Concept Statement, or other documentation to the Administering Bureau as soon as possible. Other documentation shall include, as a minimum, the name and title of the LPA’s contact person, a project description that identifies the limits and basic character of the proposed work, and a current cost estimate. (Note: If the funding application was approved by the Administering Bureau, as may be the case with the Systems Planning Bureau, additional documentation is not usually required.)

Upon receipt of this information, the Administering Bureau will prepare a funding agreement and send an unsigned copy to the LPA for signature. By signing the funding agreement, the LPA agrees to follow all of the applicable Federal and State laws, regulations and policies pertaining to the specific type(s) of Federal funds that are involved. Therefore, project development activities should not proceed until a funding agreement has been executed to avoid potential re-work or jeopardizing Federal-aid.

In general, the funding agreement spells out the responsibilities of both the LPA and the Iowa DOT. The details of the funding agreement will vary, depending on the type of Federal funds that are involved. The LPA officials responsible for the project should thoroughly review the funding agreement prior to bringing it to the board of supervisors or city council for action. Any questions or concerns should be directed to the Administering Bureau.

2.3. FHWA Authorization

FHWA Authorization is one of the most important aspects of the entire Federal-aid process. If not done correctly or in a timely manner, it can jeopardize Federal-aid reimbursement for part or all of a project.

2.3.1. When is FHWA Authorization Needed?

FHWA Authorization must be obtained before beginning any project activity for which Federal-aid reimbursement will be requested. If the LPA does not have written confirmation from the Iowa DOT that FHWA Authorization has been secured for a specific project activity which will utilize Federal-aid, work should not begin. The costs associated with work occurring prior to FHWA Authorization will not be reimbursed with Federal funds. If there is any doubt about whether FHWA Authorization has been obtained, contact the Administering Bureau for assistance.

Depending on the type of Federal funds and the provisions of the funding agreement, there are several different types of project activities that may be eligible for Federal-aid reimbursement. Some of these may include environmental studies, design, right-of-way acquisition, utility relocations, railroad work, construction, and construction inspection. Refer to the project funding agreement for the specific types of project activities that may be reimbursed with Federal funds.

2.3.2. How is FHWA Authorization Obtained?

The following is a summary of the FHWA Authorization process. This process has been generalized for the sake of clarity. The actual authorization process will vary depending on the specific type of project activity that is being authorized. Additional details are provided in the sections of the Federal-aid Guide and I.M.s that address each type of project activity.
1. The LPA sends a written request for FHWA Authorization to begin a specific type of project work to the Administering Bureau, including the appropriate documentation for the type of work being requested.

2. The Administering Bureau reviews the LPA’s request and verifies the required clearances and reviews have been completed.

3. If acceptable, the Iowa DOT verifies the availability of Federal funds and prepares the electronic Authorization/Agreement or Amendment/Modification document, using the Fiscal Management Information System (FMIS).

4. The Iowa DOT sends the electronic document to FHWA for review and approval.

5. FHWA reviews the electronic document, and if acceptable, electronically signs the document. If the request is not acceptable, FHWA contacts the Iowa DOT to resolve any questions or issues.

6. After FHWA has signed the electronic document, the Administering Bureau notifies the LPA that FHWA Authorization has been obtained and the requested work may begin.

2.4. Reimbursement

All of the Federal-aid transportation programs administered by the Iowa DOT operate on a reimbursement basis. That is, the LPA, after completing the necessary steps and receiving the appropriate approvals, pays project expenses up front. In turn, the LPA submits a request for reimbursement to the Iowa DOT. The request should be made using the format or provided by the Administering Bureau. To ensure proper accounting of costs, reimbursement requests for costs incurred prior to June 30 shall be submitted to the Administering Bureau by August 1 if possible, but no later than August 15.

Requests for reimbursement shall be made on a periodic basis after costs have been incurred. To prevent the project obligation from becoming inactive (no Federal-aid reimbursements for 12 months or more), reimbursement should be requested every 6 months but not more than bi-weekly. If the project becomes inactive, the Iowa DOT will notify the LPA that the unexpended balance of Federal funds will be de-obligated if the LPA cannot provide documentation within 30 days to support the remaining balance. Such documentation shall include a revised cost estimate and a date by which a reimbursement request for the remaining Federal funds will be submitted. If a reimbursement request cannot be submitted within 30 days, written justification will be required for retaining the unexpended balance of Federal funds. The justification shall explain why the delay in requesting Federal-aid reimbursement is beyond the control of the LPA. Examples include delays resulting from environmental reviews or permits, right-of-way acquisition, utility relocations, unresolved litigation or contract claims, or compliance with other Federal-aid requirements. Failure to adequately plan for these requirements will not be considered adequate justification. If adequate justification is not provided, the unexpended balance of Federal funds will be de-obligated, and as a result, may no longer be available for reimbursement. For more information about the inactive obligation review requirements and process, refer to I.M. 1.200, Federal Funds Management.

After Iowa DOT review and approval, the LPA will be reimbursed by the Iowa DOT at the agreed upon Federal share for properly documented, eligible, and authorized project costs. Reimbursements to the LPA are typically made by issuing a State warrant.

Farm-to-Market projects: A slightly different process is used for county Federal-aid projects on the Farm-to-Market System. For those projects, payments are typically made by Iowa DOT from the county’s Farm-to-Market account. After such payments have been made, the Iowa DOT will request Federal-aid reimbursement, and the Federal share of such costs will be credited to the county’s Farm-to-Market account.

2.5. Match Requirements

2.5.1. General Match Requirements

Most Federal-aid transportation programs require some type of cost sharing or match to the Federal funds. In most cases, the match must come from non-Federal-aid sources. Usually, this match is provided in monetary form; that is, eligible project costs that have been paid for by entities other than the Federal government. Monetary sources may include donations of funds made by a third party, special assessments made for the project, and other non-Federal-aid funding sources. However, if the total funding received up-front for the project exceeds the required non-Federal share, the Federal share shall be reduced or the excess project specific funding must be returned. In other words, an LPA may not make money on a Federal-aid project.
2.5.2. In-Kind Contributions

Under certain circumstances, certain non-monetary contributions by a third party may be counted towards the required non-Federal-aid match. These non-monetary contributions are referred to as an in-kind contribution. A third party is any entity other than the Federal government, the Iowa DOT, or the LPA who is the recipient of the Federal funds. The type of in-kind contribution that may be counted toward the non-Federal-aid match varies, depending on the timing of the contribution and the type of Federal funds that are being matched. Projects funded by one or more of the Small Federal Programs (Transportation Alternatives Program and Federal Recreational Trails) may utilize right-of-way, services, materials, or equipment as an in-kind contribution. For all other Federal-aid projects, only right-of-way may be used as an in-kind contribution. For additional guidance, eligibility limitations, and instructions on how to obtain Iowa DOT and FHWA approval of in-kind contributions, refer to I.M. 3.050, In-Kind Contributions.

2.6. Person in Responsible Charge

Federal regulations (23 CFR 635.105 and 23 CFR 172.9(d)(1)) require the LPA to have a full time employee who is in responsible charge of the project. This person supervises all project administration duties, oversees the work performed by consultants and contractors, and coordinates the development of the project with the Iowa DOT. Specific duties include:

1. administering inherently governmental project activities, including the review, approval, and negotiation of contracts, adherence to contract requirements and construction quality, and managing the scope of Federal-aid projects;
2. maintaining familiarity with day to day project operations, including project safety issues;
3. evaluating and participating in contract administration decisions and approvals, such as changed conditions, scope changes, changes in contract time, and changes in contract amounts;
4. scheduling and attending project review meetings and construction site visits on a frequency that is commensurate with the magnitude and complexity of the project;
5. reviewing financial processes, transactions, and documentation to ensure that safeguards are in place to minimize fraud, waste, and abuse;
6. directing project staff, agency staff, or consultants, to carry out project administration and contract oversight, including proper documentation;
7. being aware of the qualifications, assignments, and on-the-job performance of the agency and consultant staff at all stages of the project; and
8. ensuring that costs requested for Federal-aid reimbursement are allowable in accordance with the Federal cost principles and consistent with the contract terms.

These duties may be shared by several people. A single person may also serve as the person in responsible charge for multiple projects.

For counties and larger cities, this person is typically the county or city engineer; however, they need not be a licensed engineer or architect to be the person in responsible charge. For smaller cities that do not have any full time employees, the mayor or city clerk may serve as the person in responsible charge, with assistance from the Iowa DOT Administering Bureau. A consultant shall not serve as the person in responsible charge.

3 Getting Started

3.1. Project Development Overview

The Federal-aid project development process is shown graphically in Appendix A - Project Development Flowchart. This flow chart includes references to some of the applicable I.M.s for additional details concerning specific parts of the development process. The remaining sections of the Federal-aid Guide provide a written overview of the project development process.
3.2. Concept Statement

Submittal of the Concept Statement for Local Public Agency Federal-aid Projects (Form 517001) is a critical first step that typically initiates the project development process. This form provides information about the proposed location and types of work, possible environmental impacts, and proposed design.

Since this information is used by the Iowa DOT to initiate a number of different project reviews and processes, this form should be submitted by the LPA as soon as possible. Otherwise, the required reviews and processes will be delayed, and this may delay the project as a whole.

For additional information and detailed instructions for completing this form, refer to I.M. 3.020, Concept Statement Instructions.

3.3. Project Schedule

The time required to develop a Federal-aid project from funding approval to project letting varies greatly, depending on several factors. Some of these factors include: whether right-of-way must be acquired, the type and magnitude of environmental or social impacts, and whether utility relocations or work on railroad property or facilities is required. Therefore, it is not possible to specify a project schedule that is applicable to all situations. Nevertheless, some typical project schedules are provided in I.M. 3.000, Federal-aid Project Scheduling. These schedules show the relationship between the typical project tasks and the time it usually takes to complete each one, based on certain assumptions.

3.4. Project Submittal Dates

I.M. 3.010, Project Development Submittal Dates and Information, provides specific dates for some of the key project submittals, based on a targeted Iowa DOT letting date. It also provides a summary of what should be included in those submittals.

Please note that I.M. 3.010 is only intended to show the minimum amount of time required for the Iowa DOT to review the project submittals listed. Depending on the circumstances of each project, other submittals or activities may be the controlling factor in determining when a project may be let. These dates do not account for the review times of other Federal or State agencies that may or may not be necessary for a given project. In addition, the dates shown in I.M. 3.010 assume that the project will complete the NEPA process as a Categorical Exclusion (CE); they are not applicable for projects that will require an Environmental Assessment (EA) or Environmental Impact Statement (EIS). For more information about the different levels of environmental classification, refer to I.M. 4.020, NEPA Process.

3.5. Project Tracking

The Iowa DOT requires the LPA (or the consultant acting on its behalf) to use TPMS (as described in Section 2.1) to record and monitor the programming and development status of their projects that involve construction. Use of TPMS for non-construction projects is optional. Much of the information in TPMS is transferred electronically to the Iowa DOT for use in project programming, development, and letting. Therefore, it is important for LPAs to keep their project information current in TPMS.

3.6. Financial Plan

For major projects (those with an estimated cost of $100 million or greater) the LPA will be required to prepare a financial plan. For purposes of this requirement, a “project” is defined by the limits used for the environmental review process described in Section 4 below, unless specifically stated otherwise in the environmental document.

The LPA’s project financial plan must be reviewed and approved by the Iowa DOT and FHWA. The estimated cost shall include all elements of work for all segments of the overall project. Elements of work refer to the different categories of work, such as engineering, right-of-way, construction, etc. Segments refer to the portions of the total project which can be defined by physical limits. For example, the design, right-of-way, and construction activities for several projects in the same highway corridor, even though they are separated for purposes of bidding and construction, may be considered one overall project.
If a project may fall into the major project category, the LPA should contact the Iowa DOT Administering Bureau for assistance. Additional information is available on FHWA’s Innovative Program Delivery website.

4 Permits and Environmental Review

This section of the Federal-aid Guide gives a brief summary of the typical permits or environmental reviews that may be required by the applicable Federal or State laws and regulations.

4.1 The NEPA Process

The National Environmental Policy Act (NEPA) and its associated Federal regulations require that certain procedures be followed in developing a Federal-aid project. The purpose of these procedures is to provide consideration of a wide variety of social or environmental impacts that may result from the project.

The amount of time and effort required to comply with the NEPA process varies greatly, depending on the anticipated level of impacts. The effort required by an LPA may be as minimal as completing a few forms; or it may be as involved as preparing extensive environmental documentation and facilitating a significant amount of public involvement, which can be a very costly and time-consuming process.

The Iowa DOT is responsible to review the environmental impacts of all LPA Federal-aid transportation projects and assist the LPA in complying with the NEPA requirements. This review is coordinated and ultimately approved by the FHWA, based on the established policies and procedures.

There are several distinct parts of the NEPA process. Completion of the NEPA process is sometimes referred to in the Federal-aid Guide and I.M.s as FHWA Environmental Concurrence. For an overview of the NEPA process as a whole, refer to I.M. 4.020, NEPA Process. For additional guidance concerning the different parts of the FHWA Environmental Concurrence process, refer to the following I.M.s:

- **I.M. 3.020**, Concept Statement Instructions, provides detailed instructions for completing the Concept Statement for Local Public Agency Federal-aid Projects (Form 517001). This form is used to begin the FHWA Environmental Concurrence Process.
- **I.M. 4.110**, Threatened and Endangered Species, provides guidance concerning the requirements and procedures for potential impacts to listed species and critical habitats.
- **I.M. 4.120**, Cultural Resource Regulations, provides guidance concerning the requirements and procedures for potential impacts to cultural resources, such as archaeological sites and historic properties.

4.2 Section 404 Permits

Section 404 of the Clean Water Act and its associated Federal regulations place restrictions on the use of wetlands, streams, rivers, or other aquatic resources. If any project construction will occur in any of these areas, the LPA may be required to notify the U.S. Army Corps of Engineers and obtain the appropriate Section 404 permit. For more information, refer to I.M. 4.130, 404 Permit Process.

4.3 Iowa DNR Floodplain Development Permits

Projects that will involve construction in the flood plain of any river or stream in Iowa may require a Floodplain Development Permit from the Iowa Department of Natural Resources (Iowa DNR). The threshold for when a permit is required depends on the location, type of construction, and drainage area of the river or stream. For more information, refer to I.M. 4.150, Iowa DNR Floodplain Permits and Regulations.

4.4 Storm Water Permits

The Clean Water Act and its associated Federal and State regulations may also require a National Pollutant Discharge Elimination System (NPDES) permit. If project construction activities will disturb more than 1 acre of ground, the LPA is required to submit a notification and obtain an NPDES permit from the Iowa DNR. Ground is considered disturbed if the soil is exposed to erosive forces, such as wind or water, for any period of time. For more information, refer to I.M. 4.140, Storm Water Permits.
4.5. Farmland Protection Policy Act

The Farmland Protection Policy Act and its associated Federal regulations are designed to minimize the conversion of farmland to non-agricultural purposes by Federal-aid programs. If the project will require less than 5 acres of farmland per mile or per site, no action needs to be taken. However, if the anticipated impacts will exceed these thresholds, the LPA is required to complete a form and submit it to the Natural Resources Conservation Service (NRCS). For more information, refer to I.M. 4.170, Farmland Protection Policy Act Guidelines.

4.6. Projects in the Vicinity of an Airport or Heliport

If project construction will take place in the vicinity of a public airport or heliport, the LPA may be required to provide notice to the Federal Aviation Administration (FAA) and local airport officials. For more information, refer to I.M. 4.190, Highway Improvements in the Vicinity of Airports or Heliports.

4.7. Hazardous Materials

In order to construct a transportation project, it is possible that hazardous materials may be encountered during the demolition or construction of buildings, bridges, or other structures. In those cases, certain Federal and State laws and regulations may govern how the demolition or construction may proceed.

The Clean Air Act and its associated Federal regulations require certain inspection, testing, notification, and removal procedures to be followed if the project involves removal of any structures or material that may contain asbestos. This includes buildings and bridges. For more information on the required procedures, refer to I.M. 4.160, Asbestos Inspection, Removal, and Notification Requirements.

If contaminated soil or other hazardous wastes are encountered during project construction or on property acquired for the project, the LPA may be responsible for removal or treatment of such materials. If hazardous wastes may be present, the LPA may contact the Iowa DOT Location and Environment Bureau, Regulated Materials Section, for assistance.

4.8. Work on Primary or Interstate Highways

If a locally sponsored project involves a Primary or Interstate highway, additional coordination and approvals by the Iowa DOT and / or FHWA are required, as described below.

4.8.1. Permits

If the project will require any work within or abutting the right-of-way of an Interstate or Primary Highway, the LPA must acquire the appropriate permit(s) from the Iowa DOT. Execution of the project funding agreement does not grant any of the Iowa DOT permits that may be required. The type of permits required depends on the type of work being done. For more information, contact the Engineering Operations Technician in the Iowa DOT District Office in which the project is located.

4.8.2. Interchange Justification Reports

If the project will involve studies, design, or construction associated with a new or revised interchange on an Interstate highway, an Interchange Justification Report (IJR) must be prepared. The purpose of an IJR is to evaluate the need and engineering feasibility of the proposed interchange. The IJR must be reviewed and approved by the Iowa DOT and the FHWA. For more information, refer to the Iowa DOT’s User Guide – Process for New or Revised Interchange Access.

4.8.3. Projects within Interstate Right-of-Way

If the project will require any work within Interstate ROW, additional time may be required for FHWA review prior to construction, regardless of funding type. For projects with Federal-aid, the Administering Bureau will coordinate this. Due to traffic volumes and speed, all construction that takes place within Interstate right-of-way will be directly administered by Iowa DOT unless prior approval has been obtained from FHWA. Coordination of these activities should be discussed early in the design process to ensure all parties have capacity in their schedules.
5 Project Design

Unless specified otherwise in the project funding agreement, the LPA is responsible for all project design activities. The project design may be completed by the LPA’s own staff, by a consultant, or if provided for by an intergovernmental agreement with another governmental agency, the staff or consultants hired by that agency. In any case, all plans and specifications must be prepared by a professional engineer or architect licensed to practice in the State of Iowa, unless specified otherwise in the project funding agreement.

5.1. Final Design and FHWA Environmental Concurrence

As discussed in Section 4.1 above, the NEPA process requires that certain procedures be followed in the process of selecting the location of a Federal-aid project. The NEPA process also places limits on when certain project activities may begin. One of the activities limited by the NEPA process is final design. Final design activities may not begin until FHWA Environmental Concurrence has been obtained.

Environmental and related engineering studies, agency coordination, public involvement activities, and preparation of Preliminary Plans are not considered final design. Therefore, these activities may proceed prior to completing the NEPA process. However, work directly associated with preparation, review, or submittal of Check Plans or Final Plans is considered final design.

5.2. Federal-aid Participation in Design Activities

For most Federal-aid projects, project design activities may be eligible for Federal-aid reimbursement. For purposes of FHWA Authorization, these costs are categorized as one of the following:

- Preliminary Engineering (PE) includes work that is part of the development of the plans, specifications, and estimate (PS&E) for a construction project. This includes environmental studies and documents, preliminary design, and final design up through and including the preparation of bidding documents. PE does not include planning or other activities that are not intended to lead to a construction project. Examples include planning, conceptual, or feasibility studies.

- Construction Engineering (CE) includes materials testing, construction inspection, and other work directly related to the administration of the construction contract (e.g., processing contractor payment requests, or preparing change orders, a final punch list, or project close-out paperwork).

5.2.1. Consultant Services

If the LPA uses consultant services to assist in the planning, design, or construction of the project, a consultant evaluation shall be completed as per I.M. 3.320, Consultant Evaluations.

If the LPA desires Federal-aid reimbursement for the costs of consultant services, certain procedures must be followed in acquiring, preparing, reviewing, approving, and administering the consultant contract. For more information, refer to I.M. 3.310, Federal-aid Participation in Consultant Costs.

5.2.2. In-House Services

If the LPA chooses to perform PE, CE, right-of-way acquisition, or other work directly related to the development of the project with its own staff, these costs may also be reimbursed with Federal funds, if the appropriate procedures are followed. To be approved, the LPA must be able to segregate and provide an accounting of the cost of its in-house services. For more information, refer to I.M. 3.330, Federal-aid Participation In-House Services.

5.3. Design Guidelines

Federal-aid projects should be designed to meet the guidelines provided by the Iowa DOT. Generally speaking, these guidelines correspond to nationally recognized design guidelines, such as those published by the American Association of State Highway Transportation Officials (AASHTO).
5.3.1. **Roadways and Bridges**

Any road or bridge projects that are located on the **Primary Highway System, Interstate System** or **National Highway System** (NHS), regardless of funding source, shall use the design guidelines in the **Iowa DOT Design Manual**. For all other road and bridge projects, refer to the guidelines listed below:

- For projects involving new construction or complete reconstruction within urban areas, refer to Iowa Statewide Urban Design and Specifications (SUDAS) **Design Manual**, Chapter 5.
- For projects involving new construction or complete reconstruction on rural collectors and rural local roads, refer to **I.M. 3.210**, Rural Design Guidelines.
- For projects with a rural cross section (e.g. shoulders with open ditches, no curbs) in urban areas or projects in transition areas between rural and urban areas, refer either to the SUDAS **Design Manual** or **I.M. 3.210**.
- For both rural and urban projects involving rehabilitation, restoration, or resurfacing (3R) projects, refer to **I.M. 3.220**, 3R Guidelines.
- For guidance concerning the use and placement of guard rails and bridge rails, refer to **I.M. 3.230**, Traffic Barriers (Guardrail and Bridge Barrier Rail).
- For guidance in providing a safe recovery area, refer to **I.M. 3.240**, Clear Zone Guidelines.
- For projects involving bridges or culverts, additionally refer to **I.M. 3.500**, Bridge or Culvert Plans.

5.3.2. **Bicycle and Pedestrian Facilities**

For bicycle and pedestrian facility projects, designs should meet or exceed the minimum recommended values provided in Chapter 12A and 12B of the **Iowa DOT Design Manual**.

New construction or alterations to pedestrian facilities shall be designed to meet the requirements of the Americans with Disabilities Act (ADA). Refer to **I.M. 1.080**, ADA Requirements, for the applicable design guidelines.

5.4. **Design Exceptions**

Designs that do not meet the guidelines specified by the applicable I.M.s or documents referenced in Section 5.3 will require a written design exception or justification. Design exceptions and justifications should be based on sound engineering judgment, describe the proposed mitigation measures, and include supporting documentation that is appropriate. Design exceptions also require preparation of a cost-benefit analysis; whereas justifications do not.

The LPA must prepare and submit the design exception or justification and its accompanying documentation to the Administering Bureau for review and approval. Design exceptions or justifications should be submitted with the Concept Statement submittal, or as soon as it becomes apparent that an exception or justification will be necessary, but in no case later than the Check Plan Submittal.

5.4.1. **Roadways and Bridges**

A design exception is required in the following situations:

1. For the controlling design elements listed in **I.M. 3.260**, Design Exception Process, the proposed design does not meet:
   - the values in the “AASHTO Guidelines” tables of **I.M. 3.210**; or
   - the “acceptable” values in the **Iowa DOT Design Manual** or SUDAS **Design Manual**, as applicable.

2. For projects on the Interstate System, Primary System, or NHS, any controlling design element identified in the **Iowa DOT Design Manual Section 1C-1** is not met.
A justification is required in the following situations:

For the controlling design elements listed in I.M. 3.260, Design Exception Process, the proposed design meets:

- the values in the “AASHTO Guidelines” tables, but does not meet the values in the “Design Aids” tables of I.M. 3.210; or
- the “acceptable” values, but does not meet the “preferred values” in the Iowa DOT Design Manual or SUDAS Design Manual, as applicable.

Federal regulations require approval of design exceptions for any new construction, reconstruction or 3R project on the NHS, regardless of funding source. LPAs should review the design of all such projects and submit design exception requests to the Iowa DOT Administering Bureau. Routine maintenance activities on NHS routes do not require review or approval by the Iowa DOT.

For more information on the design exception process for road or bridge projects, refer to I.M. 3.250, Economic Analysis (Benefit-to-Cost Ratio) and I.M. 3.260, Design Exception Process.

5.4.2. Bicycle and Pedestrian Facilities

Project designs that do not meet the guidelines listed in Section 5.3.2 require a written justification.

5.5. Plans and Specifications

There are several points during project development at which plans must be submitted to the Iowa DOT. These submittals are a key part of the project review and provide much of the information required by the Iowa DOT. Each submittal shall be made through TPMS and accompanied by an e-mail through the TPMS system; and other documents shall be submitted as required. The content of each submittal is summarized in I.M. 3.010, Project Development Submittal Dates and Information.

5.5.1. Preliminary Plans

The Preliminary Plans are used by the Iowa DOT to evaluate the proposed project design, right-of-way needs, and possible environmental impacts. For more information, refer to I.M. 3.400, Preliminary Plans. If the project involves a bridge or culvert, refer also to I.M. 3.500, Bridge or Culvert Plans.

5.5.2. Check and Final Plans

Most Federal-aid transportation projects must be let by the Iowa DOT. To be successfully let by the Iowa DOT, the plans and specifications must conform to the Iowa DOT letting process. For example, the Iowa DOT Standard Specifications and the accompanying list of standard bid items shall be used when appropriate. In addition, use of Iowa DOT Standard Road Plans and Road Design Details (includes standard tabulations, notes, details, and typical sections) are also strongly encouraged. Use of these standards promotes consistency and uniformity among all projects let by the Iowa DOT. In turn, plan consistency helps reduce the project cost, because bidder uncertainties associated with different specifications or plan formats are reduced.

The Check Plan submittal serves as a precursor to the Final Plans. Even so, Check Plans should be 100% complete. This allows the Administering Bureau to review all the required elements of the plans and provide enough time to make any changes that may be needed. If the Check Plans are not complete, the project letting may be delayed.

For detailed information about the plan requirements for letting at the Iowa DOT, refer to I.M. 3.700, Check and Final Plans, and I.M. 3.720, Electronic Bid Item Information. If the project involves a bridge or culvert, refer also to I.M. 3.500, Bridge or Culvert Plans.
6 Right-of-Way, Utilities, and Railroads

6.1. Right-of-Way

For some transportation projects, it is necessary to acquire some type of property rights in order to construct the project. As used in the Federal-aid Guide and the I.M.s, the term, “right-of-way” includes the acquisition of any type of property rights. These property rights may be temporary, such as a temporary construction easement; or they may be permanent, such as a drainage easement or title to a property.

Regardless of what type of property rights are acquired, there are a number of Federal and State laws and regulations that govern how and when this may be accomplished on a Federal-aid project. These laws and regulations are lengthy and complex, and in many cases, will require the use of specially trained staff or consultants to ensure they are followed properly. Nevertheless, there are a few points that everyone should understand:

- The Federal and State right-of-way laws and regulations always apply, even if right-of-way costs will not be reimbursed with Federal funds.

- If Federal-aid is used in the cost of acquiring right-of-way, the acquisition may not begin until after FHWA Environmental Concurrence has been obtained. One exception to this requirement is when property is acquired because of a hardship on the property owner, or when purchase is necessary to protect a corridor for future transportation use. However, individual parcels to be acquired under the hardship or protective buying provisions still must have prior approval by the Iowa DOT and the FHWA.

- If Federal-aid is not used in the cost of acquiring right-of-way, the acquisition may begin before FHWA Environmental Concurrence has been obtained.

For more information about right-of-way acquisition resources, procedures, and requesting FHWA Authorization of right-of-way costs, refer to I.M. 3.600, Right-of-Way Acquisition.

6.2. Utilities

6.2.1. Accommodation and Coordination

Early coordination with utilities that may be impacted by a transportation project is critical. Even though, in many cases, the utility company is obligated to move its facilities if required by a transportation project, failure to communicate by either the LPA or the utility can cause project delays and added expense.

All utility relocations required by a Federal-aid project shall comply with the applicable utility accommodation policy. For projects located on non-primary, Federal-aid highways, refer to the Policy for Accommodating Utilities on the County and City Non-Primary Federal-aid Road System. For projects located on primary highways, refer to 761 Iowa Administrative Code, Chapter 115 Utility Accommodation. For more information, refer to I.M. 3.640, Utility Accommodation and Coordination.

6.2.2. Federal-aid Participation in Utility Relocations

Federal funds may or may not participate in the costs, depending on their location, ownership, and which entities have either the obligation or authority to pay for the costs of relocating the utilities. In most cases, utilities located in the public right-of-way must move at their own expense and are not eligible for Federal-aid reimbursement. Utility relocation costs include the costs to relocate utilities that must be moved in order to construct the project. Besides construction, these costs may also include design, and in some cases, the acquisition of a replacement easement.

For more information, refer to I.M. 3.650, Federal-aid Participation in Utility Relocations.
6.3. Railroads

6.3.1. Coordination

When a transportation project requires the use of railroad property, even for minor maintenance-type work of limited duration, advance notification and approval by the railroad will be required. Projects that require access to the railroad right-of-way or modifications to railroad facilities will require an agreement with the railroad.

Therefore, as is the case with utilities, early coordination with the affected railroad(s) is critical. The LPA should contact all railroad companies that have tracks inside or adjacent to the project work area to determine what type of approvals or agreements will be required. The Iowa DOT has developed a process for coordinating with railroads, including specific procedures and specifications that shall be used for all projects let by the Iowa DOT. For more information, refer to I.M. 3.670, Work on Railroad Right-of-Way.

6.3.2. Federal-aid Projects Involving Railroads

All Federal-aid projects that will require access to the railroad right-of-way or modifications to railroad facilities must comply with a number of other specific requirements, including project design, notifications and / or agreements, insurance, and provisions for railroad flaggers.

If required by the transportation project, the costs of work performed by a railroad or the railroad’s contractor may be eligible for Federal-aid reimbursement. In other cases, if the proposed improvements have a benefit to the railroad, the railroad may also be required by the Federal regulations to share in the cost of the work. However, the cost of improvements that are for the sole benefit of the railroad are not eligible for Federal-aid participation.

For purposes of FHWA Authorization, railroad work includes the costs of modifications to railroad facilities that are required in order to construct the project. This may include construction, flaggers, right-of-way, and engineering costs. These costs shall be identified as part of the agreement between the LPA and the railroad, and the agreement must be reviewed and approved by the Iowa DOT prior to being executed by the LPA and the railroad. For more information, refer to I.M. 3.680, Federal-aid Projects Involving Railroads.

7 Letting and Contract Award

7.1. Iowa DOT Letting Procedures

Competitive bidding has been a long-standing requirement for the Federal-aid transportation programs, with a few exceptions. As a result, there are many Federal laws and regulations that pertain to the construction contracting process. Because of the complexity of these requirements, the Iowa DOT requires that most Federal-aid projects be let at the Iowa DOT. This enables the Iowa DOT to better ensure compliance with these laws and regulations by conducting and directly monitoring the letting process. The Iowa DOT letting process is described in detail by I.M. 5.030, Iowa DOT Letting Process. If an LPA would like to utilize innovative contracting methods, refer to I.M. 3.730, Innovative Contracting Procedures. However, some important aspects of this process are highlighted in the subsections below:

7.1.1. FHWA Authorization of Construction Costs

As part of the letting process, the Iowa DOT obtains FHWA Authorization for the costs of the proposed construction contract. FHWA Authorization will be requested based on the plans, specifications, and estimate (PS&E) submitted by the LPA. If the bids come in significantly higher or lower than the estimate, the FHWA Authorization may be adjusted accordingly, provided that sufficient Federal funds are available for the project. The Iowa DOT requires that the LPA budget sufficient funds and be prepared to award a contract for bids that are up to 110% of the LPA’s estimate.

7.1.2. Project Clearances

Before letting may proceed, the project should have all of the necessary clearances. These clearances are documented by the LPA and reviewed by the Iowa DOT using the Project
Development Certification (Form 730002). This form should be submitted with the Final Plans. For more information, refer to I.M. 5.050, Project Development Certification Instructions.

Without the required clearances, projects are normally not allowed to enter the Iowa DOT letting process. However, under special circumstances, a project may begin the letting process without all of the necessary clearances provided the LPA requests and the Administering Bureau approves a Public Interest Finding.

The LPA’s request must document the reasons why it is in the public’s best interest to deviate from the standard procedures. For additional guidance on this process, as well as other conditions that require a Public Interest Finding, refer to I.M. 5.060, Public Interest Findings.

### 7.1.3. Iowa DOT Concurrence in Award

After bids are opened, the Iowa DOT determines the lowest responsive and responsible bidder and provides the LPA with tabulation of bids received and the unexecuted contract documents. Within 30 days of the letting, the LPA must either accept the low bid or reject all bidders. If the low bid is accepted, the LPA shall utilize Doc Express for the execution of the Contract. Instructions for Contract Signing in Doc Express are linked here. If the Contract is acceptable, the Iowa DOT indicates its concurrence on the contract documents and transitions the contract documents via Doc Express, and the contract documents are marked complete. **Work shall not begin and the preconstruction meeting shall not be held prior to Iowa DOT concurrence in the award.** If the LPA elects to reject all bids, it shall notify the Iowa DOT Contracts and Specifications Bureau of its decision. For additional information and items for LPA consideration, refer to I.M. 5.030, Iowa DOT Letting Process.

### 7.2. Local Letting Procedures

While most Federal-aid projects must be let at the Iowa DOT, there are a few non-highway transportation programs for which lettings may be held locally.

Even though projects funded by these programs may be let locally, the applicable Federal and State competitive bidding requirements must still be satisfied, as well as several other Federal-aid requirements. To assist in meeting these requirements, the Iowa DOT has developed procedures and standardized bidding documents for use with locally let Federal-aid projects. Before advertising for bids, the LPA must submit the proposed bidding documents for review and approval by the Iowa DOT.

For more information on the types of Federal-aid programs and projects that may be let locally, and the required procedures for conducting a local letting, refer I.M. 5.120, Local Letting Process – Federal-aid.

### 7.3. Participation by Disadvantaged Business Enterprises

The requirements of the Disadvantaged Business Enterprise (DBE) program apply to all contracts awarded under all of the Federal-aid transportation programs, regardless of how the contract is acquired. These requirements apply to construction contracts let locally or by the Iowa DOT. They also apply to consultant contracts which will be reimbursed with Federal funds.

In summary, a DBE goal is not always required, but DBE firms must always be given consideration for participation in Federal-aid funded contracts. For specific guidance on applying the DBE requirements to construction contracts or consultant contracts, refer to I.M. 5.010, DBE Guidelines.

### 8 Construction

#### 8.1. Contract Administration and Inspection

Unless specified otherwise in the funding agreement, the LPA will be responsible for all aspects of administration and inspection of the construction contract. This includes providing daily, on-site inspection of the contractor’s work activities and processing all of the paperwork associated with the construction contract, including any change orders. All change orders shall have approval of the appropriate governing authority, such as the city council or county board of supervisors. Change Orders must also have Iowa DOT concurrence.
If the LPA does not have adequate staff to perform this work, it may hire a consultant or enter into an agreement with another governmental agency to provide these services. If the LPA elects to hire a consultant, the consultant staff shall be competent in construction inspection and perform this work under the direct supervision of a registered professional engineer or architect licensed in the State of Iowa.

However, use of a consultant does not relieve the LPA of ultimate responsibility for the proper administration and inspection of the construction contract. If a consultant is used to provide the inspection services, an LPA employee shall oversee the consultant’s work.

For additional information about the construction inspection procedures, including the required forms and paper work, refer to I.M. 6.000, Construction Inspection.

8.2. Iowa DOT and FHWA Reviews

The Iowa DOT and / or the FHWA may also conduct a field review of selected LPA projects during construction. Selected projects will be reviewed by Administering Bureau, Local Systems Bureau, or FHWA staff. If selected, the LPA may be notified when the field review will be conducted, or the review may be conducted unannounced. The purpose of the field review is to spot check the LPA’s construction inspection documentation and provide assistance to the LPA if any deficiencies are identified.

8.3. Federal-aid Participation in Construction by LPA Forces

In some cases, construction of part or all of a Federal-aid project may be accomplished by LPA forces. Under very limited circumstances, the costs of such work may be eligible for Federal-aid participation. Federal-aid participation in such work requires prior approval by the Iowa DOT, as outlined in I.M. 5.060, Public Interest Findings. The Public Interest Finding must be based on both the cost effectiveness of such work and on special circumstances that are unlikely to be repeated. For more information on how to request FHWA Authorization for work done by LPA forces, refer to I.M. 6.010, Federal-aid Construction by Local Agency Forces.

Regardless of whether Federal-aid participation is requested for this work, it must also comply with State bidding laws that limit the amount of work that can be performed by LPA forces. In general, work associated with construction, reconstruction, or improvements must be obtained either by bids or competitive quotes if the estimated cost of such work exceeds the thresholds specified by the Code of Iowa. These thresholds are summarized on the Local Systems Bureau web page titled, Bid Thresholds for Iowa Cities and Counties.

9 Project Close-out and Audits

9.1. Completion of the Construction Contract

Federal regulations require each project to establish a Project End Date (PED). Costs incurred after the PED are not eligible for reimbursement. Timely project closeouts after the PED are also required by federal regulations. Refer to I.M. 1.200, Federal Funds Management, for additional details.

The LPA is responsible for ensuring that all project construction has been completed and all of the necessary paperwork as required by the construction contract has been provided. This involves the LPA conducting a pre-audit of all contract items and associated paperwork; refer to I.M. 6.110, Attachment E for a checklist of items. When both the LPA and the Administering Bureau accept the field work as complete, the LPA’s project engineer shall certify that the project was constructed in accordance with the plans and specifications and request a final audit of the construction contract.

9.2. Final Audits

After receipt of the request for a final audit, the Administering Bureau may elect to conduct a final audit of the construction contract documentation. This will include a review of the final pay quantities for the construction contract, including material certifications, test results, and other documentation. If Federal-aid participation was requested for the costs of a consultant contract, work by LPA forces, utility relocations, or railroad work, a final audit or review of these costs may also be conducted.
If the final audits or reviews find that the LPA has been over-reimbursed, the LPA shall reimburse the Iowa DOT for the amount identified by the final audit or review. In turn, the Iowa DOT will credit these funds to the FHWA. Otherwise, the Iowa DOT will make the final reimbursement to the LPA, taking into account any adjustments required by the final audit or review.

9.3. Closing the Project and Records Retention

After the final reimbursement to the LPA has been processed, the Iowa DOT will prepare a final Amendment/Modification to the FHWA authorization for the project in FMIS, including the final total costs and final amount of Federal-aid reimbursement. After FHWA has approved this request, a copy of this document will be distributed to various Iowa DOT offices, the LPA, and the appropriate RPA or MPO.

The LPA shall maintain all project records for a period of 3 years after FHWA approval of the final Amendment / Modification document. Afterwards, the LPA may discard its project files if desired.


10 Other Federal-aid Requirements

This section of the Federal-aid Guide addresses those Federal-aid requirements that do not correspond to a particular part of the project development process but are nonetheless very important considerations for any LPA using Federal funds.

10.1. Nondiscrimination

10.1.1. Title VI

Title VI of the Civil Rights Act of 1964 (Title VI) is a foundational piece of legislation that forms the basis for a wide array of other laws and regulations that prohibit discrimination on the basis of race, color, national origin, disability, gender, and age. Title VI has a very broad application. It prohibits discrimination in all programs or activities of any LPA that is a recipient of any Federal-aid financial assistance; even those programs or activities that do not directly benefit from such assistance. For additional guidance, refer to I.M. 1.070, Title VI and Nondiscrimination Requirements.

10.1.2. Americans with Disabilities Act

The Americans with Disabilities Act of 1990 (ADA) is another piece of legislation aimed at prohibiting discrimination. Title II of the ADA applies to State and local governments, and its requirements affect the design, construction, and maintenance of all transportation projects, regardless of the funding sources.

The ADA requires that all new construction, reconstruction, and alterations to existing pedestrian facilities be made accessible to persons with disabilities. In addition, for those existing facilities that are not accessible, a transition plan must be prepared and implemented to bring those facilities into compliance.

For more information on ADA requirements related to transportation projects and facilities, refer to I.M. 1.080, ADA Requirements.

10.2. Federal Funds Management

LPAs expending any Federal funds of any kind must comply with various Federal requirements relating to the management of Federal funds, including financial controls, single audit requirements, reporting, inactive obligations, project end dates, and close-out procedures. For more information, refer to I.M. 1.200, Federal Funds Management.
10.3. Bridges

10.3.1. Bridge Inspections

As a condition of receiving any Federal funds, LPAs with highway bridges under their jurisdiction must comply with the National Bridge Inspection Standards (NBIS). The NBIS requires regular inspections, bridge ratings, posting where appropriate, and qualified personnel to perform and supervise inspections. For more information, refer to I.M. 7.020, Bridge Inspections.
Appendix A – Project Development Flow Chart

Start

Is the project in the current approved STIP?

LPA forwards copy of approved funding application, Concept Statement, or other documentation to Admin. Bureau and requests guidance on how to proceed with project development.

LPA works with RPA / MPC to add the project to the current STIP (see Guide, Section 2.1).

LPA signs funding agreement and returns to Admin. Bureau.
Admin. Bureau signs agreement and distributes copies

If not already done, LPA submits a Concept Statement to the Admin. Bureau (see I.M. 3.020, Concept Statement Instructions).

Admin. Bureau reviews, provides comments, and clears Concept Statement. Admin. Bureau forwards Concept Statement and supporting documentation to LEB and ROW for review.

LPA requests FHWA Authorization and / or approval for the following, as applicable:

Consultant Work?

Yes → See I.M. 3.310, Federal-aid Participation in Consultant Costs.

No → In-House Services?


No → Will In-Kind Contributions be used?

Yes → See I.M. 3.050, In-Kind Contributions.

No

Abbreviations / Acronyms:
Admin. Bureau = Iowa DOT Administering Bureau
FHWA = Federal Highway Administration
LEB = Location & Environment Bureau
LPA = Local Public Agency
MPO = Metropolitan Planning Organization
RPA = Regional Planning Affiliation
ROW = Right-of-Way
RR = Railroad
STIP = Statewide Transportation Improvement Program
Note: Project submittals shall be as per I.M. 3.010, Project Development Submittal Dates and Information.

LPA prepares Preliminary Plans (see I.M. 3.400, Preliminary Plans).

LPA and Iowa DOT begin FHWA Environmental Concurrency process (see I.M. 4.020, NEPA Process).

Will early ROW acquisitions be requested?

Yes → See I.M. 3.600, Right-of-Way Acquisition.

No

Does the project involve a RR?


No → Utility relocations required?


No

LPA submits Preliminary Plans to Admin. Bureau, who reviews, provides comments, and clears Preliminary Plans.

(Continued on next page)
Appendix A – Project Development Flow Chart (continued)

(Continued from previous page)

FHWA Environmental Concurrence is received.

LPA addresses Preliminary Plan comments and begins development of Check Plans (see I.M. 3.700, Check and Final Plans).

If the project involves ROW, ROW Bureau contacts LPA and offers assistance.

Is ROW required?

Yes → See I.M. 3.600, Right-of-Way Acquisition.

No

Is an airport within 20,000 ft. of the project?

Yes → See I.M. 4.190, Highway Improvements in the Vicinity of Airports or Heliports.

No

Construction work by LPA forces?

Yes → See I.M. 6.010, Federal-aid Construction by Local Agency Forces.

No → LPA submits Check Plans to Admin. Bureau, who reviews, provides comments, and clears Check Plans.

LPA addresses Check Plan comments and submits the Final Plans and Project Development Certification, as per I.M. 5.050, Project Development Certification Instructions.

DOT or local letting?

Admin. Bureau reviews and submits Final Plans, PDC, and other submittals to Contracts and Specifications Bureau

See I.M. 5.030, Iowa DOT Letting Process

See I.M. 5.120, Local Letting Process – Federal-aid

LPA inspects project during construction (see I.M. 5.000, Construction Inspection).

Construction is complete.


See I.M. 3.320, Consultant Evaluations.

DOT processes final reimbursement to LPA. LPA and DOT keep project records for 3 years.

End

Abbreviations / Acronyms:
Admin. Bureau = Iowa DOT Administering Bureau
FHWA = Federal Highway Administration
LPA = Local Public Agency
MPO = Metropolitan Planning Organization
RPA = Regional Planning Affiliation
ROW = Right-of-Way
RR = Railroad
STIP = Statewide Transportation Improvement Program
Note: Project submittals shall be as per I.M. 3.010, Project Development Submittal Dates and Information.
Appendix B – Glossary of Terms

Below is an alphabetical listing of terms and phrases used in the Federal-aid Guide. Following each term or phrase is a brief definition.

**Administering Bureau:** For projects funded by any or a combination of the Transportation Alternatives Program, Federal Recreational Trails, certain Iowa Clean Air Attainment Program projects, and earmark projects that are eligible under the aforementioned programs, the Systems Planning Bureau is the Administering Bureau. For most other projects, the Administering Bureau is the Local Systems Bureau. In rare cases, the Administering Bureau is one of the 6 District Offices, depending on which Iowa DOT District the LPA is located in. Refer to I.M. 1.000, Iowa DOT Oversight of LPA Projects, to determine which bureau is the Administering Bureau.

**Authorization/Agreement:** A document that the Iowa DOT and FHWA electronically sign in FMIS that obligates Federal funds for the project. This document also establishes the Effective Authorization Date.

**Amendment/Modification:** A document that amends a previously executed Authorization/Agreement or a prior Amendment/Modification. In instances when a Federal-aid funded project needs to be amended for any reason (cost overrun, additional phase of work, supplemental agreement, etc.), an Amendment/Modification is signed by the Iowa DOT and FHWA to electronically approve the modification. This process is also completed through FMIS.

**Earmark or demonstration funds:** Federal-aid funding that is directed to specific projects in legislation enacted by the United States Congress. Earmark funding may be included either in a multi-year transportation bill such as the Fixing America’s Surface Transportation Act (FAST Act), or as part of an annual appropriations bill. Even though these projects receive their funding in a different way, earmark projects must still follow the same project development procedures as all other Federal-aid projects.

**Effective Authorization Date:** This is the date after which work that is to be reimbursed with Federal funds may begin. Any costs incurred prior to this date are not eligible for Federal-aid reimbursement. This date is shown on the Authorization/Agreement and Amendment/Modification documents.

**Federal-aid highways:** All roads except those with a Federal Functional Classification of Rural Minor Collector or Local.

**Federal Fiscal Year (FFY):** Begins on October 1 and ends September 30 of each calendar year. For example, October 1, 2021 is the beginning of the Federal Fiscal Year 2022.

**Federal funds:** Federal funds reflect the amount of Federal funding available for a project. The total amount of Federal funds received is subject to either the Federal-aid limit shown in the Statewide Transportation Improvement Program (STIP) or the limit established by the project funding agreement.

**Federal share:** The percentage of eligible and authorized project costs paid by the Federal government. With a few exceptions, the Federal government does not pay for the entire cost of the project. In most cases, Federal funds must be matched with funds from non-Federal-aid sources. For most FHWA transportation programs, the Federal share of project costs is 80%. Refer to the funding agreement for the applicable pro-rata Federal share and matching requirements of the specific type of Federal funds involved.

**FHWA Authorization:** The action taken by FHWA when signing the Authorization/Agreement document or the Amendment/Modification document in FMIS. Except in the case of Advance Construction, this action results in an obligation of Federal funds at the specified Federal share for the specific type of project costs identified on the Authorization/Agreement or Amendment/Modification.

**FHWA Environmental Concurrence:** This milestone in project development is marked by different events for different types of projects, depending on the anticipated level of environmental impacts. The event that marks the completion of the NEPA process depends on the type of NEPA document that is required for the project:

- For projects that are classified as a Categorical Exclusion (CE), the NEPA process is complete as of the effective date of FHWA Environmental Concurrence. This date is specified in the written notice the LPA will receive from the Iowa DOT Location and Environment Bureau.
- For projects that require an Environmental Assessment (EA) or Environmental Impact Statement (EIS) document, the NEPA process is considered complete as of the date that the FHWA signs the Finding of No Significant Impact (FONSI) or Record of Decision (ROD) document, respectively.
Appendix B – Glossary of Terms (continued)

For more information about the different types of environmental documentation, refer to I.M. 4.020, NEPA Process.

**Fiscal Management Information System (FMIS):** FMIS is the FHWA’s electronic financial tracking system for Federal-aid transportation projects. Iowa DOT personnel use this system to request FHWA Authorization or obtain project information and funding reports.

**Incurred Costs:** Costs are considered to be incurred when the work associated with those costs begins. Example: Costs have been incurred once a consultant, whose services are to be reimbursed with Federal funds, begins work, even if the LPA has not received a bill or made any payments to the consultant.

**Interstate System:** Those highways that are part of the Dwight D. Eisenhower National System of Interstate and Defense Highways.

**National Highway System (NHS):** Those highways that are important to the nation’s economy, defense, and mobility. The NHS is made up of several subsystems, including the Interstate System, other principal arterials (as shown on the Federal Functional Classification maps), the Strategic Highway Network (roads of importance to strategic defense and emergency response), Major Strategic Highway Connectors (access roads to major military installations) and Intermodal Connectors (roads that provide access between major intermodal facilities and the other four subsystems previously listed). For current maps of the NHS, see FHWA’s NHS in Iowa web page.

**Obligation:** An obligation is a commitment – the Federal government’s promise to pay the Federal share of a project’s eligible cost. This commitment occurs when the project is authorized by FHWA and the Authorization/Agreement or the Amendment/Modification is executed through FMIS. Obligation is a key step in financing. Obligated funds are considered “used,” or set aside for that particular project, even before any cash is transferred.

**Primary Highway System:** Those highways that are under the jurisdiction of the Iowa DOT.