Local Government Projects Policy Manual



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From: John Jameson, Director, Local Government Programs Section

Manual: Local Government Projects Policy Manual

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Purpose

The Local Government Projects Policy Manual provides applicable laws and regulations for local governments (LGs) developing transportation projects under the oversight of the Texas Department of Transportation. This manual addresses both state of Texas requirements and federal requirements administered through the Federal Highway Administration; however, it does not address public transportation, aviation or concessionaire projects.

This update to the manual includes changes to Chapters 2, 4, 7, 8 and 10, including updated references to state and federal laws and regulations, changes associated with local government project requirements and oversight, and general clarification of various manual provisions.

Contents

Chapter 2 – Project Initiation

• Added reference to 23 CFR 1.11(b) that allows TxDOT to partner with LGs on projects.

Chapter 4 – Preliminary Engineering and Design

- Changed "estimated cost" to "estimated total project cost."
- Added reference to 23 CFR §627.7(a)(4) for Value Engineering Change Proposals (VECP).
- Added language that VECP cannot be used on projects.

Chapter 7 – Project Development for Design

- Clarified the agencies that can suspend or debar a contractor.
- Changed the header from "Form FHWA-1273" to "Form FHWA-1273 and Required Contractor Certifications."
- Added references to Texas Government Code §§809.501, 2271.002, 2274.002 and Chapter 552, Subchapter J for the required contractor certifications.
- Updated language that LGs are not allowed to specify a local preference for bidders on federal-aid contracts.
- Added reference to the "Enhancing Highway Workforce Development Opportunities Contracting Initiative" notice.

Chapter 8 – Letting and Award

- Added language that bid item negotiations are not allowed between bid opening and contract execution.
- Added reference to 23 CFR §635.113(a).

Chapter 10 – Project Close-out and Maintenance

- Changed "project audit" to "project review."
- Fixed misspelling of FHWA Form PR-20.

Supersedes

Local Government Projects Policy Manual 2022-1

Contact

For more information about this manual, please contact the Transportation Programs Division's Local Government Programs Section at lgpo@txdot.gov.

Archives

Past manual notices are available in a **PDF** archive.

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Chapter 1: Introduction

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Section 1: Purpose of Manual and Guide

The Local Government Projects Policy Manual and the companion Local Government Project Management Guide provide guidance for local governments developing transportation projects under the oversight of the Texas Department of Transportation. The term "local government" includes municipalities, counties, county and regional toll authorities, regional mobility authorities, metropolitan planning organizations and private entities in certain situations. These procedures address both state of Texas requirements and federal requirements administered through the Federal Highway Administration; however, they do not address public transportation, aviation or concessionaire projects.

Section 2: Local Government Projects Section

The Texas Department of Transportation (TxDOT) defines a local government project as a transportation project in which at least one phase of project development is managed by a local government (LG) agency for which it is being reimbursed with federal or state funding. It may also include a locally funded project managed by a local government on the state highway system. The TxDOT Local Government Projects Section (LGP) is located in Austin and provides guidance and training for local government and TxDOT personnel in the development of transportation projects under TxDOT oversight. LGP develops policies and procedures, provides guidance to districts, and maintains documents, resources and training tools for LGs, consultants and TxDOT staff.

LGP is part of the larger TxDOT organization, which has the following components.

- 1. **District offices** are the initial and primary contacts for LGs and provide oversight for LG projects. **Area offices** (under the district office) may support the district office during different stages of the project.
- 2. **TxDOT divisions** support and provide subject matter expertise to the districts in each area of project development. The LG will rarely work directly with a division. However, an exception may be the direct project oversight provided by the Transportation Planning and Programming Division of non-construction projects administered by a metropolitan planning organization acting as the local government.
- 3. **Administration**, including the executive director and other executive officers, provides direction and oversight to all of the districts, divisions, and offices.

Section 3: Local Government Projects Tools

The Local Government Projects Section (LGP) of TxDOT has developed a series of reference documents and training materials to assist local governments (LGs) and TxDOT staff during the development and management of LG transportation projects. The purpose of these tools is to maximize LG and TxDOT compliance with federal and state laws, rules and regulations to ensure public funds are properly expended and to allow LGs to receive full reimbursement on eligible and allowable project costs. All of the documents referenced below are available on the Local Government Project Toolkit Web page.

Local Government Projects Policy Manual

The Local Government Projects Policy Manual (LGPP Manual or Manual) provides information on federal and state laws and regulations relevant to each step in the development of a LG project. These regulations, together with manuals and other guidance documents adopted by the FHWA, TxDOT and other agencies, establish the policies that must be followed by the LG and TxDOT during administration of the project.

Local Government Project Management Guide

The <u>Local Government Project Management Guide</u> (LGPM Guide or Guide) provides project management guidance for a LG administering a LG transportation project and for TxDOT staff who are providing oversight. The Guide contains the processes and procedures to be used by the LG and TxDOT to successfully accomplish all phases of a transportation project from project initiation to project close-out. These procedures include required practices, local responsibilities and TxDOT responsibilities with respect to both state and federal requirements.

Best Practices Workbook

The Best Practices Workbook (Workbook) is intended to serve as a quick reference tool and workbook to assist TxDOT division, district and area offices and the LG with the administration of LG projects. TxDOT and LG project managers and others working directly on the project are strongly encouraged to use the Workbook to monitor progress on a project and as a project record of activities as they are completed. The Workbook does not address all legal requirements nor does it replace any of the instructions, manuals or guidance documents referenced in the LGPP Manual, LGPM Guide, project documents, federal and state laws and regulations, or training materials.

Local Government Projects Online Toolkit

LGP has developed a user-friendly webpage and an online <u>Toolkit</u>. The online Toolkit presents information in a format that mirrors the project development process presented in the Manual and

Guide. The Toolkit provides users with an easy access portal to find and download many useful forms of information, including:

- state and federal regulations;
- LGPP Manual;
- LGPM Guide;
- Workbook;
- TxDOT websites;
- external websites;
- TxDOT and external online manuals;
- contract execution and administration forms; and
- other useful information.

Training

LGP provides training courses to allow LG officials, staff and contractors, as well as TxDOT division, district and area office staff, to receive hands-on instruction. These courses are required for key project personnel and are offered throughout the state on a regular basis throughout the year.

Each LG with a project must assign a "qualified person" to the project (see <u>Chapter 2</u> of this Manual). This person must work actively and directly on the project and have successfully completed training as defined in the Advance Funding Agreement. The requirements for certification as a "qualified person" and a current schedule for the LGP training courses are found on the <u>LGP Web page</u>.

Section 4: Organization of Manual and Guide

Both the Manual and the Guide are organized by chapters reflecting the steps that occur during project development. Each chapter contains a brief introduction and includes links to many different manuals and other information supporting that chapter. Each chapter is intended to be independent and has a format that is reflective of the materials that are covered.

The Chapters in the Manual and Guide are organized according to the sequential steps in project development and are provided in order:

- 1. **Introduction** explanation of how to best utilize the Manual and Guide as resources in project development;
- 2. **Project Initiation** project planning, programming, Advanced Funding Agreements, State Letter of Authority and contracting with TxDOT;
- 3. **Non-construction Projects** transportation-related projects or programs that do not involve the building of infrastructure;
- 4. **Preliminary Engineering and Design** procurement of professional services, project design through 30 percent completion;
- 5. **Environmental Compliance** environmental policies, practices, requirements and compliance;
- 6. **Right of Way and Utilities** real property acquisition, utility relocation and utility service to and through projects;
- 7. **Plans, Specifications & Estimates (PS&E) Development** development of engineering specifications and plans, and bid document preparation;
- 8. **Letting and Award** advertising, bidding and awarding a construction contract;
- 9. **Construction** building phase of local government projects and compliance with PS&E requirements; and
- 10. **Project Close-Out and Maintenance** financial close-out and document retention, audit and maintenance.

Section 5: Acronyms

Acronym	Definition
AASHTO	American Association of State Highway and Transportation Officials
ADA	Americans with Disabilities Act
ADAAG	Americans with Disabilities Act - Accessibility Guidelines for Buildings and Facilities
AFA	Advance Funding Agreement
AIA	American Institute of Architects
BRG	Texas Department of Transportation - Bridge Division
CAA	Clean Air Act
CCR	Central Contractor Registration
CDA	Comprehensive Development Agreement
CE	Categorical Exclusion
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CIA	Community Impact Analysis
CIV	Texas Department of Transportation's Civil Rights Division
CFR	Code of Federal Regulations
CMAQ	Congestion Mitigation and Air Quality
CMMA	Comprehensive Maintenance Management Agreement
CSD	Texas Department of Transportation's Contract Services Division
CSJ	Control-section-job
CST	Texas Department of Transportation's Construction Division
CUF	Commercially Useful Function
DBE	Disadvantaged Business Enterprise
DES	Texas Department of Transportation's Design Division
DOL	U.S. Department of Labor
DOT	U.S. Department of Transportation
DSR	Design Summary Report
DUNS	Data Universal Numbering System
EA	Environmental Assessment

Acronym	Definition
EDC	Economically Disadvantaged County
EEO	Equal Employment Opportunity
EIS	Environmental Impact Statement
EJ	Environmental Justice
ENV	Texas Department of Transportation - Environmental Affairs Division
EPIC	Environmental Permits, Issues and Commitments
ESBD	Electronic State Business Daily
FAA	Federal Aviation Administration
FC	Functional Classification
FEMA	Federal Emergency Management Administration
FHWA	Federal Highway Administration
FIN	Texas Department of Transportation - Finance Division
FM	Farm to Market (road)
FPAA	Federal Project Authorization and Agreement
FTA	Federal Transit Administration
FUP	Federal Utility Procedure
GSA	General Services Administration
HBRRP	Highway Bridge Replacement and Rehabilitation Program (federal)
HOV	High Occupancy Vehicle
НОТ	High Occupancy Toll
HRRR	High Risk Rural Road Program
HSIP	Highway Safety Improvement Program
HUB	Historically Underutilized Business
IAJ	Interstate Access Justification Report
ITS	Intelligent Transportation System (Traffic Operations)
LD	Liquidated Damages
LG	Local Government
LGP	Texas Department of Transportation's Local Government Projects Section

Acronym	Definition
LGPM	Local Government Project Management Guide
LGPP	Local Government Projects Policy Manual
LOA	Letter of Authority (state)
LOS	Level of Service
LOSA	Local On System Agreement
LRFD	Load and Resistance Factor Design
LUP	Local Utility Procedure
MNT	Texas Department of Transportation's Maintenance Division
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
MTP	Metropolitan Transportation Plan
MUTCD	Manual on Uniform Traffic Control Devices (national)
NAGPRA	Native American Graves Protection and Repatriation Act
NEPA	National Environmental Policy Act
NHS	National Highway System
NPDES	National Pollutant Discharge Elimination System
NTP	Notice to Proceed
OFCCP	Office of Federal Contract Compliance Programs
OMB	Office of Management and Budget (federal)
OSHA	Occupational Safety and Health Administration (federal)
PE	Professional Engineer
PEPS	Texas Department of Transportation - Professional Engineering Procurement Services Division
PS&E	Plans Specifications and Estimates
QAP	Quality Assurance Program
RAS	Registered Accessibility Specialist
RFP	Request for Proposals (design-build)
RFQ	Request for Qualifications (design-build and design-build)
RMA	Regional Mobility Authority

Acronym	Definition
ROW	Right of Way and Texas Department of Transportation's - Right of Way Division
RPIC	Responsible Person in Charge
RPO	Rural Planning Organization
RTA	Regional Tollway Authority
RTP	Regional Transportation Plan
RXR	Railroad Crossing pavement markings
SBE	Small Business Enterprise
SHS	State Highway System
SLOA	State Letter of Authority
SOC	Statement of Costs
SRTS/SRS	Safe Routes to School
STIP	Statewide Transportation Improvement Program
STP	Surface Transportation Program
SUP	State Utility Procedure
SW3P	Storm Water Pollution Prevention Plan
TAC	Texas Administrative Code
TAS	Texas Accessibility Standards
TCEQ	Texas Commission on Environmental Quality
ТСР	Traffic Control Plan
TDLR	Texas Department of Licensing and Regulation
THC	Texas Historical Commission
TIP	Transportation Improvement Program
TMUTCD	Texas Manual on Uniform Traffic Control Devices
TPD	Texas Department of Transportation's Transportation Programs Division
TPDES	Texas Pollutant Discharge Elimination System
TPP	Texas Department of Transportation's Transportation Planning and Programming Division
TPWD	Texas Parks and Wildlife Department
TRF	Texas Department of Transportation's - Traffic Operations Division

Acronym	Definition
TUCP	Texas Unified Certification Program (relates to DBE)
TxDOT	Texas Department of Transportation
UGMS	Uniform Grant Management Standards
USACE	U.S. Army Corps of Engineers
USDOL	U.S. Department of Labor
USDOT	U.S. Department of Transportation
USIBWC	U.S. International Boundary and Water Commission
UTP	Texas Department of Transportation - Unified Transportation Plan
VE	Value Engineering

Chapter 2: Project Initiation

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Section 6: Project Accounting

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Section 1: Introduction

Within the Local Government Projects Policy Manual (LGPP Manual) and the Local Government Project Management Guide (LGPM Guide), transportation projects are grouped in two general types of projects: construction and non-construction. Construction projects involve roads, highways, bridges, building facilities and alternative transportation projects such as pedestrian and bicycle facilities, environmental mitigation, recreational trails, safe-routes-to-school programs, and other projects involving constructed infrastructure. Non-construction projects include planning studies, development of travel demand models, management of a "shared ride" service, "motorist assistance" programs, transportation corridor analyses and other similar projects that do not involve construction activities. The Manual and Guide are organized to reflect the processes used by engineers, planners and managers to develop these projects, and each follows nine phases, beginning with Project Initiation and ending with Project Close-out and Maintenance.

Although the phases are listed in an order somewhat reflective of the timeline followed during project development, elements of some phases may be performed concurrently (such as during <u>Preliminary Engineering and Design</u>, <u>Environmental Compliance</u>, and <u>Right of Way and Utilities</u>). Many phases may relate to both non-construction and construction projects (<u>Project Initiation</u>, Preliminary Engineering and Design, Environmental Compliance, <u>Project Close-out</u>), while others may be specific to either construction or non-construction (see chapters of the same name). Each phase is fully discussed in the specific chapters, and users should review Chapter 1 to get an overview of the tools available.

The first phase in any construction or non-construction project is Project Initiation. This phase of the project includes all of the steps between project identification and the execution of the legal agreement between the local government (LG) and the state, represented in this case by the Texas Department of Transportation (TxDOT). By reference in this document, the term **transportation project, project** or **LG project** may involve either a construction or non-construction project or program. Later chapters define the types of transportation projects in more detail.

The identification of a transportation project by a LG will involve the definition of the project objectives, the public service objectives, the degree of involvement by the state and federal partners, the ability of and commitment by the LG to manage the project, and additional key decision-making elements. The LG may work with regional transportation agencies, the TxDOT district or area office, a TxDOT division, local stakeholders and others during this process. Once a decision is made to pursue a project, the partnership with TxDOT must be defined and the project moves into Planning and Programming. Eventually the Project Initiation phase will end with the development and execution of an Advance Funding Agreement (AFA) between the LG and TxDOT.

The details of this first phase will vary greatly based on the type of project; however, this chapter of the Manual provides an overview of the regulations and policies that guide the funding, contracting and oversight requirements for a LG project.

Section 2: Local Government Projects Overview

Local Government Use of the LGPP Manual

As described in Chapter 1 – Introduction, the term local government (LG) includes municipalities, counties, county and regional toll authorities, metropolitan planning organizations (MPO), regional mobility authorities (RMA) and some private entities. A LG should adopt and use the contracting procedures found in the Local Government Project Management Guide (LGPM Guide) to comply with the state and federal laws, rules and policies for transportation projects as presented in this Manual. This Manual provides the regulations and policies related to LG project initiation, preliminary design, bid document preparation, letting and award, contract execution, contract administration and other aspects of a construction or non-construction transportation project.

Federal Funding Requirements for LG Projects

This Manual and the <u>LGPM Guide</u> apply to projects involving both state (TxDOT) and Federal Highway Administration (FHWA) funds. They do not apply to projects involving public transportation, aviation or other projects funded through the Federal Transit Administration, Federal Aviation Administration or Federal Railroad Administration. Federal regulations apply to all federally funded projects and are referenced throughout this Manual. Title 23 CFR (Highways) is the primary regulatory reference; however, other titles have applicability, such as Title 2 CFR (Uniform Administrative Requirements and Cost Principles), Title 49 CFR (Transportation) and Title 29 CFR (Labor). Federal Highway Administration (FHWA) regulations can be found on its website. All federal regulations can be searched on either the <u>U.S. Government Publishing Office</u> e-CFR website or the Government Publishing Office Federal Digital System website.

FHWA funds managed by TxDOT on LG projects are part of the Federal-aid Highway Program. The Federal-aid Highway Program is primarily a reimbursement program – not a grant program where the LG receives funds prior to their expenditure. Eligible costs incurred in compliance with the regulations will be reimbursed to the LG by TxDOT. Then TxDOT will receive reimbursement from FHWA. TxDOT and FHWA have an oversight and monitoring responsibility on projects with federal funds directly administered by LGs. If any of the federal share of project costs are incurred without following the pertinent federal regulations, they are subject to being declared non-participating and will not be reimbursed. This includes Pass-Through Finance projects (also called Pass-Through Toll projects). Pass-Through Financing is one method of the LG incurring costs for development of a transportation project and then obtaining reimbursement from TxDOT over an extended time period after construction is complete. TxDOT may seek reimbursement from FHWA after reimbursing the LG. All state and federal regulations outlined in this Manual apply to Pass-Through Finance project agreements for either design-bid-build projects or design-build projects.

In accordance with Title 49 CFR Part 26, TxDOT's Disadvantaged Business Enterprise (DBE) program includes the adoption of TxDOT's DBE plan and is monitored by TxDOT's Civil Rights Division. The importance of Title 49 CFR and adoption TxDOT's DBE program in the implementation of LG projects cannot be over-stated. It is an important commitment made by every LG and any LG contractors and consultants participating in the LG program. As stated in 49

CFR §26.13(b) every contract that TxDOT (and by adoption of TxDOT's DBE program, the LG) executes with a sub-recipient (including contractors and consultants) must include the standardized assurance statement which states: 1) these parties will not discriminate based on race, color, national origin, or sex in the performance of any FHWA-assisted contract; 2) the contractor shall carry out the requirements of 49 CFR 26 in the award and administration of FHWA-assisted contracts; and 3) failure by the contractor to carry out these requirements is a material breach of contract, which may result in contract termination or other remedy as deemed appropriate by the recipient. TxDOT's Civil Rights Division is established to provide assistance, resources and monitor activities for DBE. LG's can refer to the DBE Program Compliance and Monitoring Guide for further information regarding important goals and requirements.

The LG is responsible for ensuring all project requirements are met so federal funding is not jeopardized. This provision is covered in the TxDOT/LG Advanced Funding Agreement for the project, which is described later in this chapter.

General Contracting Requirements for LG Projects

In order for federal or state funds to be spent on a transportation project in partnership with a LG, a written contract must first be executed between TxDOT and the LG. An Advance Funding Agreement (AFA) is the form of contract most frequently used for development of jointly funded projects with TxDOT and LGs. The AFA specifies whether the LG or TxDOT is performing each stage of the work for the project or program. For all activities performed by the LG, TxDOT maintains an oversight responsibility. TxDOT's district offices are the primary points of contact for the LGs throughout the project development process, although the TxDOT Transportation Planning and Programming Division (TPP) will provide oversight for non-construction projects with an MPO acting as the LG. Details of the AFA procedures are contained in Section 4 of this chapter of this Manual.

Many contracting requirements depend largely upon the funding source for the LG project. Projects may include federal, state, LG or even private funds. Federal funds impose specific requirements. State funds may impose different requirements. Both federal and state requirements will apply if a contract involves federal funding. State requirements will prevail if the contract involves only state and local funding. If a project involves any federal or state monies, applicable federal or state requirements take precedence over local contracting requirements. Typically, the most restrictive requirement prevails in order to ensure compliance with all.

The Manual provides guidance on a wide variety of project delivery methods available to TxDOT and LGs. This document provides information related to TxDOT district and division responsibilities associated with the administration and oversight of highway improvement contracts and related transportation projects let or administered by the LG as well as non-construction projects and/or programs. Available project construction delivery methods include those allowed by law, which may include design-bid-build, design-build and construction manager/general contractor. Nearly all LG projects are design-bid-build.

LG Project Oversight

TxDOT's goal is to allow a LG flexibility to effectively administer a project while minimizing the use of TxDOT resources. However, TxDOT has a stewardship responsibility for all LG projects involving federal or state funds or impacting the state highway system (SHS). The degree to which TxDOT monitors these projects depends primarily on a combination of funding source, highway system, statutory requirements, demonstrated competence of the LG personnel and resources, and the potential risk posed by non-compliance. TxDOT monitoring of construction projects on the SHS with state or federal funds will focus on proper geometric design, application of TxDOT material and construction quality standards, and compliance with statutory requirements. In summary, TxDOT will tailor the level of monitoring to the relative potential risk to TxDOT, the complexity of the relevant project and the capabilities of the LG Staff.

As stated in federal and state laws, prior to authorizing the LG to perform any element of the project development process, TxDOT has a responsibility to determine if each LG is qualified and has adequate resources and controls to perform the project work. This determination is made through the completion of the LG Agency Risk Assessment (RA), which assigns an overall risk score (ORS) for the LG. LGP maintains a centralized database for LG Risk Assessment program data, supports the districts and divisions, and monitors requirements for periodic updates of RAs based on the established ORS. The district or division determines the appropriate communication with the LG regarding the ORS. Additional oversight is established when a new LG project is identified, and the "Oversight Level Special Approval, Part A and Part B" form is completed, as discussed below.

The requirement for TxDOT approval is referenced in many areas throughout this Manual. If no specific office is referenced, the appropriate TxDOT district office should be contacted for coordination of TxDOT approval.

Section 3: Planning and Programming

Overview

Planning and Programming involves the identification of the project objectives and the development of a statement of work that identifies the project or program priorities and activities to be performed by the project partners. The process will include, at a minimum, the description of the project or program, the responsible organizations performing the work, the time frames for completing the work, the costs of the work and the sources of funding. The elements below are critical to completing the Planning and Programming and moving toward the execution of the Advance Funding Agreement (AFA) described in the next section.

Prior to execution of the AFA, TxDOT must determine if the LG will be approved to manage or perform one or more elements of the project development process. 23 CFR §635.105 states: "the State Transportation Department (STD) has responsibility for the construction of all Federal-aid projects, and is not relieved of such responsibility by authorizing performance of the work by a local public agency or other Federal agency. The STD shall be responsible for insuring that such projects receive adequate supervision and inspection to ensure that projects are completed in conformance with approved plans and specifications." TxDOT has developed a standardized LG Risk Assessment process to evaluate each LG's qualifications for performance of one or more elements of the project development process.

Local Government and TxDOT Staff

Local Government

The local government (LG) must demonstrate to TxDOT that it has adequate staff to manage all project functions. The LG staff should be experienced in managing similar types of projects or programs and have a general knowledge of standard procedures for managing consultants, contractors and other vendors as required by the project. One of the required methods for the LG to demonstrate its qualifications and proposed approach to manage one or more phases of project development and delivery is by completing Part A of the Oversight Level Special Approval form.

District

Each TxDOT district has a planning and programming section that studies and plans for the needs of the district's highway system. LGs should work with the TxDOT district staff to identify and prioritize funding for projects. After prioritizing local needs in the context of available funding, the district staff updates and coordinates project planning and programming with the TxDOT Transportation Planning and Programming Division (TPP) and the Financial Management Division (FIN) in Austin.

For LG projects with district oversight, the TxDOT district must review Part A of the <u>Oversight Level Special Approval</u> form provided by the LG, complete Part B of the <u>Oversight Level Special</u>

<u>Approval</u> form, determine which elements the LG will be authorized to perform or manage, and set a minimum oversight level to be provided by the district.

Division

Within TPP, the Statewide Planning Branch integrates the district plans into TxDOT's <u>Unified Transportation Program (UTP)</u>. The TxDOT Project Selection Process involves an annual public meeting, hearing and amendment process for the UTP. Interim updates to the UTP may occur when requested by the Texas Transportation Commission. The Statewide Planning Branch of TPP also is called upon to provide special reports and analysis for the Commission, TxDOT administration, TxDOT districts, FHWA, LGs and private parties. The UTP is approved and implemented under a minute order from the Texas Transportation Commission. This minute order specifies the amount of funding that will be provided by TxDOT for many programs, including LG and state projects.

For LG projects with division oversight, the TxDOT division must review Part A of the <u>Oversight Level Special Approval</u> form provided by the LG, complete Part B of the <u>Oversight Level Special Approval</u> form, determine which elements the LG will be authorized to perform or manage, and set a minimum oversight level to be provided by the division.

An approved minute order authorizing the project, an executed Oversight Level Special Approval form, and an executed contract in the form of an AFA are necessary before the LG can be authorized to begin work on each project or program.

The project must be a product of the statewide and metropolitan transportation planning process as described in <u>23 CFR Part 450</u>. As per those federal regulations, the project must be documented in the appropriate Metropolitan Transportation Plan (MTP) and <u>Statewide Transportation</u> <u>Improvement Program</u> (STIP) before any work is initiated.

Initial Project Coordination

The appropriate TxDOT district personnel will contact the LG to discuss the project details (and schedule an inspection of the proposed project site, when applicable). It is recommended that initial project coordination occur as soon as possible after the project is selected for funding. Details on the project meeting are contained in the Local Government Project Management Guide (LGPM Guide).

Coordination with a Metropolitan Planning Organization

General

In urban areas, a metropolitan planning organization (MPO) may act as the LG for a transportation project. In other instances, the MPO may award project funding to another LG (city, county, etc.) within the MPO's planning area. The MPO is an association of local agencies established to coordinate transportation planning and development activities within a metropolitan region. The MPO is the forum for cooperative transportation decision-making for the metropolitan region. Establishment of the MPO is required by law in urban areas with a population greater than 50,000. All MPOs have a Policy Board comprised of officials representing the counties, cities and state

transportation agency (in Texas, this agency is TxDOT). Most MPOs also have a Technical Advisory Committee consisting of professional planners and engineers who are usually employees or consultants of the same government entities.

Federal Requirements

- 1. <u>23 CFR §450.300</u> Sets forth FHWA policy that the MPO designated for each urbanized area is to carry out a continuing, cooperative and comprehensive multimodal transportation planning process that encourages and promotes the safe and efficient development, management and operation of surface transportation systems to serve the mobility needs of people and freight.
 - a. A MPO must be designated for each urbanized area with a population greater than 50,000.
 - b. <u>23 CFR §450.316(e)</u> Requires the MPO to develop a documented process that outlines the roles, responsibilities and key decision points for consulting with other governments and agencies.
 - c. <u>23 CFR §450.322(f)</u> Requires the transportation plan to include existing and proposed transportation facilities in sufficient detail, regardless of funding source, to develop cost estimates. The plan must include all projects and strategies proposed for funding under <u>23 U.S.C.</u>, <u>49 U.S.C.</u> Chapter <u>53</u> or with other federal funds, state assistance, local sources and private participation that relate to projects with regional significance.

State Requirements and Resources

- 1. <u>43 TAC, Chapter 16, Subchapter A</u> Provides for the development and structure of MPOs in Texas. <u>43 TAC §16.51(d)</u> provides that agreements be developed between TxDOT, the MPO and LGs. The agreement will include roles and responsibilities.
- 2. <u>Project Scoping Guidebook for Metropolitan Planning Organization Transportation Projects</u> Provides guidance to MPOs and LGs in developing required project scoping, cost estimation and timelines.

Required Practices

Detailed information regarding the practices associated with MPOs with respect to transportation projects is included in the LGPM Guide. In general, all state and federally funded projects in metropolitan areas will be selected through the metropolitan planning process and must be included in the Metropolitan Transportation Plan (MTP) and Transportation Improvement Program (TIP). All projects on the state or federal-aid highway system, as well as any projects deemed regionally significant, must be included in the approved transportation plan regardless of funding source to maintain the integrity of the planning process.

Functional Classification

General

Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide. The process classifies roadways according to traffic flow from the movement function to the access function.

Federal Requirements

- 1. <u>Federal Aid Highway Act of 1973</u> Requires the use of functional highway classification to update and modify the federal-aid highway systems.
- 2. <u>23 CFR §470.105(b)</u> Gives state transportation agencies the primary responsibility for developing and updating a statewide highway functional classification in rural and urban areas to determine functional usage of the existing roads and streets. The functional classification shall be mapped and submitted for approval to the FHWA.

State Requirements

1. <u>Texas Transportation Code §201.903</u> – Gives TxDOT the authority to classify, designate and mark state highways in Texas.

Required Practices

The <u>LGPM Guide</u> provides the procedures used to determine functional classification. In general, the district must coordinate with TxDOT's Transportation Planning and Programming Division (TPP), which has the primary responsibility for implementing functional classification for TxDOT. For all projects with state or federal funds and all projects on the state highway system, the LG must use <u>functional classification maps</u> (available at the Statewide Planning Map) developed by TxDOT and approved by FHWA.

Minute Order

General

A minute order is a formal expression of opinion, direction or intent approved by the Texas Transportation Commission to authorize actions by TxDOT. Minute orders are required for several actions involving project administration by the LG, including, but not limited to, access control, new route designation and donations.

Federal Requirements

1. There are no federal regulations that require issuance of a minute order.

State Requirements

- 1. <u>43 TAC, Chapter 1, Subchapter M, §1.503</u> Acceptance of a gift or donation made to the TxDOT under this subchapter must be approved by the executive director (any gift or donation with a value of \$500 or greater must also be acknowledged by order of the commission).
- 2. <u>Texas Transportation Code §201.101</u> Authorizes broad authority to the commission to develop rules and carry out the responsibilities of TxDOT.

- 3. <u>Texas Transportation Code §91.004</u> Grants TxDOT broad authority for the location, construction, maintenance and operation of a rail facility or system in Texas.
- 4. <u>Texas Transportation Code §201.103</u> Grants the commission the authority to designate and remove highway segments on the state highway system.
- 5. <u>Texas Transportation Code §203.031</u> Grants the commission the authority to designate access control on the state highway system.

Required Practices

Information on the responsibilities and practices required by the LG and the TxDOT district regarding minute orders is available in the <u>LGPM Guide</u>.

Traffic Data

General

Traffic data is used in a variety of project development situations, such as selection of design criteria and pavement design. For the purpose of this chapter, "traffic data" is defined as whatever data is required to complete the associated design activity. TxDOT's <u>Transportation Planning and Programming Manual</u> provides information related to traffic data and requires TxDOT to maintain a single source of all traffic data reported to the commission, Legislature, governor and the public.

Federal Requirements

- 1. <u>23 CFR §420.105(b)</u> Requires state departments of transportation to provide data that support the FHWA's responsibilities to Congress and the public.
- 2. <u>23 CFR §500.203(b)</u> Requires traffic monitoring systems to comply with the American Association of State Highway and Transportation Officials (AASHTO) Guidelines for Traffic Data Programs and the FHWA <u>Traffic Monitoring Guide</u>, and to be consistent with the FHWA Highway Performance Monitoring System Field Manual.
- 3. <u>23 CFR Part 625</u> Designates standards and policies that are acceptable to FHWA for application in the geometric and structural design of highways.
 - a. Projects on the national highway system (NHS) must adequately serve existing and planned future traffic of the highway in a manner that is conducive to safety, durability and economy of maintenance.
 - b. Federally funded projects off the NHS are to be designed and constructed in accordance with state laws, regulations, directives, safety standards and design standards.
- 4. AASHTO's A Policy on Geometric Design of Highways and Streets is a document accepted by FHWA as satisfactory for use on federally funded projects. In Texas, FHWA accepts TxDOT's Roadway Design Manual for use on federally funded projects and for compliance with AASHTO policy.

State Requirements

1. <u>43 TAC §15.56</u> – Requires projects to be designed in accordance with TxDOT procedures, standards, and guidelines.

Required Practices

The <u>LGPM Guide</u> provides guidance for the LG and TxDOT in the use of traffic data. In general, for all projects with state or federal funds on the state highway system, the LG must use traffic data furnished by TxDOT. For projects with state or federal funds off the state highway system, the LG may request traffic data from TxDOT or use other data, including its own, if approved by TxDOT.

Unified Transportation Program (UTP)

General

The <u>Unified Transportation Program</u> (UTP) is the 10-year planning document that guides and controls project development for TxDOT in a feasible and economical manner. The UTP is a tool used by TxDOT to implement these statutes. The UTP is part of a comprehensive planning and programming process flowing from TxDOT's agency mission to project-level implementation. That is, the UTP is an intermediate programming document linking the planning activities of the <u>Texas Transportation Plan</u> (TPP) and the Metropolitan Transportation Plans (along with plans submitted directly to TxDOT's Transportation Planning and Programming Division as part of the TTP that were previously included in Rural Transportation Plans) with the detailed programming activities under the <u>Statewide Transportation Improvement Program</u> (STIP) and TxDOT's 24-month (2-year) letting schedule.

Specifically, the UTP is a listing of projects and programs that are planned to be constructed and/or developed within the first 10 years of the current TTP plan document. Project development includes activities such as preliminary engineering work, environmental analysis, right-of-way acquisition and design. Despite its importance to TxDOT as a planning and programming tool, the UTP is neither a budget nor a guarantee that projects will or can be built. However, it is a critical tool in guiding transportation project development within the long-term planning context.

Federal Requirements

1. <u>23 CFR Part 450</u> – Requires states to have a continuing, cooperative and comprehensive planning process as a prerequisite to receiving federal funds. The process is developed by the state transportation agency and is subject to federal review and approval as conforming to federal regulations. However, there are no specific federal regulations requiring development of a UTP.

State Requirements

1. <u>Texas Transportation Code §91.004</u> – Grants TxDOT broad authority for the location, construction, maintenance and operation of a rail facility or system in Texas.

- 2. <u>Texas Transportation Code §201.103</u> Requires TxDOT to plan and make policies for the location, construction and maintenance of a comprehensive system of state highways and public roads.
- 3. <u>Texas Transportation Code §203.002</u> Allows the Texas Transportation Commission to promote public safety, facilitate the movement of traffic, preserve the public's financial investment in highways, promote the national defense and accomplish the purposes of Chapter 203 of the Texas Transportation Code. The commission may:
 - a. Lay out, construct, maintain and operate a modern state highway system, with emphasis on the construction of controlled access highways; and
 - b. Plan for future highways.

Required Practices

In general, all projects with state or federal funds must be in the current version of the UTP for TxDOT to authorize the LG to proceed. The <u>LGPM Guide</u> provides more information regarding the LG and TxDOT district responsibilities related to the UTP.

State Comprehensive Planning Process

General

As a condition of receiving federal transportation funds, states are required to have a comprehensive planning process. The <u>Texas Transportation Plan</u> (TTP), Metropolitan Transportation Plan (MTP), Transportation Improvement Program (TIP) and <u>Statewide Transportation Improvement Program</u> (STIP) are various documents developed during this planning process and are used to assure projects selected for implementation best balance identified needs within available federal resources. TxDOT is the state agency involved in transportation planning, while the two primary federal agencies are FHWA and the Federal Transit Administration (FTA).

Federal Requirements

- 1. <u>23 CFR §450.216(g)</u> Requires the STIP to include projects proposed for funding under 23 U.S.C. and 49 U.S.C. Chapter 53. The statute lists a few exceptions, such as safety projects funded under 23 U.S.C. 402 and most emergency relief projects.
- 2. <u>23 CFR §450.220(a)</u> Requires that only projects in the FHWA/FTA approved STIP shall be eligible for funds administered by the FHWA or the FTA, and notes a few exceptions.
- 3. <u>23 CFR Part 450 Subpart C</u> Establishes a national policy requiring designated MPOs to develop a MTP and corresponding TIP.

State Requirements

1. <u>43 TAC §16.103</u> – Requires TxDOT to develop a STIP and requires a project in the STIP to be consistent with the Statewide Long-Range Transportation Plan and metropolitan TIPs.

- a. A highway or transit project funded under <u>23 U.S.C.</u> or the Federal Transit Act (<u>49 U.S.C.</u> <u>§5307 et seq.</u>) will be included in a federally approved STIP.
- b. Regionally significant projects to be funded with non-federal funds will be included in the STIP for planning, coordination and public disclosure purposes.

Required Practices

The <u>LGPM Guide</u> provides guidance to the LG and TxDOT district related to the state comprehensive planning process. In general, all federally funded projects must be included in the STIP. TxDOT also requires all regionally significant projects to be in the STIP.

Risk Assessments, Evaluations of LG Qualifications and Project Update Evaluations

General

LGs may manage elements of the project development process (environmental, right-of-way acquisition, utility relocation, design/bid document preparation, letting and award, and construction/project close-out) with written TxDOT approval. This approval is typically provided by language in the AFA executed by TxDOT and the LG.

As required by federal law, federal regulations and state regulations, TxDOT has a responsibility to determine each LG is qualified and has adequate resources and controls to perform the project work, prior to authorizing it to perform any element of the project development process. TxDOT has developed a standardized process and a series of forms to evaluate each LG's qualifications for performance of one or more elements of the project development process. The process includes the following forms: LG Agency Risk Assessment; Oversight Level Special Approval, Parts A and B; and Project Update Evaluation of LG Qualifications.

Federal Requirements

- 1. <u>23 U.S.C. §106(g)(4)</u> Requires TxDOT to determine if a LG that is a sub-recipient of federal funds has adequate project delivery systems and sufficient accounting controls in place to successfully complete the project element(s) managed by the LG.
- 2. <u>2 CFR §200.331(b)</u> Requires TxDOT to evaluate a LG's risk of noncompliance with applicable laws and regulations, as well as the terms and conditions of its sub-award in order to determine TxDOT's appropriate monitoring level.
- 3. <u>23 CFR §1.11</u> TxDOT may utilize, under its supervision, the services of well-qualified and suitably equipped engineering organizations of other governmental instrumentalities for making surveys, preparing plans, specifications and estimates, and for supervising the construction of any project.
- 4. <u>23 CFR §635.105</u> TxDOT is not relieved of its responsibility for the construction of all federal-aid projects, even when it has authorized a LG to perform element(s) of the project. TxDOT is further responsible for ensuring such projects receive adequate supervision and inspection to ensure projects are completed in conformance with approved plans and

specifications; all federal requirements are met; and the LG is adequately staffed and suitably equipped to undertake and satisfactorily complete the work.

State Requirements

- 1. <u>43 TAC §15.52(4)</u> Requires the agreement between TxDOT and the LG specifies the funding arrangement agreed upon between the parties.
- 2. <u>43 TAC §15.52(3)</u> Requires the agreement to identify which party is responsible for each element of the project. In addition, TxDOT may only approve the LG's performance of an element of the project after consideration of the LG's previous experience and capability to perform the type of work proposed for completion by the LG.

Required Practices

The <u>LGPM Guide</u> provides the procedures and practices associated with addressing LG risk assessments, evaluations of LG qualifications and project update evaluations. All new LG projects require completion of a risk assessment and an evaluation of LG qualifications prior to execution of the project AFA.

Major Project Financial Plan and Project Management Plan Requirements

General

A project with an estimated total cost of \$500 million or more that utilizes federal financial assistance, or a project that utilizes TIFIA loan funds (regardless of the project's estimated total cost) is considered a "Major Project". An LG developing a Major Project is required to submit to the Secretary of Transportation a project management plan and an annual financial plan, including a phasing plan when applicable.

For projects that utilize federal financial assistance and have an estimated total cost of \$100 million or more, but less than \$500 million, an LG is required to prepare an annual financial plan that must be made available to the Secretary of Transportation for review upon request by the Secretary.

Federal Requirements

- 1. <u>23 U.S.C. §106(h)</u> Requires that federally funded Major Projects include a project management plan and an annual financial plan, both of which must be submitted to the Secretary of Transportation.
- 2. <u>23 U.S.C. §106(i)</u> Requires federally funded projects with an estimated total cost of \$100 million or more, but less than \$500 million, include an annual financial plan that must be made available to the Secretary of Transportation upon request.

State Requirements

1. No comparable statute.

Required Practices

The LG must follow the requirements regarding federally funded Major Projects and projects in excess of \$100 million. The matters that must be included in annual financial plans and project management plans are described in Chapter 2 of the LGPM Guide.

Section 4: Advance Funding Agreements

Overview

General

In order for TxDOT to spend funds or other resources on a transportation project with a local government (LG), a written contract must first be executed between the parties. At TxDOT, an Advance Funding Agreement (AFA) is the form of contract most frequently used for development of projects with LGs. When TxDOT contracts with another party, usually a private firm, for a well-defined good or service such as engineering plans, environmental studies or asphalt for a highway, a procurement contract is used. However, the AFA is not a procurement contract. The AFA is an agreement under which TxDOT and the LG allocate participation in a transportation improvement project. The AFA allows TxDOT and the LG to "jointly" provide for the implementation of a specific project.

The term "advance funding agreement" is used throughout the Manual and Local Government Project Management (LGPM) Guide as a generic term for a variety of joint-funding agreements between TxDOT and LGs. Some specific agreement types included with the AFA are:

- Pass-through Agreement;
- AFA for Bridge Replacement or Rehabilitation Off the State System;
- AFA for a Transportation Enhancement (TE) Project;
- AFA for a Transportation Alternatives Program (TAP) Project;
- AFA for Transportation Alternatives Set-Aside Program (TASA) Projects;
- AFA for Voluntary Maintenance by a Local Government;
- AFA for a Safe Routes to School Project;
- Local Transportation Project Non-construction AFA;
- AFA for Voluntary Utility Relocation;
- Agreement for the Furnishing of Traffic Signal Equipment by a Municipality;
- Congestion Mitigation and Air Quality Improvement Agreement for the Reimbursement of Engineering Services Performed by a Municipality for the Justification of and the Plan Work for Traffic Signal Indications;
- Agreement for the Installation, Operation, Adjustment, and Removal of Temporary Traffic Signal Equipment by a Municipality; and
- State Agency Advance Funding Agreement.

This list is not intended to be all inclusive, but to demonstrate the types of agreements that fall within the general category of AFAs.

The AFA defines the scope of work, labor and material resources, and cash or in-kind funding responsibilities to be contributed by each party necessary to accomplish a transportation project. In addition to contract provisions specifying the work and resource contributions, an AFA will have other legally required provisions. For example, if the AFA involves federal funds, a provision requiring the parties to follow the audit requirements of 2 CFR Part 200, Subpart F will be included in the AFA. Other federal requirements are also included in the AFA. In all cases for projects using federal funds, an approved Federal Project Authorization and Agreement (FPAA) is required before the LG can begin work.

The purpose of this section of the Manual is to help the LG:

- 1. Identify and assign a Responsible Person in Charge (RPIC) for TxDOT and LG;
- 2. Identify and assign a "Qualified" Person and a Project Manager for the LG;
- 3. Identify, negotiate, execute, administer and manage an AFA for a transportation improvement project with TxDOT;
- 4. Identify and complete TxDOT prescribed forms, if any, including Funding Structure Special Approval form, Oversight Level Special Approval form, Parts A & B, or other forms required to complete the AFA;
- 5. Calculate and track funding; and
- 6. Implement proper contract management procedures for an AFA.

The <u>LGPM Guide</u> provides additional information describing the parties to an AFA. In general, the LG will work with the TxDOT district to develop and execute the AFA, and the district will coordinate the process within TxDOT. The AFA determines which party, the LG or TxDOT, is responsible for conducting the work, providing funding or contributing items in kind. Under the contractual commitments established in the AFA, both TxDOT and the LG must follow their rules and regulations applicable to that type of work, as well as federal or state laws and requirements that may apply.

Responsible Person in Charge

Prior to beginning work, the LG and TxDOT will each designate a Responsible Person in Charge (RPIC) for the project. Each agency's RPIC shall be documented in writing within the project files and communicated to the other agency.

The person designated as being in "responsible charge" is required to be a public employee who is accountable for the project. The LG's RPIC must be a full-time employee of the LG. TxDOT's RPIC must be a full-time employee of TxDOT who is also a registered professional engineer.

Each RPIC is expected to be able to perform the following duties and functions for their agency:

• Administer governmental project activities, including those dealing with cost, time, adherence to contract requirements, construction quality and scope of federal-aid projects;

- Maintain familiarity of day-to-day project operations, including project safety issues;
- Make or participate in decisions about changed conditions or scope changes requiring change orders or supplemental agreements;
- Visit and review the project on a frequency that is commensurate with the magnitude and complexity of the project;
- Review financial processes, transactions and documentation to ensure safeguards are in place to minimize fraud, waste and abuse;
- Direct project staff (agency or consultant) to carry out project administration and contract oversight, including proper documentation; and
- Be aware of the qualifications, assignments and on-the-job performance of the agency (LG or TxDOT) and consultant staff at all stages of the project.

These requirements do not restrict an agency's organizational authority over the person designated in "responsible charge," and they do not preclude the sharing of these duties and functions among a number of public agency employees. They also do not preclude one employee from having "responsible charge" of several projects and directing project managers assigned to specific projects. The term "responsible charge" in this section is used in the context intended in 23 CFR §635.105. It may or may not correspond to its usage in state laws regulating licensure of professional engineers. Any change in RPIC during the course of the project shall be documented in writing within the project files and communicated to the other agency.

Qualified Person

23 CFR 1.11(b) allows state DOTs to work with "well-qualified and suitably equipped engineering organizations," including LGs. The state requires the LG to assign a "qualified person" to the project. This person must work actively and directly on the project and have successfully completed training as described on the Local Government Projects Section web page and defined in the AFA. The "qualified person" may be an employee of the LG or an employee of a firm under contract with the local government to perform management of at least one phase of the project.

Project Manager

Although not required by federal or state codes, it is anticipated that the LG and TxDOT will each also designate a "project manager" for the project. A project manager is responsible for the daily oversight of the project and is the primary point of contact with the other agency for day-to-day matters. The LG's project manager may be the same person as the LG's RPIC, a different employee of the LG or may be a consultant.

Categories of AFAs

General Categories of AFAs with LGs

AFAs with LGs may be divided into three broad categories:

- 1. AFAs for voluntary transportation projects to be performed by TxDOT (all local funds with no federal or state funds involved in the elements of work being paid with local funds);
- 2. U.S. Department of Transportation's (USDOT) Federal Highway Administration (FHWA) federally funded AFAs between the state and LGs (local or state funds along with federal funds); and
- 3. State-funded AFAs with LGs (state funds or both local and state funds, no federal funds).

Voluntary Transportation Projects

An AFA for a voluntary project involves cash or other resources voluntarily contributed to a project on the state highway system. LGs may sign these agreements providing they pay for 100 percent of the project costs or 100 percent of a "discrete element" of a project and there is no required state or federal match. A discrete element is a task that is separate or unconnected to other tasks in the project and can be completed independently from other tasks. There is no minimum or maximum dollar amount for these agreements.

For accounting purposes within TxDOT, the agreement may state that the "work under this voluntary agreement is 100 percent paid for by others." In practice, a voluntary project may be a small part of a larger TxDOT project that may involve other funding sources. Examples of common voluntary projects are feasibility studies, land acquisition, environmental work, plans, specifications and estimates, drainage projects, highway construction and maintenance projects. The AFA for voluntary projects does not contain federal provisions because the contributed resources are not a part of a federal program agreement.

In addition, these AFAs for voluntary projects differ from a Local On-System Agreement (LOSA). The voluntary agreement provides for the LG to contribute funding for TxDOT performed project work. A LOSA applies to a construction project located on the state highway system right of way for which the local government is contributing all funds and managing or performing all engineering and construction activities. The role of districts on LOSA projects is to approve the proposed improvements prior to commencement of construction, to authorize the LG to commence construction on state right of way, and to verify that the completed improvements meet applicable design and construction standards. Local Government Project risk assessment, oversight level, and district verification of LG compliance with state and federal requirements for consultant selection and contracting do not apply to projects with a LOSA.

Federally-funded USDOT FHWA Programs

Federal legislation creates funding programs administered by USDOT through FHWA that allow states to pass federal funds through the state to an LG for coordinated development of transportation projects. TxDOT acts as the conduit in Texas for the funds and is the oversight agency responsible for assuring these federal funds are spent in an allowable manner.

In most cases, the federal programs require a local match to the federal funds in a defined ratio. For example, a project might be funded with 80 percent federal funds and 20 percent local resources. The local match may be paid with state resources, LG resources or, in some cases, private-sector resources. In most cases, the local match is a cash match, but it can also be an in-kind match of resources, such as land, labor or materials if allowed by applicable program regulations. The federal government may also provide funding for specific earmark projects. The specifics of the agreement depend on the program and negotiated agreements among the parties.

Examples of the most common programs funded through FHWA are:

- Metropolitan Mobility/Rehabilitation projects;
- Transportation Alternatives Set-Aside Program projects;
- Off-State System Bridge Rehabilitation/Replacement projects;
- Urban Mobility projects;
- Congestion Mitigation and Air Quality (CMAQ) projects;
- Intelligent Transportation System projects;
- High Priority Corridor projects; and
- Demonstration projects.

Instead of cash or in-kind services, a LG may choose to use transportation development credits (TDCs) as the non-federal match on a project. TDCs are a financing tool approved by FHWA allowing states, toll authorities or a private entity to earn credits when these entities fund a capital transportation investment with toll revenues earned on existing toll facilities, excluding revenues needed for debt service, returns to investors or the operation and maintenance of toll facilities. In Texas, 75 percent of credits are allocated to the metropolitan planning organization (MPO) in whose region they were earned and 25 percent are allocated on a competitive statewide basis. The methods for calculating the match, for accounting for TDCs and the rules applicable to their use can be found at 43 TAC §5.101 et seq. The LG will be required to document TDC expenditures, and this documentation will be specified in the AFA. More information can be found on the TxDOT website regarding TDCs.

TxDOT has adopted rules under the Texas Administrative Code applicable to many of the federal, state and local funding participation programs. These rules are found at <u>43 TAC §15.50 et seq.</u>

Some other programs have extensive rules specifically applicable to them. For example, TAP rules are found at 43 TAC §§11.300-11.317 (implementation and administration of the TAP), TASA rules are found at 43 TAC §§11.400-11.418, as well as 43 TAC §16.153 (funding categories) and 43 TAC §16.154 (transportation allocation funding formulas). It is the responsibility of the contract manager of individual contract programs to be familiar with the applicable rules for his/her specific program contract. A contract manager working with federally funded FHWA projects with TxDOT/LG AFAs should be familiar with 43 TAC§§15.50-15.56 and with the specific rules affecting his/her program.

Some TxDOT divisions administering various programs have published important guides for reference. For example, refer to the Bridge Division's <u>Bridge Project Development Manual</u> for more information on bridge projects and the various <u>right-of-way manuals</u> found in the TxDOT Online Manual System for projects involving right-of-way acquisition.

State-funded Projects with LGs

The state may allocate funds for local projects involved in specific programs, and these projects may be handled with a unique version of the AFA. These programs are managed through various TxDOT divisions/offices including the Transportation Planning and Programming Division (TPP), Design Division (DES), Bridge Division (BRG), Traffic Operations Division (TRF) and Local Government Projects Section (LGP). LGs are encouraged to contact their local district to obtain current information in these situations. Additional information may be available through the appropriate division's Web pages on the TxDOT website.

Standard Agreements

Background

In 2019, the TxDOT Contract Services Division (CSD) further streamlined formats for AFAs with LGs and included a newly identified category for on-system projects in which the LG contributes all funds and performs all activities known as a Local On System Improvement Project Agreement (LOSA).

The formats consist of standard agreements, such as:

- A local project AFA (AFA Long)
- A local project AFA with no federal funds (AFA Non-Federal Long); and
- A local project AFA for non-construction (AFA Non-Construction Long).

The use of the above agreements further simplifies the majority of local project agreements and substantially reduces executive review and processing time.

AFA Long (AFA)

The AFA standard agreement sets out the general terms and conditions of the relationship and cites the federal and state laws that govern the agreements with LGs.

The AFA is used to define the scope of work and funding responsibilities for a specific project. Execution of an AFA requires formal action by the LG's governing body. The AFA contract period usually ends upon completion of the project unless the AFA is terminated early or is extended based on an amendment executed by both parties. The AFA specifies the distribution of responsibilities for performing work, such as right-of-way acquisition, environmental, preparation of the PS&E, construction of the roadway and other aspects of the project.

The AFA also specifies which party will provide what resources, such as the land or the funding necessary for a project. The party responsible for performing work may or may not be the party

responsible for paying for the work. The AFA also includes general terms and conditions of the agreement.

Additional Information Regarding Funding Approvals

Commission Approval

A transportation project must be authorized in a minute order presented and heard at a meeting of the Texas Transportation Commission. If a project is included in the <u>Unified Transportation</u> <u>Program</u> (UTP), the minute order approving the UTP is the only Minute Order required. Projects funded with TxDOT district discretionary funds are also authorized under the UTP minute order. There are times when an individual, project-specific minute order is required.

LG Authority Approval

It is the responsibility of the LG to know the legal requirements governing its ability to contract with TxDOT. In general, LGs authorize the expenditure of funds through action of their governing body or board that authorizes the LG to enter into a contract with TxDOT.

Outstanding Balance

In negotiating AFAs, the TxDOT district office must first check with the Finance Division (FIN) to determine if the LG has an outstanding balance owing to the state. In most cases, outstanding balances must be paid before further funding agreements can be executed.

Special Approvals

In some cases, special approvals are needed to allow a LG to perform the work. Some examples include the following.

- **Local Letting**. The LG may locally let and award a construction contract if approved by TxDOT. <u>43 TAC §15.52 (3)</u> outlines the conditions required for a LG to receive TxDOT approval to let/award a construction contract. If the specified conditions are demonstrated, written approval by the TxDOT executive director or his designee is required. This approval should be obtained during preparation of the AFA and documented in the project files.
- **Local Force Account Work**. The LG may use county or municipal employees to perform work on the project. <u>43 TAC §15.52 (3)</u> outlines the conditions required for a LG to perform project construction activities with its own forces. Once these conditions are demonstrated, written approval of the TxDOT executive director or his designee is required prior to performing the improvements. To reduce potential delays, this approval should be requested as early in the project as practicable.
- **Funding Agreement**. All AFAs define the allocation of project costs between the parties to the agreement. Chapter 1, Section 5 of the <u>Project Development Process</u> manual includes charts that indicate standard funding participation values for numerous transportation programs. This document also includes an "AFA Recommended Funding Type Chart" that indicates which of the following funding types (fixed price or specified percentage) is recommended based upon the category of work, who is managing the work, and whether the project is on or off the state highway system or is a non-construction project. If the AFA proposes a funding type that is not

aligned with the recommendation in the chart, special approval by the executive director or his designee is required.

- **Fixed Price**. 43 TAC §15.52 (4) defines fixed price as the LG funding participation amount based upon the department's estimated cost of the work to be performed at the time of executing an AFA. TxDOT and the LG agree upon a fixed price amount of participation by the LG. This amount may be adjusted through execution of amendments to the AFA due to changes in project scope and/or unforeseen conditions. In this case, any project costs in excess of the amount specified in the AFA would be the responsibility of TxDOT (using either state or federal funds). This change is intended to incentivize both the LG and TxDOT to be more proactive in estimating and managing project costs and in significantly expediting the project close-out process at project completion.
- Specified Percentage. 43 TAC §15.52(4) defines specified percentage as the LG and TxDOT agreeing to each be responsible for specified percentages of estimated total project costs. This type of agreement will specify a percentage participation for federal funds, state funds and local funds with a cap on the amount of federal and state participation. In this case, any project costs in excess of the amount specified in the AFA are the responsibility of the LG.
- **Periodic Payment Agreement**. In addition to determining whether to use fixed price or specified percentage funding, <u>43 TAC §15.52(4)</u> also allows the LG's share of estimated project costs to be paid out using periodic payments under certain conditions. Periodic payment agreements must be approved by the executive director or his designee and may not be approved if the LG has any delinquent obligations to TxDOT.
- Approval of Projects in Economically Disadvantaged Counties. 43 TAC §15.55(b) provides special consideration for projects located in economically disadvantaged counties (including the cities and towns within these counties). In evaluating a proposal for a highway improvement project with a LG that consists of all or a portion of an economically disadvantaged county, the commission shall, for those projects in which the commission is authorized by law to provide state cost participation, adjust the minimum local matching funds requirement after receipt of a request for adjustment from the governing body of the LG. Further information regarding the Economically Disadvantaged County Program is available on the TxDOT website.

An economically disadvantaged county is one that has:

- Below average per capita taxable property value;
- Below average per capita income; and
- Above average unemployment.

Funding Overruns

General

One provision of the AFA between a LG and TxDOT includes the funding responsibilities of each party to the AFA. State, federal and local funding responsibilities are specified as well as the funding type (fixed price or specified percentage). Each party's funding obligation is limited to the values indicated in the agreement unless it is the party responsible for cost overruns or an amendment to the AFA is executed in writing by both parties.

Federal Requirement

1. There are no specific federal regulations concerning funding overruns. FHWA executes a FPAA with TxDOT on all federally funded projects.

State Requirement

- 1. <u>43 TAC §15.52</u> Requires a written agreement between TxDOT and a LG when the LG is providing financial assistance for a highway improvement project. One of the provisions of the AFA is the funding responsibilities of each party to the agreement.
- 2. <u>43 TAC, Chapter 5</u> Provides for agreements between TxDOT and other entities that include funding arrangements and responsibilities:
- 3. <u>43 TAC, Chapter 5, Subchapter E</u> Pass-through Fares and Tolls;
- 4. <u>43 TAC, Chapter 5, Subchapter H</u> Transportation Development Credit Program; and
- 5. <u>43 TAC, Chapter 5, Subchapter G</u> Private Activity Bonds.

Required Practices

The <u>LGPM Guide</u> includes the LG and TxDOT responsibilities related to project funding overruns. In general, for projects with state or federal funds, the LG must follow the terms of the project AFA executed between TxDOT and the LG.

AFA Amendments

If there is a significant change in the scope of work, funding or time, the district will prepare an AFA amendment that sets forth the change and the reason for the change. Frequently this is related to a construction contract change order, but may be necessary for non-construction projects as well. An amendment to the AFA will frequently trigger a change order in the related bid documents or scope of services. Any change in the scope of the project must be consistent with TxDOT's change order policy and the project's environmental document. The <u>LGPM Guide</u> contains additional information regarding project changes and amendments.

Local On System Improvement Project Agreement (LOSA)

The LOSA is a new agreement with the LG that is available for use. The primary purpose is to document a construction project located on the State Highway System right of way for which the

LG is contributing all funds and managing or performing all engineering and construction activities.

There are numerous requirements that must be considered if a LG believes the project should use a LOSA and should be discussed with the TxDOT district as soon as a project is identified.

LOSA projects are not considered a LG project under the strict definition in Section 1 of the LGPM and therefore many state and federal requirements are not applicable.

If the provisions of the LOSA are not acceptable, then the LG must use an AFA-Long Non-Federal template to document the agreement between the parties.

Section 5: State Letter of Authority and Federal Project Authorization and Agreement

Overview

The State Letter of Authority (SLOA), a Notice to Proceed or an authorization to commence work must be issued by TxDOT on all LG projects whether the work is competitively bid or performed by the local government (LG).

A Federal Project Authorization and Agreement (FPAA) is required in addition to the SLOA for all federally funded projects (it is not required for projects that only include local and/or state funds). The primary function of this form is to obligate federal funds for the project by phases. By completion of the FPAA, federal funds are authorized through an agreement between the Federal Highway Administration (FHWA) and TxDOT for reimbursement of eligible costs. The FPAA is required prior to TxDOT issuing a SLOA for each phase of a project that includes federal funds.

For LG-performed transportation projects that include construction involving state or federal funding, up to three SLOAs (and FPAAs, if federal funding is involved) may be required by TxDOT and issued during the course of the project. The first SLOA (and FPAA, as appropriate) is required prior to the Preliminary Engineering phase, the second SLOA (and FPAA, as appropriate) is required prior to the acquisition of right of way or the accommodation of utilities and the third is required prior to initiation of advertising for construction.

- The first SLOA (and FPAA, as appropriate) is requested and issued after the execution of the AFA and prior to any work being performed on the project.
- The second SLOA (and FPAA, as appropriate) is requested and issued upon completion of the Environmental Compliance phase of the project. The SLOA (and FPAA, as appropriate) initiates the Right of Way and Utility phase of the project. It is required prior to the acquisition of any right of way or other land for the project and prior to moving forward with utility accommodations.
- The third SLOA (and FPAA, as appropriate) must be signed and dated prior to advertisement of the project, or prior to commencement of construction when the LG is doing work by force account. This authorization is generated upon approval of the final plans at the end of the plans, specifications and estimates (PS&E) phase of the project.

Obtaining Authorization

General

The SLOA, FPAA and Notice to Proceed (or authorization to commence work) are provided to the LG so it may continue with various phases of a project. The forms commit the expenditure of state or federal funds. For federal-aid projects, TxDOT becomes a recipient and the LG becomes a subrecipient of the federal funding and must follow the rules contained in <u>2 CFR Part 25</u>. This regulation requires TxDOT to verify all sub-recipients register in the System for Award

Management (SAM) database, maintain an active SAM registration with current information and provide a DUNS (Data Universal Numbering System) number with ZIP+4 prior to the time of award. A DUNS number identifies an entity by assigning it a unique nine-digit identification number. The ZIP+4 is the zip code plus an additional four digits based on the entity's physical address. TxDOT and FHWA consider the "time of award" to be the execution of the FPAA. In practice, the TxDOT district must obtain and verify the DUNS number prior to requesting a FPAA. The LGPM Guide provides additional information regarding the procedures required by 2 CFR Part 25.

In addition, prior to obtaining any of the described authorizations, an overall period of performance for the project must be established, including a project period start and end date. The sub-recipient must comply with these start and end dates, and must obtain written confirmation from TxDOT for any revisions to either date. Regarding the expiration of a existing project end date, reimbursement for project expenditures incurred subsequent to the end date cease being reimbursable without further consideration by TxDOT and FHWA.

Federal Requirements

- 1. <u>23 CFR Part 630 Subpart A</u> Requires TxDOT to obtain authorization from FHWA before work begins on any federally funded project.
- 2. <u>23 CFR Part 630 Subpart B</u> Prescribes procedures to be followed for preparation, submission and approval of PS&E, and supporting documents for federally funded projects.
- 3. <u>23 CFR Part 635 Subpart C</u> Requires authorization before a federally funded project may be advertised for receipt of bids. PS&E approval is a pre-requisite of authorization for design-bid-build projects. For design-build projects, FHWA's approval of the Request for Proposals document will constitute FHWA's project authorization; however, phased authorizations may be given under certain conditions contained in 23 §CFR 635.309(p).
- 4. <u>2 CFR Part 25</u> Requires recipients and sub-recipients of federal funds to:
 - a. be registered in the SAM database;
 - b. maintain an active SAM registration with current information; and
 - c. provide a DUNS number to the agency awarding the funding prior to award.
- 5. <u>2 CFR Part 170</u> Requires recipient's reporting of information on sub-awards of federal funds as required by the Federal Funding Accountability and Transparency Act of 2006 (Public Law 109-282).
- 6. <u>2 CFR §200.1</u> Requires the establishment and reporting of project period start and end dates by recipient prior to federal or state authorization of any reimbursable expenditures.

State Requirements

1. <u>43 TAC §15.56</u> – Requires projects on the state highway system to be designed in accordance with TxDOT manuals, procedures, standards and guidelines. Additionally requires approval of

the PS&E by TxDOT prior to advertisement for receipt of bids for projects on the state highway system.

Required Practices

The <u>LGPM Guide</u> describes the procedures and responsibilities associated with requesting and obtaining an SLOA. In general, the LG works with the district to receive authorization to proceed with various phases of the project as detailed in the LGPM Guide.

Section 6: Project Accounting

Overview

Although accounting tasks are performed throughout the project, specific financial elements must be considered early in the project initiation phase of the project in order to be adequately addressed during the project and avoid accounting problems when the project is completed. This section addresses several of these elements. In addition, early in the project development process the local government (LG) should also review the policies presented in the Non-Construction
Projects, Preliminary Engineering and Design, Construction, and Project Close-out and Maintenance chapters of this Manual to ascertain if additional elements may need to be addressed.

Invoicing and Monitoring the Project Financial Records

The LG is allowed to submit reimbursement requests, with attached status report and schedule, no more frequently than once per month. The LG is strongly encouraged to submit invoices and back up materials on a monthly basis when work is performed. TxDOT project personnel have a responsibility to work with their LG counterparts to ensure the adequacy and accuracy of the project financial records is in compliance with all applicable federal and state requirements plus any additional requirements stated in the project's advance funding agreement (AFA).

Inactive Project Obligations

FHWA defines an inactive project obligation as a federal-aid project with no expenditure for a year. Projects must comply with federal laws (23 U.S.C.) and regulations (23 CFR §630.106(a)(5)) governing the Federal-aid Highway Program. A project that is considered inactive is at risk of having its federal funding removed and reassigned to another project. A LG must bill in a consistent manner during the term of the project. The TxDOT Project Manager must provide consistent oversight of project progress and billing.

Collection of Funds

The TxDOT district or division that is managing an AFA is responsible for collecting the agreed-upon funding from the LG in accordance with the terms of the AFA.

Advance Payments for Direct State Costs

In most cases, the LG will make advance payments to TxDOT in accordance with the AFA for direct oversight costs by TxDOT. These costs could include covering:

- TxDOT oversight costs;
- right-of-way acquisition oversight;

- engineering plans development review; or
- project construction oversight and inspections.

As stated in the AFA, these LG advance payments are collected prior to starting the work that will be paid with the LG advance payments. The amount of funds advanced is specified in the AFA between TxDOT and the LG. More details on the procedures involved with advanced payments are contained in the LGPM Guide.

Interest

TxDOT does not pay interest on funds provided by an LG.

Indirect Costs

<u>Texas Government Code §2106.001</u> defines indirect costs as "the cost of administering a state or federally funded program and includes a cost of providing a statewide support service. The term does not include the actual costs of the program." "Support service" as used in the code includes accounting, auditing, budgeting, centralized purchasing and legal services.

The language used in TxDOT's AFAs is closely aligned with the Texas Government Code by using the terms "direct" and "indirect" costs to differentiate between costs incurred by providing a statewide support service (indirect) and the actual costs of the program (direct).

When federal funding is being utilized in a project, <u>2 CFR §200.414</u> and <u>Appendix VII(D)(1)(b) to 2 CFR Part 200</u> set forth additional provisions that should be considered regarding the use of negotiated rates in determining indirect costs as well as the utilization of a de minimus rate for LGs that have received less than \$35 million in federal awards.

Payment for Surveying Contracts

If payment for surveying is a responsibility of TxDOT, or if the LG is requesting reimbursement for surveying services from TxDOT, then the specified rate is the basis of payment used for surveying contracts by TxDOT. The LG may use any basis of payment allowable under State law, which includes the specified rate basis of payment.

Withdrawal from the Project

If a LG withdraws (or is terminated) from a project after an AFA has been executed, the LG is responsible for payment of all direct and indirect project costs previously incurred by TxDOT for the items of work in which the LG is participating.

Section 7: Project Documentation and Data Submittal

Overview

Project records, including legal documents, meeting minutes, reports from material testing, etc., must be maintained by the local government (LG) during the course of the project. Specific regulatory requirements for records retention are found below and in Chapters 9 and 10. These requirements ensure compliance with state and federal statutes for contract elements such as equal employment opportunity, equipment rental rates, non-segregated facilities, prevailing minimum wage (Davis-Bacon Act) and Title VI. In addition, requirements for record retention are included in Contract Administration tasks (see Chapter 9) to ensure proper documentation of progress payments, quality assurance program, specification compliance, statements and payrolls, and other contract elements.

This section provides guidance for the LG for two types of records generated during a transportation project: records retention and legacy system data submittal. Records retention relates to legal and other documents used to administer the project. Data submittal relates to the data collected during the project that is used to populate the TxDOT legacy systems. Requirements for both of these records are specified in the Advance Funding Agreement (AFA).

Records Retention

General

As soon as the contract between the LG and the contractor is executed, the LG should establish a system to maintain and organize the project records. Early organization of the project documents and files by the LG will ensure an audit by TxDOT or FHWA during or at the close of the project will proceed smoothly. Proper record keeping also aids in the administration of the project by documenting compliance with local, state and federal procedures and policies.

The LG must retain records as specified in the AFA. The TxDOT district must also retain records as specified in the AFA and must ensure the LG is maintaining the appropriate records to aid both TxDOT and FHWA during project audits.

After the contract is executed between the LG and the approved contractor (following the letting process described in Chapter 8), project records provide documentation and support for the payments for contract work. For construction projects, records also include documentation of pay quantities, test reports supporting that the materials used meet specification requirements and a variety of contract administration documentation. For example, 23 CFR §635.123 states,

"The STD (LG) shall have procedures in effect which will provide adequate assurance that the quantities of completed work are determined accurately and on a uniform basis ... All such determinations and all related source documents upon which payment is based shall be made a matter of record. Initial source documents pertaining to the determination of pay quantities are

among those records and documents which must be retained pursuant to 49 CFR Part 18 (now 2 CFR §200.334)."

<u>23 CFR Part 637 Subpart B</u> provides for quality assurance procedures for construction. These procedures include the development of a quality assurance program that will assure the materials and workmanship are in conformity with the requirements of the approved plans and specifications. There must be documentation to demonstrate specification compliance.

FHWA does not specify the content and format of job records; however, FHWA approves TxDOT manuals and procedures used on federal-aid projects. The LG has the option of adopting TxDOT's job record process or submitting its own for TxDOT concurrence. The goal is to give TxDOT a level of comfort when it certifies to FHWA a project has been completed in substantial conformity with the approved plans and specifications, including authorized changes. Records may be retained in hard or digital format, or a combination of both; however, 2 CFR §200.336 provides that the LG "should, whenever practical...store [f]ederal award-related information in open and machine readable format." However, the FHWA and TxDOT "must always provide or accept paper versions of [f]ederal award-related information to and from the [LG] upon request."

For sampling and testing records, FHWA requires that the "source document" must be retained. The source document is the first document upon which an inspector or technician notes measurements or observations. If a source document is originally established in digital format, then if should be kept in digital format (a paper copy may still be included in the project records). A paper source document that is later converted to a digital format may be used for project management, but the paper source document must also be retained.

Federal Requirement

- 1. <u>23 CFR §635.123</u> Requires procedures to be in place to provide adequate assurance that quantities of completed work are accurately and uniformly determined. Such determinations and source documents are a matter of record.
- 2. <u>2 CFR §200.334</u> Requires project records to be kept for 3 years from the date of submission of the final expenditure report for a project. (Note that current templates of AFAs provide for retention for 7 years.)
- 3. <u>2 CFR §200.336</u> Provides that the project records should, whenever practical, be kept in an open and machine readable format. However, paper versions must always be provided or accepted to and from the recipient upon request.
- 4. <u>2 CFR §200.337</u> Requires records be made available for review by federal and state officials.

State Requirement

1. <u>Texas Local Government Code Chapter 203</u> – Requires the management and preservation of records, including the establishment of a records management program and record control schedules, by elected county offices and all other local government offices.

2. <u>Texas Government Code §441.158</u> – Provides that the director and the librarian of the Texas State Library and Archives Commission prepare and distribute record retention schedules for each type of LG and are the official resource for all State record retention matters.

Required Practices

- 1. For projects with state or federal funds and projects on the state highway system regardless of funding source, the LG must use TxDOT's <u>Records Retention Schedule</u> or submit an alternate procedure for TxDOT approval. This approval must be received before work on the project begins. Note that the AFA may provide for a longer period for retention of project records, in which case the longer period will be applicable.
- 2. The <u>LGPM Guide</u> provides the responsibilities for the LG and TxDOT with respect to document retention.

Highway System Data

General

When TxDOT manages the development and construction of its own projects, various data is collected about the project and highway segment for future use.

The specific requirements for data to be provided for each project will be addressed in the AFA. The <u>LGPM Guide</u> describes the requirements for the data submittal for each project.

Federal Requirements

1. None identified.

State Requirements

None identified.

Chapter 3: Non-Construction Projects

Contents:

Section 1: Introduction

Section 2: Professional Services

Section 3: Procurement of "Other" Goods and Services

Section 4: Contract Administration

Section 5: Application of Contract Elements

Section 1: Introduction

A non-construction project or program is defined as any transportation-related project or program that does not involve the act or process of building transportation infrastructure. Typical non-construction projects involving the Texas Department of Transportation (TxDOT) and a local government (LG) partner are planning studies, development of a travel demand model, management of a "shared ride" service, a "motorist assistance" program, a transportation corridor analysis, etc. Chapter 3 of this Local Government Projects Policy Manual (LGPP Manual) provides the state and federal laws and policies that must be followed during a non-construction project. The companion chapter of the Local Government Project Management Guide (LGPM Guide) provides the required practices that should be used by an LG during management of the project and the related procedures used by TxDOT to provide oversight of the project.

Advance Funding Agreement

The advance funding agreement (AFA) for non-construction projects (NCAFA) is a standard agreement for local projects not involving construction. Examples include, but are not limited to, congestion mitigation and air quality projects, some surface transportation program - metropolitan mobility projects, van pool programs, diesel emissions programs and public information campaigns. For the purposes of this LGPP Manual, all agreements are referred to as an AFA.

The AFA is executed between TxDOT and the LG. For many types of non-construction projects or programs, the TxDOT district typically serves as the primary point of contact with the LG and provides oversight of the project or program. For these projects/programs, the AFA is executed between TxDOT and the LG. In many of these non-construction projects, the metropolitan planning organization (MPO) performs the project selection process.

For non-construction projects or programs when the MPO or rural planning organization (RPO) is filling the role of the LG, the district or TxDOT Transportation Planning and Programming Division (TPP) may serve as the primary point of contact with the LG and will provide oversight of the project or program. For these projects/programs, the AFA is executed between the MPO/RPO and TxDOT. In this situation, the local TxDOT district will frequently provide project support through technical expertise and other resources.

Statewide Transportation Improvement Program

Each year, MPOs advertise potential funding opportunities for non-construction projects. The MPO will gather submittals for proposed projects from the LGs within its boundaries, evaluate the candidate projects, select approved projects and submit those projects to TxDOT, which are then incorporated into a <u>Statewide Transportation Improvement Program</u> (STIP) (see <u>Chapter 2 – Project Initiation</u>). Once TxDOT develops and submits the STIP for approval, and the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA) approve the STIP, the sponsor LG and the district will develop and execute the AFA for a particular project.

State Letter of Authority

As discussed in detail in <u>Chapter 2 – Project Initiation</u>, the State Letter of Authority (SLOA) is a form that must be issued on all projects whether the work is performed by the LG or contracted out to a third party. For non-construction projects, the SLOA is frequently issued in the form of a Notice to Proceed issued by TxDOT to the LG.

For projects not involving federal funds, the request from the LG and issuance of a SLOA from TxDOT is required prior to initiation of work on the project. A Federal Project Authorization and Agreement (FPAA) is required in addition to the SLOA for all federally funded projects. The primary function of this form is to obligate federal funds for the project. By completion of the FPAA form, federal funds are authorized through an agreement between FHWA and TxDOT for reimbursement of the approved costs. For projects involving federal funds, TxDOT initiates the SLOA and submits the required project information to FHWA for approval. Once the project is approved as eligible for federal reimbursement by FHWA, TxDOT generates the FPAA and may issue the SLOA to the LG. Additional approval documentation, such as a memo from the district, may be required in order to obtain the FPAA. Coordinate with your district to ensure all appropriate documentation is provided.

Chapter 2 – Project Initiation and the <u>LGPM Guide</u> describe in more detail the procedures, information and responsibilities associated with requesting and obtaining an SLOA, as well as an FPAA, as applicable.

Section 2: Professional Services

Overview

The local government (LG) may use a professional services provider for architecture, landscape architecture, professional engineering or surveying. Professional services providers are defined, in part, as professional engineers, registered architects or registered professional land surveyors in the Texas Government Code, Chapter 2254, Subchapter A, often referred to as the Professional Services Procurement Act. This law requires a two-step process in selecting and negotiating costs for contracts with professional services providers. If a LG proposes to be reimbursed with state or federal funds for professional services performed by consultants, the LG must follow an approved consultant selection process meeting the provisions of state law and also 23 CFR Part 172 (if federal funds). Reimbursement for professional services is not allowed if they were incurred prior to receipt of the FPAA and SLOA or if they did not comply with the applicable state and federal requirements. Chapter 4 – Preliminary Engineering and Design of this Manual describes the regulations governing the procurement of professional services in more detail, while the Local Government Project Management Guide (LGPM Guide) provides the procedures.

Donation of Engineering Services

23 U.S.C. §323(c) allows "persons" to donate funds, materials or services in connection with a federal-aid project. TxDOT may credit the fair market value of donated engineering services to the state and/or local share of the project. However, the donation must be a service needed for the project. If a LG proposes to apply the cost it paid for consultant services to the non-federal share, the LG must follow an approved consultant selection process meeting the provisions of 23 CFR Part 172. The costs of professional services consultant contracts that are not procured, negotiated or administered in accordance with applicable federal laws and regulations are not eligible to apply toward the non-federal share of costs of the current or a future phase of a federal-aid highway program funded project. If the LG proposes to apply the cost for engineering services performed by its own personnel to the non-federal share, the LG must determine the cost effectiveness of local performance of services and receive TxDOT written approval prior to commencing the engineering services.

Selection of Professional Service Provider

State and federal regulations require LGs to use TxDOT's qualifications-based competitive selection process for the procurement of any professional services (or a TxDOT-approved alternate process) for all types of transportation projects involving state or federal funding. If the LG proposes to use an alternate selection process, it must be approved in advance in writing by the TxDOT district. The LG must also submit a Consultant Concurrence form to TxDOT prior to entering into a contract with a service provider. Detailed guidelines regarding the state and federal requirements for procuring professional services are described in Chapter 4 – Preliminary Engineering and Design.

Professional service providers (contractors and suppliers) are not allowed to participate in federally funded projects if they are suspended or debarred. The professional service provider is required to certify as to its current eligibility status. Certification is also required of all prospective participants in lower-tier transactions. This includes subconsultants, material suppliers, vendors, etc. The state of Texas has similar requirements prohibiting contracts with debarred providers. The LG is required to verify its professional service providers and lower-tier providers are not debarred by the federal or state government prior to contract award. Additional information on debarment is provided in the Debarment Certification section of Chapter 7.

Section 3: Procurement of "Other" Goods and Services

Overview

In some cases, the local government (LG) will need to procure the services of a consultant (not professional services) to help it conduct the project or part of the project. Some project examples include: transportation planning services for the development of a travel demand model; providers for management of a "shared ride" service; providers of a "motorist assistance" program; bicycles for a Congestion Mitigation and Air Quality project; and demographic data for a transportation corridor analysis. The LG must comply with the procurement requirements as outlined in Texas Government Code, Chapter 2254, Subchapter B "Consulting Services". The LG must follow procurement procedures that have been pre-approved by TxDOT in order to get reimbursed for these services.

Procurement Procedures

For the purchase of goods and services not related to construction or professional services, the LG will use its routine procurement procedures under the Texas Government Code. The Uniform Grant Management Standards (UGMS) summarizes the allowable procedures for federal- and state-funded projects and can be found on the <u>Texas Comptroller website</u>. The LG must receive TxDOT pre-approval of its procurement procedure to assure reimbursement of the costs for the goods or services. TxDOT review and approval is to assure compliance with federal and state procurement requirements. Important guidance on this matter is included in the advance funding agreement (AFA). In the Master Advance Funding Agreement (MAFA), these are found in provisions 20 and 21.

Provision 20 addresses reimbursement on federally funded projects and the provisions of <u>2 CFR Part 200</u>, <u>Subpart E</u> apply. This circular contains cost principles that state the expenditures of federal funds for projects must be allocable, allowable and reasonable.

- 1. A cost is "allocable" if the federal funds were spent on the project for which they were approved in accordance with the relative benefits received;
- 2. A cost is "allowable" if it is necessary for the project and not a disallowed type of expense. Unallowable costs include costs for items such as entertainment, lobbying, alcoholic beverages and similar costs. A detailed listing of allowable and unallowable costs is found in the UGMS.
- 3. A cost is "reasonable" if it does not exceed that which would be incurred by a prudent person under the circumstances prevailing at the time the decision was made to incur the cost. If the LG has a question concerning the "reasonableness" of a cost, a contract specialist or legal counsel should be consulted.

Provision 21 cites the requirement to comply with <u>2 CFR §200.317-200.326</u> and <u>2 CFR §1201.317</u>, which relate to federal procurement standards, and <u>2 CFR §200.313</u>, which relates to federal property management standards.

If a LG receives federal or state funds for a specific project, the LG may not use those funds for other projects, even if the funds are left over from an approved, completed project. More information regarding project funding is contained in Chapter 2 of this Manual. Information detailing the project close-out process is contained in Chapter 10.

If the LG is hiring consultants and private contractors to perform services for the LG and requesting them to purchase other goods or services for which they seek reimbursement, the LG, its consultants and private contractors must also follow federal acquisition regulations in procuring the needed goods and services. As mentioned previously, the LG must also submit a Consultant Concurrence form to TxDOT prior to entering into a contract with a service provider.

Contractors and suppliers are not allowed to participate in federally funded projects if they are suspended or debarred. The contractor or supplier is required to certify as to its current eligibility status. Certification is also required of all prospective participants in lower-tier transactions. This includes subcontractors, material suppliers, vendors, etc. The state of Texas has similar requirements prohibiting contracts with debarred contractors. The LG is required to verify its prime contractors/suppliers and lower-tier providers are not debarred by the federal or state government prior to contract award. Additional information on debarment is provided in the Debarment Certification section of Chapter 7.

Section 4: Contract Administration

Overview

Contract administration and oversight involves four general processes: project/contract planning; monitoring contract performance; payment approval with required documentation; and scope changes. The goal of contract administration is to ensure the contract is performed satisfactorily and the responsibilities of both parties are properly discharged. The primary objectives of contract administration are:

- to verify performance for the purpose of payment;
- to identify "material breach of contract" by assessing the difference between contract performance and material non-performance;
- to determine if corrective action is necessary; and
- to take such action if required.

In order to achieve the goal and objectives of contract administration, a non-construction project must have a well-defined scope of work, clear communications through project meetings, a detailed plan for monitoring the progress of the project and complete documentation of the project work elements.

Scope of Work

The scope of work developed during negotiation of the advance funding agreement (AFA) is the roadmap for contract administration. The importance of a well-defined scope of work is presented in the Local Government Project Management Guide (LGPM Guide). As described in the Introduction section of this chapter, the Statewide Transportation Improvement Program (STIP) must contain the project. The STIP is approved by TxDOT and FHWA; therefore, the LG must provide a concise scope of work that is consistent with the project described in the STIP and conforms to the project title approved in the STIP.

Post Award Meeting

After the State Letter of Authority (or Notice to Proceed) has been issued along with transmittal of a copy of the Federal Project Authorization and Agreement to the local government (LG), a post award meeting may be held between the LG and TxDOT project oversight personnel (district or Transportation Planning and Programming Division, as applicable). This meeting is described in the LGPM Guide.

Monitoring Performance

The LG is responsible for execution of all project elements in accordance with the AFA. The TxDOT project manager will provide oversight and contract administration for invoices and work progress. As part of this execution and oversight, both parties are responsible for monitoring the performance of the contractor/consultant throughout the project and for ensuring the project is completed in accordance with the contract terms detailed in the AFA. The procedures and responsibilities of the LG and TxDOT are described in the LGPM Guide. More detailed information on project documentation and data submittal requirements is contained in Chapter 2. Information on project close-out requirements is contained in Chapter 10.

Supporting Documentation

With each invoice, the LG is required to submit legible and proper documentation to validate all the expenditures being claimed on the invoice. Acceptable practices associated with documentation are described in the LGPM Guide.

Federal Requirement

1. <u>23 CFR §635.122</u> and <u>§635.123</u> – For payment of stockpiled materials, requires the request for reimbursement to be supported by a paid invoice or receipt of delivery of materials as well as provide adequate assurance the quantities of completed work have been determined accurately and on a uniform basis.

Records

Project records provide documentation and support for the payments for contract work performed. The LG and TxDOT must retain records as specified in the AFA and described in the <u>LGPM</u> Guide.

Corrective Action

If TxDOT, through its project manager, determines the LG is not performing in accordance with the terms of the AFA, appropriate corrective action will be requested of the LG. Corrective action may involve improved communication, more frequent meetings between the LG and TxDOT, interim performance evaluations, contract amendments, suspending work, replacement of LG project personnel or subcontractors, or terminating the contract. TxDOT's project manager is to document all activities leading up to and through the corrective action with a report to the project file and copies to the LG. The <u>LGPM Guide</u> provides details regarding suspension of work and termination.

Supervision and Staffing

General

A LG must be suitably equipped and staffed before it can be given authority to manage federal-aid highway projects within its jurisdiction. 23 CFR §635.105 requires TxDOT to be suitably equipped and organized to carry out the federal-aid program. Therefore, TxDOT is responsible for project delivery on all types of federal-aid projects. This responsibility is formalized by the project agreement executed for each federal-aid project. FHWA and TxDOT are the two parties to the agreement.

When a federal-aid project is to be performed by a LG under TxDOT's supervision, all of the following conditions must be met.

- All federal requirements, including those prescribed in <u>23 CFR Part 635 Subpart A</u>, are satisfied on work performed under a contract awarded by a LG.
- Force account work shall be in full compliance with <u>23 CFR Part 635 Subpart B</u>.
- The LG is adequately staffed and suitably equipped to undertake and satisfactorily complete the work.
- The LG shall provide a full-time employee of the agency to be in responsible charge of each federal-aid project, including those employing consultants and other service providers. The requirements for the Responsible Person In-Charge are defined in Chapter 2 Project Initiation of this Manual.

This arrangement does not relieve TxDOT of overall responsibility for the project. While 23 CFR §1.11(b) allows TxDOT to "utilize, under its supervision, the services of well-qualified and suitably equipped engineering organizations of other governmental instrumentalities for making surveys, preparing plans, specifications and estimates, and for supervising the construction of any project," 23 CFR §1.11(e) clearly states TxDOT is not relieved of its responsibilities under federal law and the regulations in 23 CFR if it chooses to use the services of other governmental engineering organizations.

If the LG uses the services of a consulting engineering firm, the services must be procured in compliance with <u>23 CFR Part 172</u>.

The <u>LGPM Guide</u> provides the required practices and responsibilities associated with proper supervision and staffing of a LG project.

Federal Requirement

1. <u>23 CFR §635.105</u> – For projects under a local public agency's jurisdiction, authorizes TxDOT to allow the LG to directly manage projects if TxDOT has assurance the LG is adequately staffed and suitable equipped to undertake and satisfactorily complete the work.

State Requirement

1. No state regulations related to this topic were identified.

Term of AFA

A typical non-construction AFA terminates upon completion and acceptance of the project, or upon termination by either party in accordance with the terms of the AFA. Currently, a non-construction AFA requires a termination date of no more than three years after its date of execution. However, prior to the termination date the date may be extended based on an amendment to the AFA executed by both parties. Once a project is terminated, it cannot be resumed unless a new AFA is executed.

Section 5: Application of Contract Elements

Overview

Non-construction activities include many of the same elements included in the project development phases for a construction project. However, their application may differ in varying degrees. This section highlights critical contract elements applicable to the non-construction process and refers to sections in other chapters for more information when appropriate.

Contract Amendments

A non-construction project is implemented using the advance funding agreement (AFA) and any sub-agreements between the local government (LG) and consultants or service providers. Contract amendments are common to projects and involve work added to or deleted from the contracted scope of work, the addition or deletion of deliverables, and/or adjustments in the project schedule. In cases that involve changes to the scope of work, the LG must ensure continuity of the scope with the approved STIP, or request a STIP modification. In most instances, if there are no changes in the scope of work or deliverables, contract amendments should not be executed solely for extensions in time. Details on the procedures used for executing contract amendments and the responsibilities of each party to the AFA are described in the Local Government Project Management Guide (LGPM Guide).

Disadvantaged Business Enterprises, Historically Underutilized Businesses and Small Business Enterprises

The federal and state programs for disadvantaged business enterprises (DBE), historically underutilized businesses (HUB) and small business enterprises (SBE) have been developed to encourage participation in the professional services and construction industry by a wide variety of firms and, therefore, expand diversity in the industry.

All federal-aid projects are subject to the DBE requirements. The U.S. Department of Transportation (USDOT) must approve each state's DBE program and its annual goals to ensure compliance with all DBE program requirements. The Federal Highway Administration (FHWA) has determined a LG must operate under TxDOT's DBE program even if it has its own program already approved by USDOT. Participation in TxDOT's approved DBE program is accomplished through a provision in the AFA executed by both parties. LGs are encouraged to contact TxDOT's Civil Rights Division for assistance. Guidance may also be found at USDOT's Office of Small and Disadvantaged Business Utilization Office.

The LG must implement TxDOT's DBE program and coordinate closely with the TxDOT district. This includes TxDOT pre-approval of procurement procedures and sub-agreements and periodic LG reporting requirements. Additional guidance and references to federal and state regulations related to DBE, HUB and SBE programs may be found in Chapter 7 - Plans, Specifications & Estimates (PS&E) Development.

Americans with Disabilities Act

General

The Americans with Disabilities Act (ADA) is codified at <u>U.S.C. Title 42 Chapter 126</u> and requires equal opportunity for individuals with disabilities. Such opportunity prohibits discrimination against individuals with disabilities in government services, public accommodations, transportation and telecommunications. Further, "reasonable accommodation" must be provided to qualified individuals with disabilities.

Federal Requirement

- 1. <u>28 CFR Part 35</u> Prohibits discrimination on the basis of disability by public entities. It extends the prohibition of discrimination in federally assisted programs established by section 504 of the Rehabilitation Act of 1973 to all activities of state and LGs, including those that do not receive federal financial assistance.
- 2. <u>49 CFR Part 37</u> Prohibits discrimination against an individual with a disability in connection with the provision of transportation services. It also provides requirements placed on the construction or alteration of transportation facilities by public entities. Applies to federally funded projects.

State Requirement

 Texas Occupations Code, Chapter 51 – Establishes the Texas Department of Licensing and Regulation (TDLR). TDLR enforces the Texas Architectural Barriers Act (Texas Government Code Chapter 469), which requires all public facilities in Texas constructed or maintained using public funds to be accessible to and functional for persons with disabilities.

Required Practices

The <u>LGPM Guide</u> provides information regarding the practices used by and responsibilities of the LG and TxDOT with respect to the ADA. In general, for all non-construction projects with state or federal funding or are on the state highway system, the LG must implement appropriate requirements and procedures to ensure there is no discrimination by the LG, its consultants and its service providers against any individual with a disability.

Equal Employment Opportunity

General

The LG, as a contracting agency, has a responsibility to ensure all federal-aid contractors, subcontractors, vendors and material suppliers do not discriminate in employment and contracting practices based on race, color, religion (in the context of employment), sex, national origin, age or disability.

As a sub-recipient of federal funds, the LG has the responsibility to ensure equal opportunity requirements are included in federal and federal-aid contracts and to ensure consultants and service providers are in compliance with those requirements under the LG's authority. [The LG has no

authority under <u>Executive Order 11246</u> to enforce compliance with Office of Federal Contract Compliance Programs (OFCCP) requirements.] <u>Chapter 7 – Plans, Specifications & Estimates</u> (<u>PS&E</u>) <u>Development</u> provides additional guidance and references to federal and state regulations related to equal employment opportunity practices.

Federal Requirements

- 1. Title VI of the Civil Rights Act of 1964
- 2. The Civil Rights Restoration Act of 1987
- 3. The Age Discrimination Act of 1975
- 4. The Rehabilitation Act of 1973
- 5. <u>23 U.S.C. §140</u> Nondiscrimination in employment; and <u>23 U.S.C. §324</u> Prohibition of discrimination on the basis of sex
- 6. <u>49 CFR Part 21</u> Nondiscrimination in federally assisted programs of the department of transportation
- 7. <u>23 CFR Part 200</u> Title VI program and related statutes implementation and review procedures
- 8. <u>23 CFR Part 230</u> FHWA external program regulations
- 9. <u>23 CFR §1.9</u> Limitation on federal participation; and <u>23 CFR §1.36</u> Compliance with federal laws and regulations
- 10. 23 CFR §635.117(d) and 23 CFR §635.117(e) labor and employment
- 11. <u>Form FHWA-1273</u>
- 12. FHWA Order 4710.8 Clarification of FHWA and State Responsibilities under Executive Order 11246 and Department of Labor Regulations in 41 CFR Chapter 60 (the OFCCP administers and enforces the equal employment opportunity requirements referenced in Executive Order 11246 and 41 CFR Chapter 60).

State Requirements

- 1. <u>43 TAC §9.4</u> Requires TxDOT to monitor recipients of federal funds for Title VI activities.
- 2. <u>Texas Labor Code Chapter 21, Subchapter B</u> Prohibits employer discrimination on the basis of race, religion, sex, color, national origin, age or disability.

Required Practices

The <u>LGPM Guide</u> provides guidance on the practices used by the LG and TxDOT to implement the equal employment opportunity provisions. In general, all entities will ensure compliance with the applicable state and federal regulations.

Lobbying Certification

General

Lobbying is the attempt to influence decisions made by officials in the government, including elected officials and those who work for regulatory agencies. 49 CFR Part 20 prohibits federal funds from being expended to influence or attempt to influence a federal agency or Congress in connection with the award of any federal contract or grant. This prohibition applies to all recipients, including lower tier sub-recipients of a federal contract or grant. Prior to receiving funds in excess of \$100,000 per contract/grant, the LG must submit to TxDOT a certification that it has not and will not make any prohibited payments for lobbying. This certification is obtained by a provision in the AFA executed by both parties. By signing a contract or subcontract, a consultant or service provider to the LG is certifying it will comply with lobbying restrictions.

The LG certification is to be retained by TxDOT. Likewise, lower-tier certifications are to be retained by the next higher tier (i.e., the LG retain its consultants' and service providers' 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. Payments of non-federal funds to regularly employed officers or employees of the agency or firm are exempt from the disclosure requirement.

Federal Requirements

- 1. <u>23 CFR §635.112(g)</u> Requires:
 - a. the administrating entity to include the lobbying certification in contracts;
 - b. by signing a contract, the consultant or service provider to certify it meets lobbying requirements of 49 CFR Part 20; and
 - c. the LG to include lobbying certification in all lower-tier contracts in excess of \$100,000.
- 2. <u>49 CFR Part 20</u> Places additional restrictions on lobbying.
 - a. Requires recipients of federal funds in excess of \$100,000 to file a disclosure form with FHWA.
 - b. Contains details of the certification.

State Requirements

1. No comparable statutes.

Chapter 4: Preliminary Engineering and Design

Contents:

Section 1: Introduction

Section 2: State Letter of Authority

Section 3: Procurement

Section 4: General Design Guidelines

Section 5: Preliminary Engineering Design for Construction

Section 1: Introduction

The Preliminary Engineering and Design phase defines the overall project configuration that has elements applicable to both construction and non-construction projects. This is usually the first phase of a local government (LG) project that follows after execution of the Advance Funding Agreement (AFA) between TxDOT and the LG. This phase includes four elements: State Letter of Authority (or Notice to Proceed); procurement of professional services; design schematic and layouts; and early phases of design (also considered to be the plans, specifications and estimates at 30 percent completion). Preliminary studies may be performed in this phase, including environmental assessments, surveys, geotechnical studies, hydrologic/hydraulic analyses, traffic studies, etc. This chapter of the Local Government Projects Policy Manual (LGPP Manual) provides the laws and regulations which the LG and TxDOT must use to satisfy the requirements for a State Letter of Authority (SLOA), the procurement of services and the design of the project components. The companion document, Local Government Project Management Guide (LGPM Guide), provides the procedures and practices for implementing these regulations.

Section 2: State Letter of Authority

As discussed in detail in <u>Chapter 2</u>, the SLOA must be issued on all projects whether the work is competitively bid or performed by the LG. For non-construction projects, the request from the LG and issuance of a SLOA from TxDOT is required prior to initiation of work on the project. <u>Chapter 3 – Non-Construction Projects</u> provides more details on the SLOA issued as a Notice to Proceed on these types of projects.

Three SLOAs are required by TxDOT and issued during the course of a construction transportation project involving state or federal funds. The first SLOA is required prior to the Preliminary Engineering phase. The second SLOA is required prior to the acquisition of right of way. The third is required prior to advertising for construction. A Federal Project Authorization and Agreement (FPAA) is required in addition to the SLOA for all construction and non-construction projects that include federal funds (it is not required for projects that only include local and state funds). The LGPM Guide provides the procedures for the issuance of each SLOA and FPAA.

Section 3: Procurement

Overview

For both construction and non-construction projects being managed by local governments (LGs), are located on the state highway system or include federal or state funding, the LG must obtain approval from TxDOT for its proposed procurement procedure for the selection of a professional services provider, a contractor for a construction or maintenance project, or a materials provider.

In some cases, the LG will need to purchase services or goods not in these categories. The LG should refer to <u>Chapter 3</u>, <u>Section 3 – Procurement of "Other" Goods and Services</u> in this Manual for guidance on these types of procurement procedures.

Donation of Preliminary Engineering Services

23 U.S.C. §323(c) allows "persons" to donate funds, materials or services in connection with a federal-aid project. Mapping, surveying, environmental, preliminary design and final design are all considered to be services. When TxDOT self-performs services needed for a project, TxDOT may credit the fair market value of donated engineering services to the state share of the project. 23 U.S.C. §323(c) notes any donated funds, or the fair market value of any donated materials or services, accepted and incorporated into the project by the state transportation department shall be credited against the state share. If the LG proposes to apply its costs paid for consultant services to the non-federal share of a project or program, the LG must provide documentation it followed an approved consultant selection process meeting the provisions of 23 CFR Part 172. This requirement applies whether or not the LG incurred the cost for these services before it decided to seek federal funds for construction.

Professional Service Provider

General

The LG may use a professional services provider for program management, construction management, feasibility studies, preliminary engineering, design, engineering, surveying, mapping or architectural services related to a construction project. Professional services providers are defined, in part, as professional engineers, registered architects or registered professional land surveyors in the <u>Texas Government Code</u>, <u>Chapter 2254</u>, <u>Subchapter A</u>, often referred to as the Professional Services Procurement Act. This law requires a two-step, qualifications-based process in selecting and negotiating costs for contracts with professional providers.

The use of a professional service provider by the LG can be an eligible reimbursable cost in accordance with the local participation rules found in 43 TAC §§15.50 et seq. If the LG is seeking reimbursement for project-related professional services, it must be specifically stated in the advance funding agreement (AFA).

A general overview of the federal requirements for the professional services consultant process is described in the Federal Highway Administration (FHWA) video "Hiring a Consultant Using Competitive Negotiation Procedures" available on the FHWA Federal-aid Essentials for Local Public Agencies website. Selection of a professional services provider must conform to applicable sections of both federal and state law if cost reimbursement is desired by the LG or if the LG desires to have the value of the professional services credited to its share of the project or program.

LGs must submit their proposed professional services procurement process to their TxDOT district office for review. TxDOT may only grant approval to proposed processes complying with applicable federal and state rules. For design/build projects, the selection procedure requirements can be found in 43 TAC §27.7. The LG's use of TxDOT's selection process or an alternate process must receive prior written approval by TxDOT.

The <u>Local Government Project Management Guide</u> (LGPM Guide) provides additional guidance on the required practices used for professional services selection and contracting. The Guide also lists the LG and TxDOT district responsibilities for the professional service provider selection process and agreements.

Professional service providers (contractors and suppliers) are not allowed to participate in federally funded projects if they are suspended or debarred. The professional service provider is required to certify as to its current eligibility status. Certification is also required of all prospective participants in lower-tier transactions. This includes sub-consultants, material suppliers, vendors, etc. The state of Texas has similar requirements prohibiting contracts with debarred providers. The LG is required to verify its professional service providers and lower-tier providers are not debarred by the federal or state government prior to contract award. Additional information on debarment is provided in the Debarment Certification section of Chapter 7.

Federal Requirements

- 1. <u>23 CFR Part 172</u> Prescribes policies and procedures for the administration of engineeringand design-related service contracts for which reimbursement with federal funds is requested.
 - a. Qualifications-based competitive negotiation is the primary method for procurement of professional services. Price is not to be used as a factor in the analysis and selection of the most qualified firm. The proposal solicitation process shall assure qualified in-state and out-of-state consultants are given a fair opportunity to be considered for award of the contract. Small purchase or non-competitive negotiation procedures may be used in limited situations with TxDOT approval.
 - b. Basing compensation for professional services on a cost plus a percentage of cost or on a percentage of construction cost is not acceptable.
 - c. The contracting agency must prepare written procedures for each method of procurement it proposes to utilize.
 - d. Recipients of federal funds must approve the written procedures and all revisions for their sub recipients. TxDOT is the recipient of federal funds and the LG is the sub recipient.

State Requirements

- 1. <u>43 TAC, Part 1, Chapter 9, Subchapter C</u> Establishes TxDOT's standard procedures for selection and contract management of architectural, professional engineering and land surveying service providers for transportation projects. <u>43 TAC §§9.30-31, 9.33-37, and 9.39</u> have application to procurement by LGs when state or federal funds are used on the project.
- 2. <u>Texas Government Code Chapter 2254, Subchapter A</u> Provides procurement requirements for professional services by all governmental entities. The entity:
 - a. Must procure architectural, engineering or land surveying services through a qualifications-based selection process.
 - b. Must negotiate with the most qualified provider for a fair and reasonable price.
 - c. Must formally terminate negotiations if a satisfactory contract cannot be negotiated. The entity must then select the next highest qualified provider and attempt to negotiate a contract for a fair and reasonable price.

Construction Contractor

General

The LG procurement process for advertising, letting and awarding the construction contract must be approved by TxDOT. Consideration for prequalification requirements and post-qualification requirements should be considered early in the design process so the proposed procurement process can be submitted to the TxDOT district for review and approval well in advance of approval of the plans, specifications and estimates.

For construction and maintenance projects on the state highway system (with or without state or federal funds), the LG must require contractors to be prequalified by TxDOT. TxDOT qualifies bidders to become eligible to bid or to receive a bid proposal on a construction or maintenance project. The agency has two levels of qualification, both of which require annual requalification. These are described in detail in the LGPM Guide.

Any prequalification or qualification criteria in addition to TxDOT's must be approved by TxDOT before becoming part of the bid documents. Some projects may be of a nature for which TxDOT may waive the prequalification requirements. TxDOT contractor prequalification process has two basic levels:

- 1. Confidential Questionnaire or fully prequalified (contractors complete a confidential questionnaire and provide audit financials); and
- 2. Bidder's Questionnaire or eligible to bid on projects identified as being waived (bidders complete a questionnaire).

Waived projects may include, but are not limited to, specialty projects (i.e. sidewalks, hike and bike trails, streetscape, traffic and others), maintenance projects or roadway projects of \$500,000

or less. Waived specialty and maintenance projects have no dollar limit and may exceed the \$500,000 limit. The LG must contact the district early in the project to determine if prequalification is necessary.

Materials Providers

TxDOT reviews and approves products and materials from various manufacturers and producers for use on its construction contracts. The LG will be required to use these approved sources if the project is on the state highway system or if the project is off the state highway system but involves state or federal funding. The <u>LGPM Guide</u> provides additional information on the requirements for using approved materials providers.

Section 4: General Design Guidelines

Overview

The Preliminary Engineering and Design phase of both construction and non-construction projects includes the development of design guidelines that include requirements specified by state and federal statutes. This phase also includes the development of design layouts for non-construction projects and design schematics for roadway projects depicting the geometrics proposed for the project.

This section of the LGPP Manual and <u>Local Government Project Management Guide</u> (LGPM Guide) describe general design guidelines that should be addressed in the early stages of the project design. The required practices and general procedures are covered in detail in the LGPM Guide, while this Manual provides the supporting state and federal laws and statutes regulating these practices.

Environmental Permits, Issues and Commitments

General

Preliminary Design must include an identification of the environmental issues and commitments that must be considered during the project development. Chapter 5 – Environmental Compliance contains guidelines for the local government (LG) to ensure environmental issues are addressed appropriately during the project. Commitments are often included in the project environmental documents, including those related to a categorical exclusion (CE), environmental assessment (EA) or environmental impact statement (EIS). These commitments are listed in the Environmental Permits, Issues and Commitments (EPIC) sheet and must be carried through the project development, design and construction stages to assure full compliance with state and federal environmental regulations. More information pertaining to TxDOT's environmental policies is provided in Chapter 5 – Environmental Compliance.

Federal Requirements

- 1. <u>23 CFR §635.309(j)</u> Specifies the plans, specifications and estimates (PS&E) may not be approved until the Federal Highway Administration (FHWA) or TxDOT has determined appropriate measures have been included in the PS&E to ensure conditions and commitments made in the development of the project to mitigate environmental harm will be met.
- 2. <u>23 CFR Part 771</u> Contains the FHWA regulations concerning environmental actions.
 - a. <u>23 CFR §771.105(d)</u> Requires measures necessary to mitigate adverse impacts identified during the environmental process to be incorporated into the project.
 - b. <u>23 CFR §771.109(b)</u> Provides that the applicant for federal funds is responsible for implementing those mitigation measures stated as commitments in the environmental documents prepared pursuant to this regulation.

- c. <u>23 CFR §771.109(d)</u> Mandates TxDOT responsible for ensuring the project is constructed in accordance with and incorporates all committed environmental impact mitigation measures listed in the approved environmental documents.
- 3. <u>23 CFR §772.13(h)</u> States the PS&E will not be approved unless those noise abatement measures that are reasonable and feasible are incorporated into the plans and specifications.

State Requirements

- 1. <u>43 TAC §2.43</u> Provides that, unless otherwise approved by TxDOT, a public or private entity requesting state or federal funds is responsible for compliance with environmental regulations. Included in these regulations is the requirement for the LG to submit documentation to TxDOT showing all issues identified in the EPIC are complete or will be completed including copies of permits or other approvals required prior to construction.
- 2. <u>43 TAC §26.33</u> Assigns full responsibility to the regional mobility authority (RMA) for ensuring all EPIC are addressed in the project design for projects connecting to the state highway system.
- 3. <u>43 TAC §27.56</u> Assigns full responsibility to the LG for ensuring all EPIC are addressed in the project design for projects where a public or private entity (LG) is eligible to request financial assistance for toll facilities.
- 4. <u>43 TAC §§5.59</u>, <u>15.56</u>, <u>26.33</u> and <u>27.56</u> Requires projects to be designed in accordance with TxDOT procedures, standards and guidelines. For RMA, toll and pass-through financed projects, preliminary design information must be sent to TxDOT for review and approval when the design is approximately 30 percent complete.

Required Practices

In general, the LG must coordinate with the TxDOT district to determine the environmental compliance issues and include the EPIC in the plans. Chapter 5 – Environmental Compliance of this Manual provides additional information on this topic. The LGPM Guide describes the required practices and the responsibilities of the LG and TxDOT district for this process.

Design Concept Conference

General

The Design Concept Conference is a meeting of key individuals to establish fundamental aspects of a project. The conference facilitates agreement to basic project features by concerned parties and enhances relationships between those parties.

Federal Requirements

1. There are no federal regulations specifically requiring design conferences.

2. <u>23 U.S.C. §139(h)(4)</u> (as added by MAP 21, §1306) – The project sponsor must convene a meeting of all participating agencies to resolve issues that could delay completion of the environmental review process.

State Requirements

1. There are no state regulations requiring design conferences.

Required Practices

A design concept conference should be held as early in the project development process as feasible and should include all parties that provide information for the project and have the ability to influence the project development schedule. The <u>LGPM Guide</u> provides the required practices and responsibilities of the LG and TxDOT with respect to the design concept conference.

Coordination with FAA

General

The Federal Aviation Administration (FAA) is responsible for assuring the safety of air traffic. One major concern is interference with navigational airspace, such as possible encroachments in take-off and landing patterns. The LG is responsible for identifying potential conflicts with navigational airspace early in the project and for coordinating project design with the FAA. Documentation of satisfactory coordination with FAA must be provided before a project may be authorized for construction.

Federal Requirements

- 1. <u>14 CFR Part 77</u> Contains rules for objects affecting navigational airspace.
 - a. <u>14 CFR §77.9</u> Lists scenarios requiring notification of the FAA before construction or modification.
 - b. <u>14 CFR §77.7</u> Specifies minimum timing of notification and use of FAA Form 7460-1.
- 2. <u>23 CFR Part 620 Subpart A</u> Requires coordination of highway and airport developments between FHWA and FAA to ensure airway-highway clearances are adequate for the safe movement of air and highway traffic and to ensure the expenditure of public funds for airport and highway improvements is in the public interest.
- 3. <u>Vertical Clearances Highway Development and Coordination with Other Agencies</u> (formerly non-regulatory supplement to 23 CFR Part 620 Subpart A) Recommends any federally funded project within two miles of an airport to be carefully examined to determine if there is a possibility for conflict and if coordination is required.

State Requirements

1. There are no state regulations requiring coordination with FAA.

Required Practices

The <u>LGPM Guide</u> describes the practices that should be used by the LG and TxDOT to coordinate with the FAA.

Accessibility Guidelines and Compliance

State and federal statutes protect the rights of individuals with disabilities, and the LG must consider the requirements of these statutes during the project development and design. For transportation purposes, the <u>Americans with Disabilities Act Accessibility Guidelines</u> (ADAAG) and the <u>Texas Accessibility Standards</u> (TAS) provide the majority of criteria on which compliance is based. The U.S. Departments of Justice and Transportation are responsible for enforcement of the ADA. The Texas Department of Licensing and Regulation (TDLR) is the regulatory agency charged with monitoring compliance with the TAS.

All projects, regardless of cost, must comply with the provisions of ADAAG and TAS. Public meetings, hearings and project websites must be accessible and ensure effective communication with members of the public with disabilities. The LG is responsible for submitting plans and specifications for review and approval to the TDLR or a registered accessibility specialist (RAS) for public right-of-way projects with pedestrian elements estimated to cost at least \$50,000, building or facilities projects and hike/bike trail projects. More information on the application of accessibility requirements during the design and construction phases are provided in Chapter 7 Plans, Specifications and Estimates (PS&E) Development.

Design Surveys

Professional land surveys are often required by LGs or TxDOT as part of the design process in order to identify site conditions and limitations for the project. Surveying may be required for both construction and non-construction projects but is most commonly a part of construction projects. Requirements for design surveys are discussed in the corresponding Design Surveys section of the LGPM Guide, while requirements for right-of-way surveys are discussed in Chapter 6 – Right of Way and Utilities of both the Manual and Guide.

Landscape Development

General

The transportation system is a network of highways, trails, railroads, airports, transmission lines, pipelines, canals and waterways set in the landscape. The goal of the transportation designer is to fit the highway or other facility into the adjacent landscape in a way that is complementary to, and enhances, the existing landscape. Achieving this goal requires consideration of natural, ecological, aesthetic, economic and social influences related to the landscape.

Federal Requirements

1. <u>23 CFR §752.4</u> – Requires landscape development to be in general conformity with accepted concepts and principles of highway landscaping and environmental design. In urban areas, new and major reconstructed highways and completed interstate and expressway sections are

to be landscaped as appropriate for the adjacent existing or planned environment. In rural areas, new and major reconstructed highways should be landscaped as appropriate for the adjacent environment. Landscaping projects shall include, but not be limited to, the planting of native wildflower seeds, seedlings or both, unless a waiver is granted.

State Requirements

- 22 TAC, Part 1, Chapter 3, Subchapter G Prohibits the practice of landscape architecture by someone who does not hold a certificate of registration issued by the Texas Board of Architectural Examiners.
- 2. <u>43 TAC, Chapter 11, Subchapter D</u> Requires TxDOT to develop a Green Ribbon Master Plan (landscaping and aesthetics) for cities with a population greater than 100,000. A LG may provide resources for the program.
- 3. <u>Texas Government Code §2166.404</u> Requires the use of xeriscape practices on state-owned facilities.

Required Practices

The <u>LGPM Guide</u> provides the required practices for both the LG and TxDOT for design of landscape aspects of the project. In general, the LG must develop a landscape plan under the supervision of a registered landscape architect, is required to use TxDOT guidance documents for projects on the state highway system (SHS) and is encouraged to use TxDOT guidance documents for projects off the SHS.

Storm Water Pollution Prevention Plans

General

Water pollution degrades surface waters making them unsafe for drinking, fishing, swimming and other activities. As authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that connected to a municipal system, using a septic system or not having a surface discharge do not need a NPDES permit; however, industrial, municipal and other facilities must obtain permits if their discharges go directly to surface waters. To obtain a NPDES permit, the LG must submit a storm water pollution prevention plan (SW3P). A SW3P is required for all projects that may discharge storm water into waters of the United States. These will primarily be construction-type projects, but may be other types of projects as well. The LG should coordinate early with the TxDOT district to determine if a permit is required.

Federal Requirements

1. <u>23 CFR Part 650 Subpart B</u> – Requires control of erosion, abatement of water pollution and prevention of damage by sediment deposition from all federally funded construction projects.

2. <u>40 CFR Part 122</u> – Implements the NPDES. Requires a permit to be obtained that includes a SW3P.

State Requirements

1. <u>30 TAC, Chapter 205</u> – Authorization for the Texas Commission on Environmental Quality (TCEQ) to implement the Texas Pollutant Discharge Elimination System (TPDES) as administrator of the NPDES.

Required Practices

The <u>LGPM Guide</u> provides procedures for the development and review of a SWPPP by the LG and TxDOT district, respectively.

Section 5: Preliminary Engineering Design for Construction

Overview

This section describes the elements required for preliminary design of construction projects, including highways, roads, bridges and alternative transportation-related projects and discusses a delegation of authority by the Federal Highway Administration (FHWA) to TxDOT in administration of projects with FHWA funds. As discussed in TxDOT's Roadway Design Manual, different design guidelines apply to the design of new construction, rehabilitation and restoration projects. The local government (LG) must work with the TxDOT district to determine which guidelines apply before beginning design.

In general, schematic design will be required for most construction projects. Specialty projects such as building projects may require something other than a schematic.

If the LG does not use TxDOT's or other approved guidelines, its guidelines must be submitted to TxDOT for review and approval. Ideally, these guidelines and code sources are identified in the advance funding agreement (AFA). In order to avoid delaying project development, the LG must coordinate and submit a written request for a design exception, as early as it is identified, to TxDOT staff for review and approval. The LG is encouraged to coordinate with TxDOT district staff during the Preliminary Design phase to ensure all design considerations are met. A more detailed discussion of this topic is included in the corresponding section of the Local Government Project Management Guide (LGPM Guide).

Design Criteria

General

"Design criteria" is defined as those basic elements in Chapter 2 of TxDOT's Roadway Design Manual (i.e. horizontal and vertical alignment, sight distance) and those elements that depend on scope of work and functional classification in Chapters 3-8 of the Roadway Design Manual (i.e. design speed, lane width, structure width). They include both the "controlling" and "noncontrolling" criteria for which design exceptions, waivers and variances must be considered as listed in Chapter 1, Section 2 of TxDOT's Roadway Design Manual.

Federal Requirements

- 1. <u>23 CFR §625.3(a)(1)</u> Requires projects on the national highway system to be designed and constructed to FHWA-approved standards. <u>23 CFR 625.3(d)</u> advises that the standards are applicable regardless of the source of funds.
- 2. <u>23 CFR §625.3(a)(2)</u> Requires federally funded projects not on the national highway system to be designed, constructed, operated and maintained in accordance with state laws, regulations, directives, safety standards, design standards and construction standards.

State Requirements

- 1. <u>43 TAC §§5.59</u>, <u>15.56</u>, <u>26.33</u> and <u>27.56</u> Specifies that projects must be designed in accordance with TxDOT procedures, standards and guidelines. For regional mobility authority (RMA), toll and pass-through financed projects, preliminary design information must be sent to TxDOT for review and approval when the design is approximately 30 percent complete.
- 2. <u>Texas Transportation Code §222.104</u> Allows TxDOT to enter into an agreement with public or private entities that provides for the payment of pass-through tolls for the design, development, financing, construction, maintenance or operation of a toll or non-toll facility on the state highway system. The agreement must provide that a municipality, county, RMA or regional tollway authority is required to meet state design criteria, unless TxDOT grants an exception.

Required Practices

In general, the LG must design roadway projects using the TxDOT manuals and other accepted guidelines or submit and obtain TxDOT pre-approval of alternate design standards. The <u>LGPM Guide</u> provides a more detailed discussion of the required practices and LG/TxDOT responsibilities for using acceptable design criteria.

Exceptions to Design Criteria

General

Selection of design criteria is covered above. All reasonable effort must be made to produce a project meeting the established design criteria. However, there may be occasions when one or more design elements do not meet requirements. Exceptions may be granted as an engineering decision if properly documented, and supported.

There are three situations where formal approval must be given: design exceptions; design waivers; and design variances.

- 1. Exceptions cover deviation from specific "controlling" criteria established by federal regulation.
- 2. Waivers cover deviation from "non-controlling" criteria, those values listed as specific, numerical criteria but not one of the listed "controlling" criteria.
- 3. Variances cover deviations from the Texas Accessibility Standards.

The Texas Department of Licensing and Regulation is the approval authority for variances. The approval authority for exceptions and waivers is established by policy and by agreement between the LG and TxDOT.

Federal Requirements

1. <u>23 CFR §625.3(f)(2)</u> – States that approval may be given on a project-by-project basis to designs not conforming to the minimum specified criteria. The determination may be made only after giving due consideration to all project conditions such as maximum service and safety benefits for the dollar invested, compatibility with adjacent sections of roadway and the

probable time before reconstruction of the section due to increased traffic demands or changed conditions.

State Requirements

- 1. <u>43 TAC §§5.59</u>, <u>15.56</u>, <u>26.33</u> and <u>27.56</u> Requires projects to be designed in accordance with TxDOT procedures, standards, manuals and guidelines. TxDOT may be requested to approve deviations from criteria for specific elements. For RMA, toll and pass-through financed projects, preliminary design information must be sent to TxDOT for review and approval when the design is approximately 30 percent complete.
- 2. Texas Transportation Code §222.104 Allows TxDOT to enter into an agreement with public or private entities that provides for the payment of pass-through tolls for the design, development, financing, construction, maintenance or operation of a toll or non-toll facility on the state highway system. The agreement must provide that a municipality, county, regional mobility authority or regional tollway authority is required to meet state design criteria, unless TxDOT grants an exception.

Required Practices

The procedures for obtaining approval for exceptions, waivers or variances to the design criteria vary by type. The <u>LGPM Guide</u> provides the required practices and related LG and TxDOT responsibilities for design criteria exceptions.

Design Level of Service

General

Level of service (LOS) is a measure of traffic flow and congestion. As defined in the <u>Highway Capacity Manual</u> published by the Transportation Research Board, the LOS is a qualitative measure describing operational conditions within a traffic stream – generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience and safety. Selecting a design LOS is a conscientious attempt to reasonably accommodate traffic in the design year. The definition of a LOS is described in more detail in the LGPM Guide.

Federal Requirements

- 1. <u>23 CFR §625.2</u> Requires plans and specifications for projects on the national highway system (NHS) to provide for a facility that will adequately serve the existing and planned future traffic of the highway in a manner conducive to safety, durability and economy of maintenance, and to conform to the particular needs of each locality.
- 2. <u>23 CFR §625.3(a)(2)</u> Requires federally funded projects not on the NHS to be designed in accordance with State directives and design standards.

State Requirements

1. <u>43 TAC §§5.59</u>, <u>15.56</u>, <u>26.33</u> and <u>27.56</u> – Requires projects to be designed in accordance with TxDOT manuals, procedures, standards and guidelines. For RMA, toll and pass-through financed projects, preliminary design information must be sent to TxDOT for review and approval when the design is approximately 30 percent complete.

Required Practices

The LG must select a design level of service and submit it to TxDOT for concurrence. The <u>LGPM</u> <u>Guide</u> provides more information on this process.

Geometric Schematic

General

The geometric schematic is a drawing of a computed alignment of the preferred alternate of a roadway or other linear facility. For a roadway, it shows features such as location of interchanges, ramps, and the number and arrangement of lanes. The schematic also conveys information to the public during meetings and hearings. TxDOT lists elements of the schematic in its Roadway Design Manual.

Federal Requirements

1. There are no federal regulations requiring development of a geometric schematic.

State Requirements

- 1. <u>43 TAC §15.56</u> Requires projects to be designed in accordance with TxDOT manuals, procedures, standards and guidelines.
- 2. <u>43 TAC §26.33(h)(3)</u> For RMA, toll and pass-through financed projects, preliminary design information must be submitted for TxDOT review and approval when the design is approximately 30 percent complete.

Required Practices

The LG is encouraged to prepare and submit a geometric schematic to TxDOT for approval for all transportation projects. It is a requirement for all design-bid-build projects on the SHS. The <u>LGPM</u> <u>Guide</u> provides specific practices and responsibilities for this task.

Highway Access Management

General

An "access connection" is a facility for entry or exit such as a driveway, street, road or highway that connects to the highways under the jurisdiction of a public entity. "Access control" is the enforcement of specified authorization rules based on positive identification of the users and the systems they are permitted to access. Access management must be considered during the design of transportation projects on the state or national highway systems.

Proper access management assists in protecting the substantial public investment in transportation by preserving roadway efficiency and enhancing traffic safety, thus reducing the need for expensive improvements. Access management can also significantly reduce traffic accidents, personal injury and property damage. TxDOT policy and procedures for managing access to the state highway system is contained in TxDOT's <u>Access Management Manual</u>. Additional information may be found in TxDOT's <u>Roadway Design Manual</u>.

Federal Requirements

- 1. <u>23 U.S.C. §111</u> Prohibits states from allowing additional access points to the interstate system without the prior approval of the Secretary of Transportation. <u>FHWA's interstate access policy</u> may be found on FHWA's website.
- 2. Other than specifying design criteria for federally funded projects, there are no specific regulations addressing access management. However, FHWA assumes a role to encourage and advance the development of state and local access management policies, guidelines and procedures for the management of facilities, and integrate these into established planning, policy and design processes.

State Requirements

- 1. <u>43 TAC, Chapter 11, Subchapter C</u> Provides for approval of access connections to state highways. Includes granting authority to municipalities to develop and use their own access management plan.
- 2. <u>43 TAC §§5.59</u>, <u>15.56</u>, <u>26.33</u> and <u>27.56</u> Requires projects to be designed in accordance with TxDOT manuals, procedures, standards and guidelines. For RMA, toll and pass-through financed projects, preliminary design information must be sent to TxDOT for review and approval when the design is approximately 30 percent complete.

Required Practices

The <u>LGPM Guide</u> describes the required process and procedures and defines LG and TXDOT responsibilities for highway access management.

Value Engineering

General

Value engineering (VE) is the systematic application of recognized techniques identifying the function of a product or service, establishing a value for that function and providing the necessary function reliability at the least overall cost. VE studies are required on federally funded projects on the federal-aid system with an estimated total project cost greater than \$50 million and bridge projects with an estimated total project cost greater than \$40 million. This requirement must be fulfilled before construction is authorized. The LG is encouraged to conduct the VE study soon after completion of the geometric schematic (approximately 30 percent design stage) to facilitate economical incorporation of all VE recommendations into the plans, specifications and estimates.

Federal Requirements

- 1. 23 CFR §627.5 Requires a value engineering study to be performed for all federally funded projects with an estimated total project cost greater than \$50 million and for all federally funded bridge projects with an estimated total project cost greater than \$40 million.
- 2. <u>23 CFR §627.9(c)</u> States that the requirement to conduct a value engineering study must be fulfilled prior to release of the request for proposals for a design-build project.
- 23 CFR §627.7(a)(4) Requires that states establish and document policies, procedures, and contract provisions that identify when Value Engineering Change Proposals (VECP) may be used.

State Requirements

1. There are no state regulations requiring the application of value engineering techniques to construction projects.

Required Practices

The <u>LGPM Guide</u> describes the practices for the LG and TxDOT district required for performance of a value engineering study. TxDOT does not have VECP policies or procedures in place and, therefore, VECP cannot be used on projects.

Right of Way, Utility and Railroad Certification

General

Issues involving the need for right-of-way acquisition, railroad coordination and utility relocations are identified during the Preliminary Design phase and usually are involved with construction projects. Ideally, all right of way is acquired, utilities adjusted and all necessary coordination with affected railroads is completed before construction begins. This gives the contractor unrestricted access to the project and minimizes the potential for delays during construction. The <u>LGPM Guide</u> provides a discussion of exceptions to this timeline. Detailed information regarding right-of-way acquisition, railroad coordination and utility relocation is contained in <u>Chapter 6 – Right of Way and Utilities</u> and <u>Chapter 7 – Plans, Specifications & Estimate (PS&E) Development</u>.

Since the timing for obtaining railroad permits can be quite extensive, it is not recommended that any project proceed to advertisement for letting without all required railroad permits in hand. Federal-aid projects require a statement, often referred to as the railroad certification, from TxDOT and the LG confirming the appropriate railroad coordination has taken place. This statement is required for all federal-aid highway construction projects, including projects not involving a railroad.

Encroachments are features within the right of way that are privately owned. Encroachments may remain if approved in writing. Otherwise they must be removed before construction is completed and the work accepted.

"Buy America" provisions apply to utility relocations on all federal-aid or on-system state projects. This topic is described in more detail in Chapter 7 of this Manual and the LGPM Guide.

Federal Requirements

- 1. <u>23 CFR §635.307</u> Prior to authorization to advertise for receipt of bids, right-of-way clearance, utility and railroad work must be so coordinated with the physical construction that no unnecessary delay or cost for the physical construction will occur. Right-of-way clearance, utility and railroad work performed separately from the contract for the physical construction of the project are to be accomplished in accordance with provisions of the applicable federal regulation.
- 2. <u>23 CFR §635.309</u> Requires a request for authorization to advertise for receipt of bids that include the following statements or certifications for all design-bid-build projects.
 - a. Either all right-of-way clearance, utility and railroad work has been completed or all necessary arrangements have been made for it to be undertaken and completed as required for proper coordination with the physical construction schedules.
 - b. Either all individuals and families have been relocated to decent, safe and sanitary housing or the state has made available to relocatees adequate replacement housing in accordance with the provisions of current FHWA directive(s). Additional required information is outlined.
 - c. Either right of way has been acquired or will be acquired in accordance with the current FHWA directive(s) covering the acquisition of real property or that acquisition of right of way is not required.
 - d. Statements relative to relocation advisory assistance and payments.
 - e. The provisions of 23 CFR §645.119(b) have been fulfilled where utility facilities are to use and occupy the right of way.
- 3. <u>23 CFR §635.309(p)</u> Requires the following certifications accompany a request to authorize final design and construction for design-build projects.
 - a. Either all right-of-way, utility and railroad work has been completed or all necessary arrangements will be made for the completion of right-of-way, utility and railroad work.
 - b. If right-of-way, utility and/or railroad services are to be included as part of the design-builder's scope of work, then the request for proposals document must include: (1) a statement concerning scope and current status of the required services; and (2) a statement requiring compliance with the Uniform Relocation and Real Property Acquisition Policies Act of 1970, as amended, and 23 CFR Part 710.

4. <u>23 CFR §710.403(a)</u> – Requires all real property within a federal-aid facility to be devoted to highway use unless alternate use has been approved. Approval for encroachments to remain may be given only if the encroachment does not interfere with the safe, free flow of traffic.

State Requirements

- 1. <u>43 TAC §15.56</u> Requires projects be designed in accordance with TxDOT procedures, standards and guidelines.
- 2. Based on precedents set in case law, the state prohibits an encroachment to exist without formal agreements with the owner of the encroachment. For more information, see TxDOT's Right of Way Manual, Volume 2, Chapter 5, Section 21.

Required Practices

In general, the LG is responsible for right-of-way, railroad and utility coordination. The <u>LGPM</u> <u>Guide</u> provides the required practices and the LG and TxDOT responsibilities associated with this coordination.

Chapter 5: Environmental Compliance

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Section 1: Introduction

The Environmental Compliance phase of any transportation project occurs throughout the planning, development and execution of the project, and runs concurrently with other associated phases of a given project. Environmental compliance issues should be identified early in the project by the local government (LG) in cooperation with the TxDOT district's environmental coordinator since requirements may impact project initiation tasks, including the details included in the advance funding agreement. State and federal regulations may require a project to be included in the Statewide Transportation Improvement Program, Metropolitan Transportation Plan and/or Transportation Improvement Program. These requirements need to be identified by the LG through coordination with the TxDOT district's environmental coordinator. In many projects, the preliminary design (30% complete design) is performed concurrently with the Environmental Compliance phase. The Environmental Compliance phase must be completed prior to right-of-way acquisition and/or utility accommodation.

There are many aspects to the environmental compliance process for a TxDOT project. The environmental documentation defined within the TxDOT Environmental Toolkit web page supersedes any description of the documentation requirements discussed in the related chapters of the Local Government Project Management Guide (LGPM Guide). Public involvement is a critical element of the environmental process, and the Envolvement should be utilized by the LG to ensure all appropriate and required measures are met. All federal-aid transportation projects and projects on the state highway system must have an environmental clearance in the form of a categorical exclusion (CE) determination, environmental assessment (EA) and finding of no significant impact (FONSI), or environmental impact statement (EIS) and record of decision (ROD) prior to final design, letting, and construction. For a Federal Highway Administration (FHWA) project, TxDOT has been assigned responsibility for compliance with the National Environmental Policy Act (NEPA) and other environmental laws under a 2014 memorandum of understanding with FHWA, which was renewed in 2019 (except for projects that cross the state boundary). This means that TxDOT is authorized to issue the CE determination, FONSI, or ROD, on FHWA's behalf.

This chapter provides guidance for the LG and TxDOT district to properly perform project scoping, to prepare a categorical exclusion or other appropriate environmental document, and to identify and comply with the environmental permits, issues and commitments for construction transportation projects. Additional information related to overall project initiation, preliminary engineering and other transportation project development and implementation tasks are discussed in detail in other chapters of this Local Government Projects Policy Manual (LGPP Manual) and related chapters of the LGPM Guide.

Section 2: General Environmental Compliance Requirements

Overview

Environmental compliance responsibilities vary depending on the scope of the project and the potential social, economic and environmental impacts. TxDOT's NEPA and Project Development Toolkit web page details the process for environmental review and approval and contains templates and guidance for preparing environmental review documents and amendments.

The legal requirements for highway projects are different from the requirements for other transportation projects. The legal requirements for highway projects will vary based upon the project's designation of the official "project sponsor". The official project sponsor is the entity that accepts responsibility not only for preparing the environmental review document, but also performing related tasks, including preparing the project scope. Requirements for highway projects being developed by a formally designated local government (LG) project sponsor are different from the requirements for a project being developed by a LG that has not been formally designated as a LG project sponsor. LG sponsor highway projects have requirements that differ from TxDOT sponsor highway projects. Other conditions also affect legal requirements.

If the LG is going to perform (by its own forces or by consultants) the environmental phase of a transportation project, it is recommended that the LG has early coordination with the TxDOT district's environmental coordinator (due to the complexity of environmental regulations and the wide range of potential requirements that may apply to any individual LG project). The district will request assistance from the TxDOT Environmental Affairs Division (ENV), as necessary, to properly identify environmental requirements for a proposed project. The LG and TxDOT will work collaboratively to develop a project scope representing a mutual understanding of applicable requirements, expectations for completed environmental work and a plan and schedule for addressing environmental requirements for the project. An environmental department delegate will be assigned to each project, and be responsible for certain approvals during project activities; the district office is considered the "department delegate" for CEs, and ENV for EAs/EISs. This role is discussed in more detail in Section 5.2.4.5 of the LGPM Guide.

Environmental Permits, Issues and Commitments

Environmental concerns should be identified early in the project so any mitigation may be addressed and accurately reflected in the design documents using the appropriate environmental permits, issues and commitments (EPIC) form. EPICs are any permits, issues, coordination commitments or mitigation obligations necessary to address, offset or compensate for social, economic or environmental impacts of a project. These may include sole source aquifer coordination, waters of the U.S. permits, stormwater permits, traffic noise abatement, threatened or endangered species coordination, archeological and historical coordination, and any other mitigation or environmental commitments associated with the project. EPICs must be specified in the construction documents and will be monitored for compliance during the project and for a

defined period of time after construction completion. A digital version of the standard EPIC form is available on TxDOT's publication web page.

Federal Requirements

- 1. <u>23 CFR §635.309(j)</u> Requires the authorizing entity to make a determination that appropriate measures have been included in the bid documents to ensure conditions and commitments made to mitigate environmental harm are implemented.
- 2. <u>23 CFR §771.109(b)</u> Requires commitments made during the environmental process to be implemented.
- 3. <u>23 CFR §636.109</u> For design-build projects, requires the request for proposals to address how environmental commitments and mitigation measures will be implemented.

State Requirements

- 1. <u>43 TAC §2.2</u> Provides TxDOT's environmental policy statement.
- 2. <u>43 TAC §2.3(b)(2)</u> Requires transportation projects using state funds to comply with applicable state and federal environmental laws.
- 3. <u>43 TAC §26.35</u> Requires a regional mobility authority to agree to be responsible for implementing all environmental commitments for projects on the state highway system
- 4. <u>43 TAC §27.44(e)</u> Requires regional tollway authorities to comply with <u>Texas</u> <u>Administrative Code</u>, <u>Title 43</u>, <u>Chapter 2</u>, <u>Subchapter C</u> for projects on the state highway system.

Required Practices

More information on required environmental procedures and process are included in the <u>LGPM</u> <u>Guide</u>. In general, all projects must comply with TxDOT environmental policies and the EPICs must be included in design documents.

State Letter of Authority

As discussed in detail in <u>Chapter 2 – Project Initiation</u>, the state letter of authority (SLOA) is a form that must be issued on all projects performed by the LG or its consultants. The first SLOA is required prior to initiating work on the project. The second SLOA is required prior to the acquisition of right of way or the accommodation of utilities. The third is required prior to advertising for bids for construction. In general, the first SLOA (during the Preliminary Engineering phase) typically provides authorization for initiation of environmental compliance activities. The <u>LGPM Guide</u> provides more information on the processes and procedures related to environmental compliance.

National Environmental Policy Act

General

Public works projects are subject to state and federal laws, statutes, regulations and guidance. Environmental compliance for projects with federal funding occurs under the umbrella of the National Environmental Policy Act (NEPA). NEPA requires an agency to take a "hard look" at the environmental impacts of a project and document the extent to which a project will or will not have a significant environmental impact. Environmental compliance under state jurisdiction in Texas follows a process similar to NEPA requirements and procedures. TxDOT environmental compliance programs are administered by the Environmental Affairs Division (ENV), which provides an Environmental Compliance Toolkits web page.

Federal Requirements

- 1. <u>42 U.S.C. §§4321 et seq. National Environmental Policy</u> Requires federal actions to consider projects' environmental impacts before making a decision to construct. Includes requirement to consider what level of documentation is needed to support the decision.
- 2. <u>40 CFR Part 1500-1508</u> Provides Council on Environmental Quality's regulations for implementing NEPA.
- 3. <u>23 CFR Part 771</u> Provides Federal Highway Administration's (FHWA) regulations for implementing NEPA.
- 4. <u>23 U.S.C. §139</u>, <u>MAP-21 §1305</u> Requires implementation of specified procedures for establishing the need and purpose, alternatives, evaluation methods and a coordination plan for projects requiring an environmental impact statement. Additional environmental requirements are contained throughout these regulations.
- 5. <u>Memorandum of Understanding</u> between the Federal Highway Administration and the Texas Department of Transportation Concerning State of Texas' Participation in The Project Delivery Program Pursuant to 23 U.S.C. §327 Assigns to TxDOT most of FHWA's responsibilities under NEPA and most other environmental requirements.
- 6. <u>40 CFR Part 93</u> Provides Environmental Protection Agency regulations implementing transportation conformity.
- 7. <u>23 CFR §450.220</u> Provides FHWA regulations requiring project selection from the Statewide Transportation Improvement Program.

Guidance for these subjects and others can be found at the <u>FHWA Environmental Review Toolkit</u> <u>website</u>.

State Requirements

1. <u>43 TAC Chapter 2</u> – Specifies the general environmental requirements needed to obtain environmental approval from TxDOT.

2. <u>Texas Transportation Code, Title 6, Roadways</u> – Contains environmental requirements applying to specific project types scattered throughout Title 6.

Required Practices

The process for complying with NEPA is complex and is described in detail in the <u>LGPM</u> <u>Guide</u> and additional documents referenced in the Best Practices Workbook.

Section 3: Specific Environmental Compliance Requirements

Overview

This section includes information regarding archeological, biological, water and historic resources, as well as information related to social issues and other legal requirements. Additional resources for environmental requirements during the project development process may be found at TxDOT's Environmental Compliance Toolkits web page.

Air Quality

General

Local governments (LGs) must comply with the <u>Clean Air Act</u> (CAA), the <u>National Environmental Policy Act</u> (NEPA) and the Federal-Aid Highways Code (<u>23 U.S.C. §§101-190</u>) for potential project effects on air quality. The CAA prohibits federal agencies from providing funding or approving any activity not conforming to an applicable state implementation plan (SIP). An environmental decision cannot be made for any project in a nonattainment and maintenance area subject to transportation conformity, until project level transportation conformity is demonstrated. Incorporating the LG project into the Statewide Transportation Improvement Program, Transportation Improvement Program and/or Metropolitan Transportation Plan early in project development will help prevent project delays.

Federal Requirements

- 1. <u>40 CFR Part 93</u> Provides Environmental Protection Agency regulations implementing transportation conformity that require non-exempt projects in certain nonattainment or maintenance areas to be consistent with the SIP.
- 2. <u>23 CFR §450.322</u> Provides FHWA regulations implementing <u>23 U.S.C. §134</u> for the congestion management process. In order for federal funds to be programmed for projects adding single occupant vehicle capacity in certain nonattainment areas, the project must be addressed in a congestion management process.
- 3. FHWA uses guidance rather than rule to establish requirements for air quality analyses, and these are discussed in the TxDOT Environmental Handbook for Air Quality and are subject to periodic revision.

State Requirements

- 1. <u>43 TAC Part 1, Chapter 2, Subchapter I</u> Requires documentation of compliance with air quality provisions under the memorandum of understanding (MOU) with the Texas Commission on Environmental Quality (TCEQ).
- 2. <u>30 TAC §114.260</u> Implements state requirements for transportation conformity.

Required Practices

Compliance responsibilities vary depending on the scope of the project and the potential social, economic and environmental impacts. The <u>LGPM Guide</u> provides details on the process used to achieve compliance for air quality regulations.

Biological Resources

General

A series of laws and regulations requires the LG to identify and, if necessary, mitigate impacts to biological resources, including but not limited to endangered and threatened species, critical habitat and farmland. Violations of the Endangered Species Act and Migratory Bird Treaty Act are especially serious and can result in work stoppages and large fines. Because of the complexity of biological issues and the range of regulatory requirements, early coordination between the LG and the TxDOT district is essential.

Federal Requirements

- 1. Endangered Species Act as amended <u>16 U.S.C.</u> §§1531-1544 Regulates impacts on endangered or threatened species, or critical habitat, and in some circumstances requires consultation with the U.S. Fish and Wildlife Service.
- 2. Migratory Bird Treaty Act <u>16 U.S.C. §§703-712</u> Prohibits taking, disturbing or harassing a wide range of migratory birds and their nests.
- 3. Fish and Wildlife Coordination Act of 1968 <u>16 U.S.C.</u> §§661-667d Requires coordination with the U.S. Fish and Wildlife Service under circumstances where a U.S. Army Corps of Engineers individual permit is required.
- 4. Magnuson Stevens Fishery Conservation Management Act <u>16 U.S.C. §§1801-1891d</u> For projects in coastal counties, requires coordination with the National Marine Fisheries Service if the project area contains essential fish habitat in tidally influenced water.
- 5. Farmland Protection Policy <u>7 U.S.C. §§4201-4209</u> Requires evaluation of impacts to new right of way not developed, not urbanized and not zoned for urban use. Coordination with the Natural Resource Conservation Service may be necessary.
- 6. <u>Invasive Species Executive Order 13112</u> Requires re-vegetation according to TxDOT's standard practices for urban or rural areas if the project includes landscaping plans.
- 7. Presidential Executive Memorandum on <u>Environmentally and Economically Beneficial</u> <u>Landscaping Practices</u> 4/26/1994 Requires consideration of incorporating elements consistent with the executive memorandum if the project includes landscaping plans.
- 8. Marine Mammal Protection Act <u>16 U.S.C. §§1361-1423h</u> Requires coordination with the National Marine Fisheries Service if the project adversely affects tidally influenced waters.
- 9. Coastal Barrier Resources Act <u>16 U.S.C. §§3501-3510</u> For projects within a coastal county and located, in whole or in part, within a system unit of the Coastal Barrier Resources System

- (CBRS), documentation of compliance with the Coastal Barrier Resources Act is required and may include consultation with the U.S. Fish and Wildlife Service.
- 10. Bald and Golden Eagle Protection Act <u>16 U.S.C.</u> §§668-668d Requires coordination with the U.S. Fish and Wildlife Service if the project would result in unavoidable impacts to bald or golden eagles.

Guidance for these subjects and others can be found at the <u>FHWA Environmental Review Toolkit</u> website.

State Requirements

- 1. <u>Texas Parks and Wildlife Code §68.015</u> Prohibits capturing, trapping, taking or killing, or attempting to capture, trap, take or kill, endangered fish or wildlife. No exception is provided for construction or other projects.
- 2. <u>Texas Transportation Code §201.607</u> Requires TxDOT to establish MOUs with resource agencies.
- 3. <u>43 TAC §§2.201-2.214</u> MOU with the Texas Parks and Wildlife Department MOU implementing <u>Texas Transportation Code §201.607</u>.

Required Practices

The <u>LGPM Guide</u> provides the required practices and procedures and LG and TxDOT responsibilities associated with biological resources. In general, the LG must coordinate with the TxDOT district early in the project to identify the applicable requirements.

Water Resources

General

Roadway construction projects typically transect or abut a number of waterbodies (streams, rivers, lakes, bays, wetlands) and, therefore, typically involve a number of related water quality issues. Water quality related permits and authorizations for construction activities are usually required. Some authorizations may be general permits or nationwide permits that can be obtained in a very short period of time. An example is the Texas Pollutant Discharge Elimination System (TPDES) stormwater permit for construction activities, an authorization that can be obtained in as little as 24 hours. Other authorizations, such as an individual U.S. Army Corp of Engineers permit or an individual TPDES wastewater discharge permit, may require a year or more to obtain. Therefore, it is important for the LG to identify water resource issues very early in the planning phase of a project and to allow ample time to obtain water resource authorizations. Violations of permit and other requirements are serious and can result in work stoppages and large fines.

Federal Requirements

1. <u>33 U.S.C. §403</u> (relating to Protection of Navigable Waters and of Harbor and River Improvements Generally) – Requires a U.S. Army Corps of Engineers permit for a project obstructing navigable waters by fill, construction of a bridge, bulkhead or other structure.

- 2. <u>33 U.S.C. §§525 et seq.</u> (relating to the Construction and Operation of Bridges) Requires a permit from the U.S. Coast Guard for the construction and operation of bridges over navigable waters (see also the General Bridge Act of 1946).
- 3. <u>33 U.S.C. §1342</u> [relating to National Pollutant Discharge Elimination System (NPDES)] Prohibits discharge of pollutants (including stormwater associated with construction and industrial activities) into waters of the United States without first obtaining an NPDES permit (see related regulation <u>40 CFR Part 122</u>).
- 4. <u>33 U.S.C. §1344</u> (relating to Permits for Dredged or Fill Material) Prohibits dredge and discharge of fill material in waters of the United States without first obtaining a permit from the U.S. Army Corps of Engineers.
- 5. <u>Executive Order 11990 Protection of Wetlands</u> Prohibits construction located in wetlands unless there is no practicable alternative and the proposed action includes all practicable measures to minimize harm to wetlands.
- 6. <u>Executive Order 11988 Floodplain Management</u> Requires the beneficial values of floodplains be preserved.
- 7. <u>22 U.S.C. §277 1944 Water Treaty of the U.S. International Boundary and Water Commission (USIBWC)</u> Requires a license or permit from the USIBWC for any proposed activities crossing or encroaching upon the floodplains of USIBWC flood control projects and right of way (related regulation: U.S. Section Directive, Vol. IV, Chapter 315 dated July 27, 2000).
- 8. <u>16 U.S.C. Chapter 28</u> (relating to Wild and Scenic Rivers) Requires selected rivers shall be preserved in free-flowing condition and they and their immediate environments shall be protected. Applies only to projects along the designated portion of the Rio Grande at Big Bend National Park.

Guidance for these subjects and others can be found at the <u>FHWA Environmental Review Toolkit</u> website.

State Requirements

- 1. <u>Texas Natural Resources Code §33.205</u> (relating to Coastal Coordination Act) Requires a project to meet the policies and goals of the Coastal Management Program.
- 2. <u>Texas Natural Resources Code, Chapter 61</u> (relating to Use and Maintenance of Public Beaches) Requires that projects in the vicinity of public beaches must not affect public access and use, and must comply with local beach access and use plans.
- 3. <u>Texas Natural Resources Code, Chapter 63</u> (relating to Dunes) Requires projects in the vicinity of dunes with public access to conform to local dune permit programs, ordinances and other protections established within the dune protection line.
- 4. <u>31 TAC Part 16</u> (relating to Coastal Coordination Council) Requires projects within Coastal Management Plan (CMP) boundaries to comply with the CMP.

- 5. <u>30 TAC Chapter 213</u> (relating to Edwards Aquifer) Requires projects within the Edwards Aquifer contributing or recharge zones to develop and implement an approved Edwards Aquifer protection plan. The regulated contributing and recharge zones occur only within TxDOT's Austin, San Antonio and Laredo districts.
- 6. <u>43 TAC Part 1, Chapter 2, Subchapter I</u> (relating to MOU with the TCEQ) Requires coordination of NEPA documents with TCEQ to address water quality issues under certain circumstances.
- 7. <u>Texas Water Code §26.121</u> (relating to Unauthorized Discharges Prohibited) Prohibits discharge of waste, wastewater and regulated stormwater runoff without a TPDES permit (see related regulations <u>30 TAC Chapters 205</u> and <u>216</u> and <u>§281.25</u> regarding Storm Water Pollution Prevention Plan).
- 8. <u>Texas Water Code Chapter 11</u>, <u>Subchapter D</u> (relating to Permits to Use State Water) Requires a permit to appropriate state water for use.

Required Practices

More information including a description of the responsibilities of the LG and TxDOT district with respect to water resources issues that may impact the project is available in the <u>LGPM Guide</u>. In general, the compliance responsibilities vary depending on issues of funding, land ownership, geographic location, operational project control and the involvement of one or more federal agencies.

Archeological Resources

General

An archeological resource is a site characterized by the remains of past human occupation. Although it may be associated with a building, structure, object or district, an archeological resource is treated differently than historic resources. For the purposes of this discussion, "archeological resource" does not include historic resources, which are covered in another section. Protected archeological resources are called "historic properties." An archeological historic property is an archeological resource listed in or eligible for inclusion in the National Register of Historic Places (NRHP) or eligible for designation as a state archeological landmark. Except under unusual circumstances, the archeological resource must be at least 50 years old at the time construction begins. A cemetery with graves more than 50 years old must be treated as an archeological resource. State and federal laws regulate the impacts of transportation projects on archeological resources, so the LG must coordinate with the TxDOT district during the scoping of project which may impact these sites.

Federal Requirements

1. <u>Section 106, National Historic Preservation Act of 1966, 16 U.S.C. §470f</u> (Section 106) – Requires federal agencies to consider the effects of their projects on archeological sites listed in or eligible for inclusion in the NRHP. <u>The First Amended Programmatic Agreement among the Federal Highway Administration</u>, the Texas Department of Transportation, the Texas State

<u>Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding</u> the <u>Implementation of Transportation Undertakings</u> (PA-TU) identifies TxDOT as responsible for all consultation in compliance with Section 106 on FHWA projects and prescribes standard procedures for compliance.

- 2. Section 110(k), National Historic Preservation Act of 1966, 16 U.S.C. §470h-2(k) (Section 110) Section 110 prohibits demolition of an archeological historic property prior to conclusion of Section 106 consultation ("anticipatory demolition"). Anticipatory demolition may result in loss of FHWA funding or approval. Destruction of a site that has not been evaluated also may result in loss of funding or approval.
- 3. <u>36 CFR Part 800</u> Prescribes procedures for complying with Section 106 for FHWA projects removed from the PA-TU and for undertakings where an agency other than FHWA has jurisdiction.
- 4. <u>Native American Graves Protection and Repatriation Act, 25 U.S.C. Chapter 32</u> Governs planning for Native American graves for projects on federal or tribal land, and disposition of human remains and funerary objects controlled by an entity receiving federal funds.

Guidance for these subjects and others can be found at the <u>FHWA Environmental Review Toolkit</u> <u>website</u>.

State Requirements

- Texas Natural Resource Code, Chapter 191, Antiquities Code of Texas Requires the Texas Historical Commission (THC) to be notified of proposed construction projects and prohibits unpermitted destruction of archeological sites eligible for designation as state antiquities landmarks.
- 2. <u>13 TAC Part 2, Chapter 26, Practice and Procedure</u> Rules implementing the Antiquities Code for projects on land.
- 3. <u>13 TAC Part 2, Chapter 28, Shipwrecks</u> Rules implementing the Antiquities Code for projects crossing water bodies. Typically restricted to projects under U.S. Coast Guard or U.S. Army Corps of Engineers permits.
- 4. <u>43 TAC Chapter 2, Subchapter H, MOU with THC</u> (also adopted as <u>13 TAC §26.25</u>) Identifies whether TxDOT or the LG coordinates with THC for Antiquities Code compliance and prescribes standard procedures for complying with the Antiquities Code on projects for which TxDOT is responsible.
- 5. <u>Texas Health and Safety Code, Chapter 711</u> Specifies legal processes for removal of human graves and for converting cemetery land to a non-cemetery purpose. Cemeteries with graves more than 50 years old are additionally subject to the Antiquities Code and Section 106.

Required Practices

In general, archeological compliance responsibilities of the LG and TxDOT vary depending on project sponsorship, issues of funding, land ownership and the involvement of one or more federal agencies. The <u>LGPM Guide</u> provides a detailed discussion of these responsibilities.

Historic Resources

General

A historic resource is a building, structure, object or district that, except under unusual circumstances, must be at least 50 years old at the time construction begins. Historic resources are treated differently than archeological resources. For the purposes of this discussion, "historic resource" does not include archeological resources, which are covered in another section. Protected historic resources are called "non-archeological historic properties." A non-archeological historic property is listed or eligible for inclusion in the NRHP or eligible for designation as a state archeological landmark. State and federal laws regulate the impacts of transportation projects on historical resources, so the LG must coordinate with the TxDOT district during the scoping of project, which may impact these properties.

Federal Requirements

- 1. Section 106, National Historic Preservation Act of 1966, 16 U.S.C. §470f (Section 106) Requires federal agencies to consider the effects of their projects on historic resources listed or eligible for inclusion in the NRHP. PA-TU prescribes standard procedures for complying with Section 106 on FHWA projects.
- 2. Section 110(k), National Historic Preservation Act of 1966, 16 U.S.C. §470h-2(k) (Section 110) Section 110 prohibits demolition of an archeological historic property prior to conclusion of Section 106 consultation ("anticipatory demolition"). Anticipatory demolition may result in loss of FHWA funding or approval. Destruction of a site that has not been evaluated also may result in loss of funding or approval.
- 3. <u>36 CFR Part 800</u> Prescribes procedures for complying with Section 106 for FHWA projects removed from the PA-TU and for undertakings where an agency other than FHWA has jurisdiction.

Guidance for these subjects and others can be found at the <u>FHWA Environmental Review</u> Toolkit website.

State Requirements

- Texas Natural Resource Code, Chapter 191, Antiquities Code of Texas Requires THC to be notified of proposed construction projects and prohibits unpermitted destruction of properties listed or eligible as a state antiquities landmark, listed on the NRHP or listed as a national historic landmark.
- 2. 13 TAC 26, Practice and Procedure Provides rules implementing the Antiquities Code.

- 3. <u>43 TAC Chapter 2, Subchapter H, MOU with THC</u> (also adopted as <u>13 TAC §26.25</u>) Prescribes standard procedures for complying with the Antiquities Code on TxDOT projects, including projects requiring TxDOT approval.
- 4. <u>Texas Health and Safety Code, Chapter 711</u> Specifies legal processes for removal of human graves and for converting cemetery land to a non-cemetery purpose. Cemeteries with graves more than 50 years old are subject to the Antiquities Code and Section 106.

Required Practices

Similar to "Archeological Resources" discussed above, the compliance responsibilities for historical resources vary depending on certain issues. The <u>LGPM Guide</u> provides guidance to the LG and TxDOT for their respective responsibilities for compliance related to historic resources.

Environmental Justice and Community Impact Analysis

General

Federal actions are required to comply with an array of laws pertaining generally to issues of civil rights, equity and community impacts. An environmental document must disclose effects related to these issues. The general methods for analyzing and disclosing these effects fall under what is generally referred to as environmental justice (EJ) and community impact analyses (CIA). Violations of the statutes below can have serious consequences. EJ and CIA issues are a major source of environmental litigation.

EJ and CIA analyses are among the most difficult analyses to perform because they resist standardization. The variables related to and affecting the analyses are complex, and their importance may vary as a result of the scale of project and the context within which the project occurs. In addition, guidance changes rapidly. The publication "Community Impact Assessment, A Quick Reference for Transportation," FHWA publication number FHWA-PD-96-036 (FHWA-CI), is especially useful for an LG to use during scoping of a transportation project. Many others are available from FHWA.

Federal Requirements

The statutes and executive orders listed below generally provide that a project must equitably distribute project benefits among members of covered groups or classes of people.

- 1. Title VI of the Civil Rights Act of 1964, 42 U.S.C. §§2000d-2000d-7
- 2. Civil Rights Restoration Act of 1987, 20 U.S.C. Chapter 38
- 3. Federal-Aid Highway Act of 1956, 23 U.S.C. Chapter 1, as amended
- 4. The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, 42 U.S.C. Chapter 61
- 5. Section 504 of the Rehabilitation Act of 1973, 29 U.S.C. §794
- 6. Americans with Disabilities Act of 1990, 42 U.S.C. Chapter 126

- 7. Age Discrimination Act of 1975, 42 U.S.C. §§6101-6107
- 8. <u>Executive Order 12898, Environmental Justice</u> Specifies a project cannot have disproportionate effects on a minority or low-income population.
- 9. Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency (LEP) Specifies public involvement must give LEP populations meaningful opportunities for participation in public involvement. Access to public services and facilities is also covered by this requirement.

Guidance for these subjects and others can be found at the <u>FHWA Environmental Review</u> Toolkit website.

State Requirements

1. No specific state statute applies to EJ or CIA. Federal statutes other than the executive orders apply independently of funding or other considerations

Required Practices

In general, the responsibilities for the EJ and CIA analyses vary and coordination between the LG and TxDOT is strongly encouraged. The <u>LGPM Guide</u> provides information related to these analyses and to the responsibilities of the LG and TxDOT for a project.

Taking or Use of Public Land Interests (Section 4(f) Property)

General

The USDOT defines a "Section 4(f) property" as any publicly owned land of a public park, recreation area or wildlife and waterfowl refuge of national, state or local significance, or land of an historic site of national, state or local significance (23 CFR §774.17). To be protected under Section 4(f), a historic site must warrant preservation in place and must be included in or eligible for inclusion in the NRHP. A historic site does not need to be publicly owned to be subject to Section 4(f).

Section 4(f) of the Department of Transportation Act of 1966 prohibits the USDOT from using land from a Section 4(f) property unless FHWA (or another USDOT agency with jurisdiction) determines there is no feasible and prudent alternative to the use of land from the property and that project planning includes all possible planning to minimize harm to the property resulting from such use. "Use" occurs when land is permanently incorporated into a transportation facility, when there is a temporary occupancy of land that is adverse in terms of the statute's preservation purpose, or when there is a proximity impact so severe the protected activities, features or attributes qualifying the property for protection under Section 4(f) are substantially impaired (constructive use). A use of a protected property can be processed with a de minimis Section 4(f) finding if the use is minor and does not adversely affect the property. For a historic resource, the THC must concur in writing that the project does not have an adverse effect. For parks, recreation areas or wildlife and waterfowl refuges, the Official with Jurisdiction over the property must

concur in writing that the project will not have an adverse effect to the protected activities, feature or attributes and that he or she agrees with any proposed mitigation.

Similar state laws apply to publicly owned properties designated and used as parks, recreation areas, scientific areas, wildlife refuges and historic sites and to private land encumbered by an agricultural conservation easement purchased under Texas Natural Resources Code, Chapter 183. Before land on a protected property can be taken or used, state law requires the LG must demonstrate there is no feasible and prudent alternative to the taking and must hold a public hearing. For protected properties subject to Section 4(f) and Texas Parks and Wildlife Code, Chapter 26, the LG must document compliance with both statutes.

Federal Requirements

1. <u>23 U.S.C. §138</u> and <u>49 U.S.C. §303</u> (Section 4(f)) – Requires there must be no feasible and prudent alternative to a project using publicly owned parks, recreation areas, wildlife and waterfowl refuges, or historic sites for a transportation purpose (see related regulation <u>23 CFR Part 774</u>).

Guidance for Section 4(f) and other subjects can be found at the <u>FHWA Environmental Review</u> Toolkit website.

State Requirements

- 1. <u>Texas Parks and Wildlife Code, Chapter 26</u> Requires there must be no feasible and prudent alternative to a project using publicly owned parks, recreation areas, wildlife refuges, scientific areas or historic sites for a transportation purpose.
- 2. <u>Natural Resources Code, Chapter 183</u> Requires there must be no feasible and prudent alternative to the use or taking of private land encumbered by an agricultural conservation easement.

Required Practices

In general, the LG must determine if a project impacts property subject to Section 4(f) and must coordinate with TxDOT accordingly. The <u>LGPM Guide</u> provides guidance related to this determination and the responsibilities of both the LG and TxDOT.

Hazardous Materials Management and Pollution Prevention and Abatement

General

Under state and federal laws, a landowner is responsible for abating hazardous wastes. Purchasing contaminated land places the burden of abatement on the new owner. Known hazardous materials must be abated prior to construction, and construction must stop when hazardous materials are encountered during construction. Therefore, the LG must determine whether hazardous wastes occur in existing and new right of way. Contaminated right of way cannot be purchased in TxDOT's name.

Federal Requirements

A variety of federal laws and regulations govern generation and abatement of pollutants.

- Comprehensive Environmental Response, Compensation and Liability Act, <u>42 U.S.C. Chapter</u> 103
- 2. Resource Conservation and Recovery Act of 1976, 42 U.S.C. Chapter 82
- 3. 40 CFR Part 61 National Emission Standards for Hazardous Air Pollutants

Guidance for these subjects and others can be found at the <u>FHWA Environmental Review</u> Toolkit website.

State Requirements

A variety of state regulations govern generation and abatement of pollutants.

- 1. <u>25 TAC Chapter 295 Subchapter C</u> Texas Asbestos Health Protection
- 2. <u>30 TAC Chapter 327</u> Spill Prevention and Control
- 3. 30 TAC Chapter 330 Municipal Solid Waste
- 4. <u>30 TAC Chapter 333</u> Brownfields Initiatives
- 5. <u>30 TAC Chapter 334</u> Underground and Above Ground Storage Tanks
- 6. <u>30 TAC Chapter 335</u> Industrial Solid Waste and Municipal Hazardous Waste
- 7. 30 TAC Chapter 350 Texas Risk Reduction Program

Required Practices

The <u>LGPM Guide</u> provides information related to the required practices and responsibilities of the LG and TxDOT for dealing with hazardous materials.

Noise Abatement

General

The LG must evaluate highway projects for their potential to cause noise impacts that must be abated.

Federal Requirements

1. <u>23 CFR Part 772</u> – Provides standards, procedures for noise studies and noise abatement measures to be followed on federally funded projects.

State Requirements

1. No specific state statute for noise abatement.

Required Practices

The <u>LGPM Guide</u> provides guidance related to the requirements for noise studies and noise abatement measures. Further guidance regarding traffic noise and noise abatement can be found at TxDOT's <u>Traffic Noise Toolkit</u> website.

Chapter 6: Right of Way and Utilities

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Section 1: Introduction

The acquisition of right of way or other property and the accommodation of utilities located near or on property impacted by a transportation project necessitate close coordination between the state and cities, counties and other forms of local government (LG). TxDOT has cooperated with LGs in the acquisition of real property and utility relocations for many decades. Projects on the state or national highway system, projects involving the intersections of LG roads with the state highway system or projects including state or federal funding program requirements are required to coordinate closely with TxDOT.

Right-of-way acquisition and utility relocation issues must be identified in the early phases of a transportation project. Details of the responsibilities of the LG and TxDOT must be included in the advance funding agreement and may be an integral part of the preliminary design. A state letter of authority and possibly a federal project authorization and agreement may be required prior to initiation of right-of-way acquisition or utility accommodation. The LG must follow the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 if any federal funds are used for any part of the project. This law applies even if the LG is providing all the funds for land acquisition or right-of-way purchase but is receiving federal funds for any part of engineering design or construction.

Right-of-way and utility issues will need to be resolved prior to the Construction phase for most transportation projects. This chapter of the Local Government Projects Policy Manual and the companion Local Government Project Management Guide provide general guidance to the LG for issues related to acquiring right of way and other land, relocation of utilities in the right of way and the provision of utility service to projects.

Section 2: Right-of-Way and Other Land Acquisition

Overview

Land transactions between TxDOT and local governments (LGs) are divided into two broad categories for the purposes of this Manual and the Local Government Project Management Guide (LGPM Guide) – right of way for roads and interests in land used for other purposes.

- 1. **Right of Way for Roads** For most road and highway projects, the advance funding agreement (AFA) will define which party is providing funding and coordination for the purchase of right of way. Projects may involve the use of local, state or federal funds for the purchase of right of way and may be subject to the requirements of <u>Title II</u> and <u>Title III</u> of the <u>Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970</u>, and amendments thereto. Even projects entirely locally funded require TxDOT oversight if the project impacts the state highway system.
- 2. **Interests in Land Used for Other Purposes** The second category of TxDOT/LG land transactions relate to land acquired for purposes other than highway right of way. Interests in land used for other purposes may include different forms of real property, such as buildings or other structures. In these cases, specific program rules may impose unique requirements on the LG. If real property is acquired by the LG for a project other than roads, the same requirements listed under "Right of Way for Roads" will be in effect.

The <u>LGPM Guide</u> provides a more detailed description of the types of land transactions which may be involved in an LG project.

State Letter of Authority

As discussed in detail in Chapter 2 – Project Initiation, the state letter of authority (SLOA) is a form that must be issued on all projects whether the work is competitively bid or performed by the LG. For construction projects, the first SLOA is required prior to the Preliminary Engineering phase. The second SLOA is required prior to the acquisition of right of way or the accommodation of utilities. The third is required prior to advertising for bids for construction. A federal project authorization and agreement (FPAA) is required in addition to the SLOA for all federally funded projects. Chapter 2 of this Manual and the LGPM Guide provide more information on the SLOA and FPAA.

Land Acquisition

General

The acquisition of land for either road right of way or other purposes by the LG must follow state and federal laws and statutes. <u>TxDOT's ROW Manuals</u> collection provides several volumes of detailed information including links to necessary forms, extensive legal citations and a process

flowchart. More detailed information related to reference manuals and examples are provided in the LGPM Guide.

Federal Constitution and Statutes

The U.S. Constitution limits governmental agencies' right to obtain real property through eminent domain. That is, governmental agencies can exercise condemnation powers to obtain real property provided the property acquired is for a stated public purpose and is also acquired within limitations and conditions imposed in the Constitution as interpreted by the federal courts.

The primary federal statute pertaining to acquisition through eminent domain is the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. Chapter 61). This law is typically referred to as the Uniform Act and includes the original statute plus its amendments.

The fundamental requirements of the Uniform Act are:

- a formal appraisal process to establish a property's fair market value;
- a negotiation process free from coercion, promotes public confidence in the land acquisition program, ensures real property owners are treated fairly and consistently, and encourages expedited acquisition by agreements and minimizes the need for litigation;
- a relocation program providing fair and consistent relocation assistance services to displaced persons and ensures the displaced persons suffer no disproportionate injuries as a result of the project; and
- ensure agencies implement the Uniform Act and its regulations in a manner that is efficient and cost effective.

Although many federal agencies are subject to the Uniform Act, the Federal Highway Administration (FHWA) is the lead agency in its implementation. FHWA provides a complete explanation of the Uniform Act at its Uniform Act Policy and Guidance website.

In the implementation of its right-of-way acquisition and contracting procedures, the LG should also be aware of the provisions of <u>Title VI of the Civil Rights Act of 1964</u>. This statute provides that public funds not be spent in a way that tends to discriminate against certain classes of people. The U.S. Department of Justice is responsible for the enforcement of Title VI. More detailed information is found at the Justice Department's <u>Title VI Overview</u> website.

Federal Requirements

- 1. <u>Title II</u> and <u>Title III</u> of the <u>Uniform Relocation Assistance and Real Property Acquisition</u> <u>Policies Act of 1970</u> Requires all projects involving the purchase of right of way using state or federal funds, or which are on the state highway system, to meet the requirements of this Uniform Act and amendments thereto.
- 2. <u>23 CFR Part 710</u> Contains specific guidance as to program administration, project development, real property management, property acquisition alternatives, federal assistance

- programs and concession agreements. The purpose of this regulation is to "ensure the prudent use of Federal funds ... in the acquisition, management and disposal of real property."
- 3. <u>49 CFR Part 24</u> Provides specific rules pertaining to real property acquisition and relocation matters in order to "promulgate rules to implement the Uniform Act," which is referenced above.

State Requirements

1. The primary statutory authority for right-of-way acquisition is found in <u>Texas Property Code</u>, <u>Chapter 21 – Eminent Domain</u> and in various provisions of the Texas Transportation Code. Administrative requirements are set out in <u>43 TAC Part 1</u>, including <u>43 TAC Chapter 21</u>.

Required Practices

The <u>LGPM Guide</u> provides a description of the required practices that must be followed during the purchase of land by a LG for specific types of projects. The responsibilities of both the LG and TxDOT are provided.

Advance Acquisition of Land

P.L. 112-141, the Moving Ahead for Progress in the 21st Century Act (MAP-21) was enacted in 2012. This law includes provisions for federal funding of right of way purchased by the LG in advance of final environmental approval. This law is specific and depends upon existing state statutory requirements. The TxDOT Right of Way Division (ROW) advises caution in advance acquisitions because, if used inappropriately, it could jeopardize federal funding for the project. Further guidance will be provided as the federal law is affected. A LG should consult with ROW attorneys concerning any consideration of advance acquisition. If an LG chooses to use its own funds for advance acquisition without seeking federal reimbursement, it can do so subject to the guidance in TxDOT's ROW Real Estate Acquisition Guide for Local Public Agencies.

Relocation of Individuals and Businesses

General

Any LG project requiring an individual or business to move, or requires an individual or business to move their personal property, will necessitate that the LG provide relocation assistance complying with the requirements of the <u>Uniform Act</u> and <u>49 CFR Part 24</u>. Relocation assistance consists of two major elements – advisory services and financial assistance. These activities can have considerable impacts on project budgets and timing and should be planned for accordingly. Any relocation assistance program must strive to ensure all displaced persons are treated fairly, consistently and equitably, and to ensure those displaced persons do not suffer disproportionate negative impacts as a result of the project.

TxDOT's <u>ROW Relocation Assistance Manual</u> and ROW staff can offer further clarification and guidance on questions regarding interpretation and implementation of the <u>Uniform Act</u> and <u>49</u> <u>CFR Part 24</u>. If the LG does not have qualified staff to perform the required functions, it is

recommended the LG obtains the services of a qualified consultant. Failure to comply with the requirements of the Uniform Act and 49 CFR Part 24 can result in a loss of federal participation in the entire cost of the project. In addition to the requirements the Uniform Act, 49 CFR §24.8 lists many related federal laws with which a successful LG program must be in compliance. Notably among these are Title VIII of the Civil Rights Act of 1968 (commonly known as the Federal Fair Housing Law) and Title VI of the Civil Rights Act of 1964.

Federal Requirements

- 1. <u>Title II</u> and <u>Title III</u> of the <u>Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 Requires all projects involving the purchase of right of way using state or federal funds, or which are on the state highway system, to meet the requirements of this Uniform Act and amendments thereto.</u>
- 2. <u>49 CFR Part 24</u> Provides specific rules pertaining to real property acquisition and relocation matters. The purpose of this part of federal regulations "is to promulgate rules to implement the Uniform Act," which is referenced above.
- 3. Title VIII of the Civil Rights Act of 1968
- 4. Title VI of the Civil Rights Act of 1964

State Requirements

1. <u>Texas Property Code §21.046</u> – Requires a LG to establish a relocation compatible with the Uniform Act, as amended.

Required Practices

The relocation of individuals and businesses is a specialized and complex subject. The LG should coordinate early with TxDOT ROW and use the procedures described in the <u>LGPM Guide</u>.

Section 3: Utility Accommodation for Transportation Projects

Overview

This section provides general guidance to the LG for issues related to utility accommodation of transportation projects, including both the relocation of utilities in the right of way and the provision of utility service to projects.

Local Utility Relocation Procedures

General

According to the TxDOT ROW Utilities Manual, utilities have a statutory right to occupy highway and road rights of way; however, the utilities rights are subordinate to the needs of the transportation facility. If utilities are located in a road or highway right of way, they will frequently need to be relocated to allow for construction of a transportation project. Depending on the terms of the advance funding agreement (AFA) (described in Chapter 2 of the LGPP Manual), either the LG or TxDOT may be the party responsible for utility relocation.

The AFA will provide a brief but detailed overview of the legal requirements for utility relocations on transportation projects. For most TxDOT/LG projects, the LG is usually responsible for utility relocations; however, TxDOT may assume responsibility of the utility relocations, particularly for projects on the state highway system. The agreement will specify the level of responsibility of both parties. The AFA can be reviewed at TxDOT's <u>publications</u> website.

Federal Requirements

- 1. <u>23 CFR Part 645</u> Subparts <u>A</u> and <u>B</u> Prescribes the policies, procedures and reimbursement provisions for the adjustment and relocation of utility facilities and for accommodating utility facilities on the right of way of federal-aid or direct federal highway projects.
- 2. <u>Section 1518 of Moving Ahead for Progress in the 21st Century (MAP 21)</u> Requires all utility agreements on federal projects to be compliant with Buy America requirements [see <u>23</u> <u>U.S.C. §313(g)</u>].

State Requirements

- 1. <u>43 TAC §§21.21-24</u> Provides guidelines for agreements between TxDOT and public utility companies for the relocation, adjustment and/or removal of qualifying utilities affected by the improvement to a state highway. Standards for the negotiations, engineering, property rights and other factors are set forth.
- 2. <u>43 TAC §§21.31-21.56</u> Governs matters concerning accommodation, location and methods for the installation, adjustment, relocation and maintenance of utility facilities on state highway rights of way.

3. 43 TAC §§15.50-15.56 – Describes federal, state and local responsibilities for cost participation in highway improvement projects; establishes TxDOT's participation agreement with LGs for highway improvement projects and the responsibilities of the parties to such an agreement; defines the responsibilities of LGs for preliminary engineering and construction engineering costs; describes cost sharing for state, federal and local financing of construction; describes the requirements for construction cost participation; and prescribes the conditions of LG financing.

Required Practices

The LG should follow the procedures found in Chapter 6 of the <u>LGPM Guide</u> and in the TxDOT <u>ROW Utilities Manual</u>.

Providing Utility Service to Projects

When it is necessary to extend utility service to projects such as a new building or rest area, the party constructing the project usually provides for extension of utilities as described in the <u>LGPM</u> Guide.

Chapter 7: Plans, Specifications & Estimates (PS&E) Development

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Section 2: Design - Highways and Roads

Section 3: Design - Traffic

<u>Section 4: Design – Bridges and Structures</u>

Section 5: Design - Building Facilities

Section 6: Bid Document Preparation

Section 1: Introduction

Preliminary engineering and design elements common to both non-construction and construction projects are presented in the Local Government Projects Policy Manual (LGPP Manual) Chapter 4 – Preliminary Engineering and Design. Design elements unique to construction projects are included in this chapter, Plans, Specifications and Estimates (PS&E) Development. The PS&E phase of a local government (LG) construction project generally occurs after the execution of the advance funding agreement (AFA), after completion of other project initiation tasks as described in Chapter 2 and after the 30 percent complete design is reviewed in the Preliminary Engineering and Design phase described in Chapter 4. This phase may run concurrently with tasks outlined in Chapter 5 – Environmental Compliance and Chapter 6 – Right of Way and Utilities. If the LG intends to seek federal funding, the project must comply with the provisions of 23 CFR §771.113. Proceeding with tasks concurrently is done with some risk by the LG if all of the environmental commitments have not been cleared.

Typically, a state letter of authority (SLOA) and possibly a federal project authorization and agreement (FPAA) are required prior to initiation of right-of-way acquisition and are issued by TxDOT upon the completion of the Environmental Compliance phase (see Chapter 5). The LG should coordinate with the TxDOT district office early in the PS&E phase of the project in order to proceed efficiently with design.

As noted in Chapter 4, environmental permits, issues and commitments (EPICs) are any permits, issues, coordination commitments, or mitigation obligations necessary to address, offset or compensate for social, economic or environmental impacts of a project. EPICs must be identified early in the Preliminary Design phase and carried through PS&E as described in Chapter 5. EPICs must be specified in the construction documents and will be monitored for compliance during the project and for a defined period of time after construction completion. Each section of this chapter of the LGPP Manual presents general information followed by topics containing more detailed information related to the laws and statutes regulating the activities associated with that topic. The sections describe procurement matters relating to engineering services; preparation of the plans, bid documents, specifications; and construction cost estimates, as well as detailing the processes needed to release projects for construction. The companion chapter of the Local Government Project Management Guide (LGPM Guide) contains the required practices and the responsibilities of the LG and TxDOT related to each topic.

Section 2: Design - Highways and Roads

Overview

This section builds upon the early phases described in <u>Chapter 4 – Preliminary Engineering and Design</u> and provides information on the design phase of highway and road construction projects. It provides a brief reference to items initiated in the 30 percent design and more details on items developed as the engineering progresses through final design. For all design elements, the LG and its design engineer must reference TxDOT's guidance manuals (such as the <u>Roadway Design Manual</u>) or other TxDOT-approved manuals or standards to find details for incorporating TxDOT and Federal Highway Administration (FHWA) design requirements into the project design.

Design Criteria

<u>Chapter 4 – Preliminary Engineering and Design</u> of the LGPP Manual contains a detailed discussion of the regulations and policies for design criteria used for highway and other construction projects. The same chapter of the <u>LGPM Guide</u> describes the practices for implementing established design criteria and the practices that must be followed if the local government (LG) desires to request an exception to the use of established design criteria. The design criteria selected by the LG must follow federal and state guidelines if state or federal funds are used or if the project is on the state highway system. In general, the LG must submit a design summary report to TxDOT, and TxDOT must assure the LG selects the proper functional classification and uses acceptable traffic data.

Design Level of Service

The level of service (LOS) is a measure of traffic flow and congestion and should be used by the LG to design a project that will reasonably accommodate traffic. For projects on the state highway system or involving state or federal funding, the LG must request traffic data from TxDOT, adhere to the requirements of LOS from the TxDOT Roadway Design Manual, develop a capacity analysis using the Highway Capacity Manual and submit to TxDOT for concurrence. The TxDOT district must review and approve the LG's analysis and selected LOS. Chapter 4 – Preliminary Engineering and Design provides a detailed discussion of the LOS regulations and procedures.

Hydraulic Design

General

Hydraulic structures must be designed to provide proper drainage for highways and roads. Guidelines for the design of hydraulic structures are contained in the TxDOT <u>Hydraulic Design Manual</u>.

Federal Requirements

- 1. <u>23 CFR Part 650, Subpart A</u> Describes procedures for the location and hydraulic design of highway encroachments on flood plains.
 - a. Minimum standards for hydraulic studies are listed.
 - b. <u>23 CFR §650.115(a)(2)</u> requires the design flood for encroachments by through lanes of interstate highways to not be less than the flood with a 2 percent chance of being exceeded in any given year (50-year design frequency).
 - c. <u>FHWA Additional Guidance on 23 CFR 650A, Attachment 2</u> (formerly the Federal-Aid Policy Guide Non-regulatory Supplement, Attachment 2) Lists the procedures for coordinating highway encroachments on floodplains with the Federal Emergency Management Agency (FEMA).

State Requirements

1. <u>43 TAC §§5.59</u>, <u>15.56</u>, <u>26.33</u> and <u>27.56</u> – Requires projects to be designed in accordance with TxDOT manuals, procedures, standards and guidelines. For regional mobility authority (RMA), toll and pass-through financed projects, preliminary design information must be sent to TxDOT for review and approval when the design is approximately 30 percent complete.

Required Practices

In general, the LG is responsible for selection of a design frequency for the drainage design of the roadway and is also responsible for coordinating floodplain management issues with FEMA and the local floodplain administrator. The <u>LGPM Guide</u> describes the required practices for hydraulic design.

Longitudinal Barriers, including Bridge Rail

General

A barrier is the longitudinal system located on either bridges, medians or along the roadside used to shield vehicles from potential hazards or work areas. There is a national standard to assure only those barriers meeting certain crash test criteria are installed.

Federal Requirements

- 1. <u>23 CFR §625.3(a)(1)</u> Provides projects on the national highway system to be designed and constructed to FHWA-approved standards. <u>23 CFR §625.3(d)</u> states the standards are applicable regardless of the source of funds.
- 2. <u>23 CFR §625.3(a)(2)</u> Requires federally funded projects not on the national highway system to be designed, constructed, operated and maintained in accordance with state laws, regulations, directives, safety standards, design standards and construction standards.

State Requirements

1. <u>43 TAC §§5.59</u>, <u>15.56</u>, <u>26.33</u> and <u>27.56</u> – Requires projects to be designed in accordance with TxDOT procedures, standards and guidelines. For RMA, toll and pass-through financed projects, preliminary design information must be sent to TxDOT for review and approval when the design is approximately 30 percent complete.

Required Practices

The <u>LGPM Guide</u> provides the required practices and the LG and TxDOT responsibilities for the provision of longitudinal barriers for a road or highway project.

Pavement Design

General

The proper design of a long-lasting pavement must be included in the overall project design in order to reduce pavement costs and future maintenance costs. Lower maintenance requirements also reduce road user costs by minimizing future lane closures for maintenance. TxDOT's Pavement Manual provides pavement design methods and other standards.

Federal Requirements

- 1. <u>23 CFR §626.3</u> Requires pavements to be designed to accommodate current and predicted traffic needs in a safe, durable and cost-effective manner.
- 2. <u>FHWA Pavement Design Considerations</u> (formerly Federal-aid Policy Guide Non-regulatory Supplement to 23 CFR Part 626) Even though a particular pavement design procedure is not specified, each state is expected to use a design procedure appropriate for its conditions. The state may use the design procedures outlined in the "<u>AASHTO Guide for Design of Pavement Structures</u>" or other pavement design procedures that, based on past performance or research, are expected to produce satisfactory pavement designs.

State Requirements

1. <u>43 TAC §§5.59</u>, <u>15.56</u>, <u>26.33</u> and <u>27.56</u> – Requires projects to be designed in accordance with TxDOT manuals, procedures, standards and guidelines. For RMA, toll and pass-through financed projects, preliminary design information must be sent to TxDOT for review and approval when the design is approximately 30 percent complete.

Required Practices

In general, the LG must use standard pavement design methods approved by TxDOT. The <u>LGPM</u> <u>Guide</u> provides the required practices and responsibilities of each party for pavement design.

Road Closure/Detour Plans

General

Construction often requires lane closures, detours or road closures. For all projects on the state highway system or impacting the state highway system, detours and closures must be coordinated with the entities responsible for both the road being detoured or closed and the road traffic is expected to use. Policies and procedures for the coordination of road closures and detours are described in the <u>LGPM Guide</u>.

Federal Requirements

- 1. <u>23 CFR §630.1006</u> Requires each state to implement a policy for the systematic consideration and management of work zone impacts on all federally funded projects.
- 2. <u>23 CFR §630.1012</u> Requires each project to have a transportation management plan or a traffic control plan. The plan must be consistent with <u>Part 6 of the Manual on Uniform Traffic Control Devices</u> and with the work zone hardware recommendations in the American Association of State Highway and Transportation Officials (AASHTO) <u>Roadway Design Manual</u>.

State Requirements

- 1. <u>43 TAC §15.56</u> Requires projects to be designed in accordance with TxDOT procedures, standards and guidelines.
- 2. <u>Texas Transportation Code §224.034</u> Requires that before TxDOT enters into any contract for an improvement to the state highway system that will require the closing of the highway, TxDOT must coordinate with public officials from municipalities affected by the closure to avoid adverse economic impacts to the municipality. Any contract for such improvements must include a provision identifying any days the highway may not be closed.

Required Practices

The <u>LGPM Guide</u> describes the TxDOT manuals and guidelines that must be used by the LG to coordinate road closures and detours on the state highway system or impacting the state highway system.

Specifications/Special Provisions

General

Specifications are the directions, provisions and requirements outlining the description of work and the methods and manner the work is to be performed. Specifications and special provisions for highway and road projects are an integral part of the contract between the LG and the contractor. TxDOT maintains standard specifications, special specifications and required special provisions for use on road and highway projects in Texas.

Federal Requirements

1. <u>23 CFR §630.205(b)</u> – Requires plans and specifications to describe the location and design features and the construction requirements in sufficient detail to facilitate the construction and contract control of the project.

- 2. <u>23 CFR §630.205(e)</u> and <u>23 CFR §635.309(a)</u> Provides that FHWA authorization to advertise for receipt of bids will not be given until the plans, specifications and estimate (PS&E) have been approved.
- 3. <u>23 CFR §635.411</u> Prohibits referencing proprietary materials in the specifications unless supported by an approved public interest finding.
- 4. FHWA Guidelines for Preparation of Plans, Specifications and Estimates (formerly the Federal-aid Policy Guide Non-regulatory Supplement to 23 CFR Part 630 Subpart B) Contains guidelines for the preparation of the PS&E and definitions for standard specifications, special specifications and special provisions. NOTE: FHWA approves the use of TxDOT standard specifications, special specifications and special provisions on federally funded projects.

State Requirements

- 1. <u>43 TAC §15.56</u> Requires the use of the latest <u>TxDOT standard specifications</u>, <u>special specifications and special provisions</u> for projects on the state highway system. In addition, it requires all PS&E to be approved by the department prior to advertisement for bids on the project. If the LG desires to propose alternate specifications for a project on the state highway system, it may request TxDOT approval of alternate specifications for:
 - a. projects with a pass-through financing arrangement (43 TAC §5.59);
 - b. regional mobility authority projects connecting to the state highway system (<u>43 TAC</u> §26.33); and
 - c. toll projects (<u>43 TAC §27.56</u>).

Required Practices

In general, the LG must either adopt the latest TxDOT standard specifications, applicable special specifications and required special provisions or request TxDOT approval of alternate, equivalent specifications. The <u>LGPM Guide</u> provides a detailed description of the required practices for developing specifications that must be used by the LG in order to obtain approval by TxDOT.

Section 3: Design - Traffic

Overview

A local government (LG) transportation project may include traffic engineering, traffic safety, railroad crossing and signals and traffic management. The traffic operations and project development staff at the TxDOT district are the primary contact points for the LG on traffic operations projects. The Traffic Safety Division (TRF) is responsible for statewide traffic operations, including traffic safety, traffic signals, intelligent transportation systems, operational engineering and management issues, and railroad signals and crossings.

The authority of the LG to alter the speed limits is addressed in the Texas Transportation Code, §370.033 and §§545.354-.356. The LG is required to follow <u>TxDOT's Procedures for Establishing Speed Zones Manual</u> when altering speed limits on off-system toll roads.

The following sections contain guidance for the LG to address traffic operations issues and to coordinate with the TxDOT district, which provides monitoring of the LG submittals.

Category 8 Safety Projects (HSIP and FSP)

General

"Category 8 safety projects" are traffic safety projects with federal and local funds.

- The <u>Highway Safety Improvement Program</u> (HSIP) is federally funded, and program funds are eligible to cover 90 percent of project construction costs. The remaining 10 percent of project construction costs must be covered by state or local participation. The Texas HSIP is made up of two safety construction programs, the <u>Hazard Elimination (HES) program</u> and the <u>High</u> <u>Risk Rural Roads (HRRR) program</u>.
 - The HES program focuses on construction and operational improvements for locations both on and off the state highway system (excluding interstate highways).
 - The HRRR program focuses on construction and operational improvements on high-risk rural roads. High-risk rural roads are paved roadways functionally classified as rural major or minor collectors, or rural local roads with a fatal and incapacitating injury crash rate above the statewide average for those functional classes of roadways.
- <u>Federal Railroad Signal Program</u> (FSP) projects include installations or updates to railroad signals and/or signage improvements to highway-rail grade crossings both on and off the state highway system.

TxDOT does not allow the LG to let and manage HSIP and FSP projects. The district will execute an Advance Funding Agreement (AFA) with the LG outlining the financial responsibilities of the LG for HSIP projects not on the state highway system. An AFA is not required on FSP projects.

Federal Requirements

1. The Moving Ahead for Progress in the 21st Century Act (MAP-21), §1112 – Addresses development and implementation of a strategic highway safety improvement program and plan in each state.

State Requirements

- 1. The Category 8 programs are part of the <u>Unified Transportation Program</u>.
- 2. <u>43 TAC §15.56</u> Requires projects to be designed in accordance with TxDOT procedures, standards, manuals and guidelines.

Required Practices

In general, TRF selects projects based upon available funding and defined scoring criteria for FSP and HSIP projects and defines the funding and level of involvement for the LG based upon program criteria. The <u>LGPM Guide</u> provides details for the procedures and responsibilities of each party.

Illumination/Electrical

General

Roadway illumination normally falls into one of several categories: continuous lighting; safety lighting; and bikeway and pedestrian lighting. Illumination may be provided by the LG on eligible roadways where conditions warrant installation. Guidance is contained in TxDOT's Highway Illumination Manual. The LG may have applicable ordinances that apply to transportation illumination.

Electrical work is covered by TxDOT <u>standards and specifications</u>. Applicability to all possible situations is outside the scope of the LGPP Manual.

Federal Requirements

- 1. 23 CFR §655.603 Provides that the National Manual on Uniform Traffic Control

 Devices (MUTCD) is the national standard for all traffic control devices installed on any
 street, highway or bicycle trail open to public travel. A state MUTCD must be in substantial
 conformance with the national MUTCD.
- 2. <u>MUTCD Section 2A.07-08</u> Requires all regulatory, warning and guide signs to be either retroreflective or illuminated to show the same shape and similar color both day and night. Street or highway lighting is not included in this requirement.
- 3. There are no federal statutes for general roadway illumination. However, <u>23 CFR §635.410 Buy America Requirements</u> applies when furnishing steel light poles. <u>23 CFR §635.411 Material or Product Selection</u> does not allow proprietary materials to be used on federal-aid projects.

State Requirements

- 1. <u>Texas Occupations Code §1305.003(a) (5)(C)</u>, Electricians Provides that the Texas Electrical Safety and Licensing Act (<u>Texas Occupations Code Chapter 1305 et seq.</u>) does not apply to highway work.
- 2. <u>43 TAC §§5.59</u>, <u>15.56</u>, <u>26.33</u> and <u>27.56</u> Requires projects to be designed in accordance with TxDOT procedures, standards and guidelines. For regional mobility authority (RMA), toll and pass-through financed projects, preliminary design information must be sent to TxDOT for review and approval when the design is approximately 30 percent complete.
- 3. <u>43 TAC §25.11</u> Gives the requirements for financing and installation of continuous lighting and safety lighting systems on the state highway system.
- 4. <u>Texas Health and Safety Code, Chapter 425</u> Provides standards to be met if state funds are used for the installation or operation of outdoor lighting fixtures. TxDOT must also determine that the purpose of the outdoor lighting fixture on the state highway system cannot be achieved by other methods as a condition of participation with state funds.

Required Practices

The <u>LGPM Guide</u> provides the required practices and LG and TxDOT responsibilities for illumination projects. In general, the LG should follow the TxDOT <u>Highway Illumination</u> <u>Manual</u> and coordinate closely with the TxDOT district. Overhead sign installations should not be illuminated unless supported by an engineering study.

Intelligent Transportation Systems

General

Intelligent Transportation Systems (ITS) is the integration of communication and technology systems to improve road traffic conditions, safety and mobility. ITS also provides for the integration and coordination of multiple agencies in jurisdictions within a region to improve total travel networks, not just one facility or service. The <u>LGPM Guide</u> provides additional information on ITS.

Federal Requirements

- 1. <u>23 CFR §940.5</u> Requires ITS projects to conform to the national ITS architecture and standards.
- 2. <u>23 CFR §940.11</u> Requires all ITS projects funded with highway trust funds to be developed using a systems engineering analysis and to identify what part of the regional ITS architecture is being implemented.
- 3. <u>23 CFR §200.216</u> and <u>23 CFR §200.471</u> Requires all projects with federal funds to comply with the prohibition of use of services or systems that are produced by manufacturers, or services or systems that contain components produced by manufacturers named in the regulation.

State Requirements

1. There are no state statutes or executive orders related to ITS, except as to providing distribution of information for Amber/Silver/Blue and Endangered Missing Persons Alerts.

Required Practices

In general, the LG must receive approval from TRF prior to designing and implementing an ITS, as described in the LGPM Guide.

Pavement Markings and Markers

General

Pavement markings are patterns or shapes set into the surface of, applied upon or attached to the pavement to inform or guide traffic. Typical markings intended to guide traffic include striping, traffic buttons, raised pavement markers and graphics.

Federal Requirements

1. <u>23 CFR §655.603</u> – Provides that the <u>National MUTCD</u> is the national standard for all traffic control devices installed on any street, highway or bicycle trail open to public travel. A state MUTCD may be used if found by FHWA to be in substantial conformance with the national MUTCD. The <u>Texas MUTCD</u> has been found to meet these criteria.

State Requirements

- 1. Texas Transportation Code §544.001 Requires TxDOT to develop a manual and specifications for a uniform system of traffic control devices that correlates with and, to the extent possible, conforms to the system approved by the American Association of State Highway and Transportation Officials (AASHTO). The Texas Manual on Uniform Traffic Control Devices (TMUTCD) is incorporated by Texas Transportation Code §544.001 and shall be recognized as the Texas standard for all traffic control devices installed on any street, highway or bicycle trail open to public travel. Furthermore, Texas Transportation Code §544.002(b) requires LGs to use and conform to the TMUTCD and approved specifications adopted under §544.001.
- 2. <u>43 TAC §15.56</u> Requires projects to be designed in accordance with TxDOT procedures, standards and guidelines.
- 3. <u>43 TAC §25.1</u> Establishes the TMUTCD as the standard for traffic control devices in Texas.

Required Practices

The <u>LGPM Guide</u> lists the required practices the LG and TxDOT must follow for the design of pavement markings.

Railroad Coordination

General

When projects cross railroad right of way or otherwise affect railroad facilities, pre-design and preconstruction coordination with the railroad is necessary to protect the interests of both the railroad and the entity administering the project. Coordination also involves obtaining railroad approval of the project PS&E by executing an agreement with the railroad and providing mandatory insurance for the railroad. This can be a time-consuming process and should be started early in the project development process. Federal-aid projects require a statement, often referred to as the railroad certification, from TxDOT and the LG confirming the appropriate railroad coordination has taken place. This statement is required for all federal-aid highway construction projects, including projects not involving a railroad.

Federal Requirements

- 1. <u>23 CFR §635.307</u> Prior to authorization to advertise for receipt of bids, all railroad work must be so coordinated with the physical construction that no unnecessary delay or cost for the physical construction will occur. Railroad work performed separately from the contract for the physical construction of the project is to be accomplished in accordance with provisions of the applicable federal regulation.
- 2. <u>23 CFR §635.309</u> Requires a request for authorization to advertise for the receipt of bids for all design-bid-build projects that includes a statement or certification that either all railroad work has been completed or all necessary arrangements have been made for it to be undertaken and completed as required for proper coordination with the physical construction schedules.
- 3. <u>23 CFR §635.309(p)</u> Requires the following certifications accompany a request to authorize final design and construction for design-build projects.
 - a. Either all railroad work has been completed or all necessary arrangements will be made for the completion of railroad work.
 - b. If railroad services are to be included as part of the design-builder's scope of work, then the request for proposals document must include a statement concerning scope and current status of the required services.
- 4. <u>23 CFR §646.105</u> Requires contractors to have public liability and property damage insurance in effect on federally funded projects when working within railroad right of way.
- 5. <u>23 CFR §646.214</u> Requires grade crossing improvements to conform to the specified design standards of the railroad company and/or highway authority.
- 6. <u>23 CFR §646.216(d)</u> Requires a written agreement be executed by the contracting agency and the railroad company for federally funded projects requiring the use of railroad properties or adjustments to railroad facilities.
- 7. <u>23 CFR §646.216(e)</u> Requires the following conditions be met before authorization for receipt of bids.
 - a. The PS&E must be approved.

- b. A proposed agreement between the contracting agency and the railroad has been found to be satisfactory.
- c. There must be adequate provisions for any needed easements, right of way or temporary crossings for construction purposes.
- d. The pertinent portions of the contracting agency-railroad agreement applicable to any protective services required during performance of the work must be included in the project specifications and special provisions.

State Requirements

- 1. <u>43 TAC §15.56</u> Requires projects to be designed in accordance with TxDOT procedures, standards and guidelines.
- 2. <u>Texas Transportation Code §112.059</u> Requires that railroads place and keep that portion of its roadbed and right of way, over or across which any public road may run, in proper condition for the use of the traveling public.

Required Practices

In general, the LG must identify railroad crossings early in the project. The LG is responsible for coordination with the railroad, and TxDOT is a party to projects on the state highway system as described in detail in the LGPM Guide.

Signing Requirements for Geometric Schematic

General

Signs are traffic control devices used by TxDOT and LGs to provide guidance on streets, highways or bicycle trails. Major guide signs must be included in the geometric schematic for many LG projects. Chapter 4 – Preliminary Engineering and Design includes a section on the development of a geometric schematic. The geometric schematic shows features such as location of interchanges, ramps and the number and arrangement of lanes. It is critical to consider signing requirements at this stage of project development to assure a facility is constructed that can be properly signed and operated.

Federal Requirements

23 CFR §655.603 – Provides that the <u>National MUTCD</u> is the national standard for all traffic control devices installed on any street, highway or bicycle trail open to public travel. A state MUTCD may be used if found by FHWA to be in substantial conformance with the national MUTCD. The <u>TMUTCD</u> has been found to meet these criteria.

State Requirements

1. <u>43 TAC §§5.59</u>, <u>15.56</u>, <u>26.33</u> and <u>27.56</u> – Requires projects to be designed in accordance with TxDOT procedures, standards and guidelines. For RMA, toll and pass-through financed

projects, preliminary design information must be sent to TxDOT for review and approval when the design is approximately 30 percent complete.

- 2. 43 TAC §25.1 Establishes the TMUTCD as the standard for traffic control devices in Texas.
- 3. <u>Texas Transportation Code §544.001</u> Requires TxDOT to develop a manual and specifications for a uniform system of traffic-control devices that correlates with and, to the extent possible, conforms to the system approved by AASHTO.
 - a. The <u>TMUTCD</u> is incorporated by Texas Transportation Code §544.001 and shall be recognized as the Texas standard for all traffic control devices installed on any street, highway or bicycle trail open to public travel.
 - b. Texas Transportation Code §544.002(b) requires LGs to use and conform to the TMUTCD and approved specifications adopted under §544.001.

Required Practices

The <u>LGPM Guide</u> provides the required practices for the inclusion of signing and other traffic control devices in the geometric schematic developed by the LG and reviewed by TxDOT.

Regulatory and Construction Speed Zones

General

Speed limits are established to reflect the speed the majority of drivers will be traveling at or below. The TMUTCD is the state standard applicable to all roadways open to public traffic. TMUTCD states "speed zones (other than statutory speed limits) shall only be established on the basis of an engineering study that has been performed in accordance with traffic engineering practices. The engineering study shall include an analysis of the current speed distribution of free-flowing vehicles. The Speed Limit (R2-1) sign shall display the limit established by law, ordinance, regulation, or as adopted by the authorized agency based on the engineering study."

State law requires speed limits on state highways to be set at the statutory speed established by law, unless a traffic and engineering study show the need for a differing speed limit. Local agencies have the authority to establish speed zones on state highways within the limits of their jurisdiction and for roadways off the state highway system. The process for establishing speed limits on the state highway system, including regulatory speed limits in construction zones, is contained in TxDOT's Procedures for Establishing Speed Zones.

Federal Requirements

1. <u>23 CFR §655.603</u> – Provides that the <u>National MUTCD</u> is the national standard for all traffic control devices installed on any street, highway or bicycle trail open to public travel. A state MUTCD may be used if found by FHWA to be in substantial conformance with the national MUTCD. The <u>TMUTCD</u> has been found to meet these criteria.

State Requirements

1. <u>43 TAC §25.1</u> – Establishes the TMUTCD as the standard for traffic control devices in Texas.

- 2. <u>Texas Transportation Code §544.001</u> Requires TxDOT to develop a manual and specifications for a uniform system of traffic-control devices that correlates with and, to the extent possible, conforms to the system approved by AASHTO.
 - a. The <u>TMUTCD</u> is incorporated by Texas Transportation Code §544.001 and shall be recognized as the Texas standard for all traffic control devices installed on any street, highway or bicycle trail open to public travel.
 - b. <u>TMUTCD Section 2B.13</u> requires a speed zone be established based on an engineering study made in accordance with traffic engineering practices and established by law, ordinance, regulation or as adopted by the authorized agency.
 - c. <u>TMUTCD Section 6C.01.12</u> states reduced speed limits in construction zones should be used only in the specific portion of the work zone where conditions or restrictive features are present.
- 3. 43 TAC §§25.20-28 Sets forth the procedures for establishing speed zones.
- 4. <u>Texas Transportation Code, Chapter 545, Subchapter H</u> Constitutes "basic speed law" in Texas. Establishes "prima facie" speed limits on Texas highways and allows changes if approved by the Texas Transportation Commission and supported by the <u>Procedures for Establishing Speed Zones</u> manual.
- 5. <u>Texas Transportation Code §545.354</u> Allows a regional tollway authority to alter speed limits on turnpike projects if the <u>Procedures for Establishing Speed Zones</u> manual is followed.
- 6. <u>Texas Transportation Code §545.355</u> Allows a county to alter speed limits on a county road based on the results of an engineering and traffic investigation.
- 7. <u>Texas Transportation Code §545.356</u> Allows a municipality to alter speed limits on a highway within the municipality, including a highway on the state highway system, based on the results of an engineering and traffic investigation.
- 8. <u>Texas Transportation Code §370.033(a)(12)</u> Allows a RMA to alter speed limits on transportation projects under its control if the <u>Procedures for Establishing Speed</u> Zones manual is followed.

Required Practices

The LG must follow the TxDOT <u>Procedures for Establishing Speed Zones</u> and coordinate with TxDOT as described in the LGPM Guide.

Traffic Control Plan

General

The traffic control plan is defined as all documents pertinent to the proposed efficient, effective and safe travel of the public through work zones on a construction project, including the safety of construction workers and inspection personnel. Such documents include plan sheets, general notes,

specifications, special specifications, special provisions and quantities. Traffic control plans are an integral part of each construction and maintenance project. Part 6 of the TMUTCD contains criteria for development of traffic control plans. TxDOT policy on work zones is contained in the administrative memorandum titled "Work Zone Safety and Mobility Guidelines" issued Nov. 20, 2008. This document can be obtained through the local district office from TxDOT's internal website. Traffic control devices exposed to traffic must meet certain safety criteria to be considered "crash-worthy." Devices in the current version of TxDOT's Compliant Work Zone Traffic Control Device List meet these criteria.

Federal Requirements

- 1. <u>23 CFR §630.1010</u> Defines a "significant project" as one that, alone or in combination with other concurrent projects nearby, is anticipated "to cause sustained work zone impacts" and sets forth the applicability of project-level procedures to manage work zone impacts.
- 2. <u>23 CFR §630.1012</u> Provides guidance and establishes procedures to manage work zone impacts of individual projects.
- 3. <u>23 CFR §630.1106(a)</u> Requires each state to implement a policy for the systematic consideration and management of work zone impacts on all federally funded projects.
- 4. 23 CFR §630.1106(b) Requires agency processes, procedures and/or guidance be based on consideration of standards and/or guidance contained in the MUTCD and the AASHTO Roadside Design Guide, as well as project characteristics and factors. The strategies and devices to be used may be determined by a project-specific engineering study or determined from agency guidelines defining strategies and approaches to be used based on project and highway characteristics and factors.

State Requirements

- 1. <u>43 TAC §25.1</u> Establishes the TMUTCD as the standard for traffic control devices in Texas.
- 2. <u>43 TAC §§5.59</u>, <u>15.56</u>, <u>26.33</u> and <u>27.56</u> Requires projects to be designed in accordance with TxDOT procedures, standards and guidelines. For RMA, toll and pass-through financed projects, preliminary design information must be sent to TxDOT for review and approval when the design is approximately 30 percent complete.
- 3. <u>Texas Transportation Code §544.001</u> Requires TxDOT to develop a manual and specifications for a uniform system of traffic-control devices that correlates with and, to the extent possible, conforms to the system approved by AASHTO.
 - a. The <u>TMUTCD</u> is incorporated by Texas Transportation Code §544.001 and shall be recognized as the Texas standard for all traffic control devices installed on any street, highway, or bicycle trail open to public travel.

Required Practices

In general, the LG must prepare a traffic control plan in coordination with TxDOT as described in the LGPM Guide.

Temporary Traffic Control Devices

General

Federal regulations related to temporary traffic control devices are intended to reduce the likelihood of fatalities and injuries to road users and workers who are exposed to motorized traffic (vehicles using the highway for purposes of travel) while working on federal-aid highway projects.

Federal regulations exist concerning the use and payment of uniformed law enforcement officers, positive protection measures between workers and motorized traffic, and temporary traffic control devices on construction, maintenance and utility work zones. The regulations apply to all federal-aid highway projects, but state agencies are encouraged to adopt these on other types of projects as well. Guidance is also included in the administrative memorandum titled "Work Zone Safety and Mobility Guidelines" dated Nov. 20, 2008. This document can be obtained through the TxDOT district office from TxDOT's internal website.

The <u>LGPM Guide</u> provides a discussion of the practices associated with the regulations, which require agencies to establish processes, procedures and/or guidance to systematically consider the use of the following:

- 1. **Positive protection devices** to prevent the intrusion of motorized vehicles into the work space and other hazardous areas of the work zone. The use of positive protection devices must be based on an engineering study as described in the <u>LGPM Guide</u>.
- 2. **Exposure control measures** to avoid or minimize worker exposure to motorized traffic and road user exposure to work activities. Examples of exposure control measures are provided in the LGPM Guide.
- 3. **Uniformed law enforcement** and other traffic control measures to reduce work zone crashes. Each LG, in partnership with the FHWA, shall develop a policy addressing the use of uniformed law enforcement on federal-aid highway projects. The policy may consist of processes, procedures and guidance. In general, the need for law enforcement is greatest on projects with high traffic speeds and volumes and where the work zone is expected to result in substantial disruption to or changes in normal traffic flow patterns. In addition, if law enforcement is used, they must be trained as required in 23 CFR §630.1008(d). The LGPM Guide lists specific project conditions that should be examined when determining the need for law enforcement.
- 4. Safe exit and entry of work vehicles into and out of the work area from the travel lanes. The agency processes, procedures and guidance should also address safe means for work vehicles and equipment to enter and exit traffic lanes and for the delivery of construction materials to the work space. The guidance should be based on individual project characteristics and factors.
- 5. **Payment for traffic control features and operations** must not be incidental to the contract or included in payment for other items of work not related to traffic control and safety. Separate pay items must be provided for major categories of traffic control devices, safety features and work zone safety activities. Method-based specifications, unit price pay items, lump sum pay items or a combination thereof may be used. Specifications should include

- provisions to require and enforce compliance with implementation and maintenance of the project transportation management plan and related traffic control items.
- 6. **Traffic control quality guidelines** shall be developed and implemented by each agency to help maintain the quality and adequacy of the temporary traffic control devices for the duration of the project. A level of inspection necessary to provide ongoing compliance with the quality guidelines must be provided.

Federal Requirements

- 1. <u>23 CFR Part 630 Subpart J</u> Relates to work zone safety and mobility.
- 2. <u>23 CFR Part 630 Subpart K</u> Relates to bid items for temporary traffic control.
- 3. <u>23 CFR §630.1008(d)</u> Provides training requirements, both for the design of work zones and the operations, maintenance, enforcement, flaggers, etc.

State Requirements

1. No comparable statute.

Required Practices

In general, the LG must either adopt TxDOT's temporary traffic control program or submit an alternate program for approval as described in the required practices in the <u>LGPM Guide</u>.

Traffic Signal Warrants

General

A comprehensive investigation of traffic conditions and characteristics of potential signal locations is necessary to determine the need for signal installations and to collect data for the design and operation of signals. Traffic control signals should not be installed unless the investigation reveals at least one of the warrants contained in the TMUTCD is met in accordance with 43 TAC §25.5. Meeting a warrant(s) is only the first step to justifying a traffic signal. The TMUTCD states engineering judgment is required and all factors should be considered when determining if a traffic signal should be installed. Even if a traffic signal is warranted, the signal does not have to be installed. TxDOT's procedure for evaluating traffic signals is contained in TxDOT's Traffic Signals Manual.

Federal Requirements

23 CFR §655.603 – Provides that the <u>National MUTCD</u> is the national standard for all traffic control devices installed on any street, highway or bicycle trail open to public travel. A state MUTCD may be used if found by FHWA to be in substantial conformance with the national MUTCD. The <u>TMUTCD</u> has been found to meet these criteria.

State Requirements

- 1. <u>43 TAC §15.56</u> Requires projects to be designed in accordance with TxDOT manuals, procedures, standards and guidelines. For RMA, toll and pass-through financed projects, preliminary design information must be sent to TxDOT for review and approval when the design is approximately 30 percent complete.
- 2. 43 TAC §25.1 Establishes the TMUTCD as the standard for traffic control devices in Texas.
- 3. <u>43 TAC §25.5</u> Establishes traffic signal warrants for state highways.
- 4. <u>Texas Transportation Code §544.001</u> Requires TxDOT to develop a manual and specifications for a uniform system of traffic-control devices that correlates with and, to the extent possible, conforms to the system approved by AASHTO.
 - a. The <u>TMUTCD</u> is incorporated by Texas Transportation Code §544.001 and shall be recognized as the Texas standard for all traffic control devices installed on any street, highway or bicycle trail open to public travel.
 - b. Texas Transportation Code §544.002(b) requires LGs to use and conform to the TMUTCD and approved specifications adopted under §544.001.

Required Practices

The <u>LGPM Guide</u> provides a discussion of the required practices and LG and TxDOT responsibilities related to traffic signal warrants. In general, the LG must meet warrants for traffic signals in accordance with guidelines contained in TxDOT manuals.

Section 4: Design – Bridges and Structures

Overview

The TxDOT district office project development staff is the primary contact point for the local government (LG) on bridge projects and structural elements on other projects. TxDOT's Bridge Division (BRG) develops policy, standards, manuals and guidelines for the design, construction, maintenance and inspection of the state bridge system, and administers the federal bridge funding programs in Texas. The <u>Local Government Project Management Guide</u> (LGPM Guide) describes the administrative process for these programs. The <u>Bridge Project Development Manual</u> provides information pertaining to policies and guidelines for the development of bridge projects.

TxDOT performs routine inspections on all publicly-owned vehicular bridges at regular intervals not to exceed 24 months, or not to exceed 48 months when adhering to Federal Highway Administration (FHWA) approval criteria. Bridges requiring an underwater inspection are inspected at regular intervals not to exceed 60 months, or not to exceed 72 months when adhering to FHWA underwater criteria. Fracture critical members are inspected at regular intervals not to exceed 24 months. If the structure is owned by a LG, it is the responsibility of the LG to provide traffic control during bridge inspection operations. TxDOT will provide all equipment and engineering expertise necessary for performing bridge inspections.

Bridge Design

General

Bridge design is defined as the steps used to develop a project in compliance with both geometric design criteria and construction quality standards. State and federal regulations require TxDOT manuals, procedures, standards and guidelines to be followed for all bridges designed and subsequently built on the state highway system and national highway system (NHS). FHWA has accepted TxDOT's Roadway Design Manual and TxDOT's Load and Resistance Factor Design (LRFD) Bridge Design Manual as complying with federal regulations. Bridges off the state highway system built with no state or federal funds may be designed in accordance with standards adopted by the LG.

Federal Requirements

1. <u>23 CFR §625.4</u> – Prescribes standards, policies and specifications to be used for all projects on the NHS. <u>23 CFR §625.4(b)</u> lists specific references for bridges and structures.

State Requirements

1. <u>43 TAC §§5.59</u>, <u>15.56</u>, <u>26.33</u> and <u>27.56</u> – Requires projects to be designed in accordance with TxDOT manuals, procedures, standards and guidelines.

Required Practices

In general, the LG must follow the TxDOT guidelines provided in TxDOT manuals for bridge design. The <u>LGPM Guide</u> provides a description of the required practices and the responsibilities of the LG and TxDOT district related to bridge design.

Bridge Layouts

General

Bridge layouts depict proposed features of a structure and are used to obtain early approval before beginning detailed bridge design. A checklist of information to be shown on bridge layouts and samples of bridge layouts are contained in TxDOT's <u>Bridge Detailing Guide</u>.

Federal Requirements

1. There are no federal statutes requiring development or submission of bridge layouts.

State Requirements

1. <u>43 TAC §15.56</u> – Requires preliminary design information for RMA, toll and pass-through financed projects to be sent to TxDOT for review and approval when the design is approximately 30 percent complete.

Required Practices

The LG must submit all bridge layouts to TxDOT for approval at the 30 percent complete stage of design, according to guidance contained in TxDOT manuals. The specific manuals and required practices are described in the LGPM Guide.

Design of Other Structures

General

State and federal regulations require TxDOT manuals, procedures, standards and guidelines be followed for all other types of structures designed and subsequently built on the state highway system. Common types of structures include retaining walls, sound walls, culverts, junction boxes, manholes, signs, light and signal poles, etc. Other structures off the state highway system built with no state or federal funds may be designed in accordance with standards adopted by the LG.

Federal Requirements

1. <u>23 CFR §625.4</u> – Prescribes standards, policies and specifications to be used for all projects on the NHS. <u>23 CFR §625.4(b)</u> lists specific references for bridges and structures.

State Requirements

1. <u>43 TAC §15.56</u> – Requires projects be designed in accordance with TxDOT manuals, procedures, standards and guidelines.

Required Practices

The <u>LGPM Guide</u> describes the required practices and responsibilities of the LG and TxDOT related to the design of other structures under the oversight of TxDOT.

Geotechnical

General

Geotechnical studies are performed primarily for pavement design and structures (i.e., bridges, retaining walls, etc.), and for excavation and embankment stability evaluation. TxDOT practices are contained in TxDOT's Geotechnical Manual.

Federal Requirements

1. There are no federal statutes for geotechnical matters.

State Requirements

1. <u>43 TAC §§5.59</u>, <u>15.56</u>, <u>26.33</u> and <u>27.56</u> – Requires projects to be designed in accordance with TxDOT manuals, procedures, standards and guidelines. For RMA, toll and pass-through financed projects, the preliminary design information must be sent to TxDOT for review and approval when the design is approximately 30 percent complete.

Required Practices

The LG is responsible for conducting geotechnical studies in accordance with TxDOT's Geotechnical Manual. The required practices are described in the LGPM Guide.

Scour

General

Scour is the result of the erosive action of flowing water excavating and carrying away material from the bed and banks of streams. Potential scour can be a significant factor in the analysis of a stream crossing system. The design of a crossing system involves an acceptable balance between a crossing that is economical and provides the required traffic service and one that provides a sufficient water opening that will not cause upstream damage due to backwater nor damage at the crossing from scour. TxDOT practices are contained in TxDOT's Geotechnical Manual.

Federal Requirement

1. <u>23 CFR Part 650, Subpart C</u> – Sets national standards for the proper safety inspection and evaluation of all highway bridges. Some bridges are identified as scour-critical.

State Requirement

1. <u>43 TAC §§5.59</u>, <u>15.56</u>, <u>26.33</u> and <u>27.56</u> – Requires projects to be designed in accordance with TxDOT manuals, procedures, standards and guidelines. For RMA, toll and pass-through

financed projects, the preliminary design information must be sent to TxDOT for review and approval when the design is approximately 30 percent complete.

Required Practices

The LG is responsible for performing scour analyses in accordance with TxDOT guidelines. The required practices are included in the <u>LGPM Guide</u>.

Section 5: Design - Building Facilities

Overview

Local governments (LG) may be involved in the construction of buildings with TxDOT. The Roadway Facilities group in TxDOT's Maintenance Division (MNT) is responsible for the review of all architectural and engineering plans, specifications and estimates for building projects on the state highway system or built with state or federal funds. Examples of LG projects involving buildings include emergency operations centers, rest areas, park buildings and transportation museums.

Architectural and Engineering Standards

Architectural and engineering standards, including structural, mechanical, electrical, plumbing and civil (SMEPC), are set forth in TxDOT's Facility Design Standards and Production Guidelines. For federally funded projects, the LG is required to follow 23 CFR Part 635 – Construction and Maintenance. Note that many contracting practices associated with architectural/building projects may not be allowed by federal rules (23 CFR Part 635) or state law. If alternate contracting methods (such as construction manager at-risk, turn-key construction or others) are proposed, the LG must demonstrate they are allowable for the intended project, submit a request to TxDOT and receive TxDOT approval for the proposed contracting method. The LGPM Guide provides additional information related to building standards.

Progress Reviews

In addition to architectural and engineering SMEPC documents, the Roadway Facilities group will also perform progress reviews related to other building systems that they review and approve for compliance with TxDOT facility standards and guidelines. The <u>LGPM Guide</u> provides a discussion of this process.

For the maintenance of buildings, the LG must include an applicable section in the comprehensive maintenance management agreement (CMMA) discussed in Chapter 10 of the LGPP Manual and LGPM Guide. This section of the CMMA must contain standards for a building upkeep and maintenance program, including preventive and routine maintenance and essential repair planning. The LG should make building inspections at the appropriate intervals to determine maintenance needs.

Section 6: Bid Document Preparation

Overview

Bid documents include the plans, specifications and estimates (PS&E) developed to describe all of the elements of a construction project and become the contract between the local government (LG) and the selected contractor. The following sections list the applicable federal and state provisions associated with each bidding or contracting component with a brief description of the requirements associated with each.

As previously described in this Chapter, LG projects with state or federal funds or located on the state highway system must adopt the latest TxDOT Standard Specifications, Special Specifications and Special Provisions, or request written approval from TxDOT of alternate, equivalent specifications. TxDOT has developed templated versions of certain contract documents (Items 1L-9L) to assist the LG in properly addressing requirements as listed below. More information regarding the use of these templates can be found in the LGP Workbook.

Submittal of PS&E Documents

General

The PS&E are prepared by the LG and submitted to the TxDOT district for review and approval. On most projects, it is recommended the PS&E be submitted at several stages in the project, reflecting the 30 percent, 60 percent and 90 percent completion phases, in order to receive TxDOT [and Federal Highway Administration (FHWA), when required] concurrence during development of the design aspects of the project. For less complex projects, the TxDOT district may allow fewer submittals.

The 30 percent complete design is submitted in the Preliminary Engineering and Design phase. The 60 percent and 90 percent complete designs are submitted in the PS&E Development phase. Upon final submittal, the PS&E and bid documents are reviewed and approved by TxDOT and a state letter of authority and federal project authorization and agreement, if required, are issued that allow advertising of the construction phase of the project. The district or division managing the AFA should also ensure the collection of the agreed-upon funds for this phase of the project from the LG in accordance with the terms of the AFA.

Federal Requirements

- 1. <u>23 CFR Part 630 Subpart A</u> Requires TxDOT to obtain authorization from FHWA before work begins on any federally funded project.
- 2. <u>23 CFR Part 630 Subpart B</u> Prescribes procedures to be followed for the preparation, submission and approval of the PS&E, and supporting documents for federally funded projects.

3. <u>23 CFR Part 635 Subpart C</u> – Requires authorization before a federally funded project may be advertised for the receipt of bids. PS&E approval is a pre-requisite of authorization for design-bid-build projects. For design-build projects, FHWA's approval of the request for proposals document will constitute FHWA's project authorization. However, phased authorizations may be given under certain conditions contained in <u>23 CFR §635.309(p)</u>.

State Requirements

1. <u>43 TAC §15.56</u> – Requires projects on the state highway system to be designed in accordance with TxDOT manuals, procedures, standards and guidelines. Additionally requires approval of the PS&E by TxDOT prior to advertisement for the receipt of bids for projects on the state highway system.

Required Practices

The <u>LGPM Guide</u> provides the required practices and LG and TxDOT responsibilities for submittal of bid documents. In general, the LG must coordinate with the district and submit the final PS&E well in advance of the proposed letting date.

Bonding

General

A LG may include provisions for bid guaranties or bonds, or warranty bonds, in invitations for the receipt of bids. Bonding is grouped into five basic classifications: bid bonds; performance bonds; payment bonds; retainage bonds; and warranty bonds. These are described in more detail in the LGPM Guide.

Federal Requirements

1. <u>23 CFR §635.110(b)</u> – Specifies the procurement or contract documents may not contain criteria that restrict competition.

State Requirements

- 1. <u>Texas Local Government Code §252.044</u> Calls for a municipality to require the successful bidder to execute a good and sufficient bond. The bond must be executed with a surety company authorized to do business in Texas.
- 2. <u>Texas Local Government Code §262.032</u> Allows a county to require the successful bidder to provide a performance bond. The bid bond must be executed with a surety company authorized to do business in Texas.
- 3. Texas Government Code §2252.064 Requires a contractor to execute a performance bond issued by a surety company authorized to do business in this state in an amount determined by the contracting state agency but not to exceed the contract price. Requirement applies to TxDOT only and is not applicable to a regional mobility authority (RMA) or regional tollway authority.

- 4. <u>Texas Government Code §2253.021</u> Requires a contractor to execute a performance bond if the contract is in excess of \$100,000 and a payment bond if the contract is in excess of \$25,000 (\$50,000 for municipalities).
- 5. <u>Texas Transportation Code §223.205</u> (comprehensive development agreement by TxDOT) Requires a private entity to provide a performance and payment bond or an alternative form of security in an amount equal to the cost of constructing or maintaining the project.
- 6. <u>Texas Transportation Code §370.308</u> (comprehensive development agreement by RMA) Requires a private entity to provide a performance and payment bond or an alternative form of security in an amount equal to the cost of constructing or maintaining the project or an amount sufficient to ensure performance and protect the beneficiaries.

Required Practices

In general, the LG must get TxDOT approval of procedures used to bond contractors and must include these procedures in the contract documents. The <u>LGPM Guide</u> provides a description of the required practices and responsibilities of each party in the bonding process.

Buy America

General

The LG must comply with the latest provisions of Buy America as listed at <u>23 CFR §635.410</u>. The LG is required to use steel or iron materials manufactured in the United States except when:

- the cost of materials, including delivery, does not exceed 0.1 percent of the total contract cost or \$2,500, whichever is greater;
- the contract contains an alternate item for a foreign source steel or iron product and the contract is awarded based on the alternate item; or
- the materials are temporarily installed.

Manufacturing Process

Buy America requires all manufacturing processes must take place domestically. Manufacturing begins with the initial melting and mixing, and continues through the coating stage. Any process modifying 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. The LGPM Guide provides additional information related to items included or excluded from Buy America provisions.

Application of Buy America

Buy America does not apply to minimal use of iron/steel materials provided the total cost of all foreign source items used in the project, as delivered to the project site, is less than \$2,500 or one-tenth of 1 percent (1/10 of 1%) of the contract amount, whichever is greater. More information regarding the application of Buy America provisions to partial fabrication processes and temporary items are included in the <u>LGPM Guide</u>. The practice of making otherwise eligible items non-

participating for the purpose of circumventing the Buy America requirements is unacceptable and will not be approved. FHWA retains the authority to resolve all Buy America issues.

Buy America provisions apply to all material permanently incorporated in a federal-aid project, even if an item is rendered as a "donated material" in accordance with 23 U.S.C. §323 – Donations and Credits. While the LG may receive a credit for donated material, this material must generally comply with Buy America.

Waivers

Buy America does not apply to raw materials (iron ore and alloys), scrap, pig iron, or processed, pelletized and reduced iron ore. Insufficient domestic supplies of raw materials caused FHWA to issue a nationwide waiver allowing foreign source supplies of these items. The waiver may be found at the FHWA nationwide waiver website. If domestically produced steel billets or iron ingots are shipped overseas for any manufacturing process and then returned to the United States, the resulting product does not conform to the Buy America requirements.

Approval authority for waivers of Buy America requirements is retained by FHWA for all federally funded projects. The FHWA may grant a waiver of the Buy America requirements for specific projects if the LG can demonstrate either of the following:

- 1. compliance with the requirements is inconsistent with the public interest; or
- 2. insufficient quantities of satisfactory quality domestic products are available.

Materials delivery delay will not be considered as grounds for a waiver. The cost differential between domestic and foreign products is also not grounds for a waiver.

A LG may apply for a waiver of the Buy America provisions if it believes a waiver is warranted. The LG must submit the waiver request with supporting information through TxDOT to FHWA sufficiently in advance of its need to allow time for proper review and action.

Alternative Bidding Procedures

An alternative bidding procedure may be used to justify the use of foreign steel or iron. Under this procedure, the total project is bid using two alternatives: one based on foreign source products; and the second using domestic products. The use of foreign products may be justified if the lowest total bid based on domestic steel or iron products is 25 percent more than the lowest bid using corresponding foreign steel or iron products. The 25 percent differential applies to the total bid for the entire project, not just the bids for the steel or iron products.

Enforcement

The LG is responsible for enforcing the Buy America provisions. The contract provisions should require the contractor to provide a definitive statement about the origin of all products covered under the Buy America provisions. An alternate procedure is to use step certification for products. Under step certification, each handler of the product (supplier, fabricator, manufacturer, processor, etc.) certifies its step in the process was domestically performed.

Federal Requirements

- 1. <u>23 CFR §635.410</u> Requires all iron and steel products to be of domestic origin. Waivers may be approved by FHWA.
- 2. <u>23 CFR §636.119</u> Requires TxDOT to ensure compliance with Buy America for designbuild projects regardless of the form of FHWA funding.

State Requirements

1. <u>Texas Transportation Code §223.045</u> – Requires a contract awarded by TxDOT on the state highway system without federal aid must contain the same preference provisions for steel and steel products required under federal law for a federally funded project. There is no specific requirement for other entities to follow this statute.

Required Practices

The <u>LGPM Guide</u> provides the required practices that must be followed by the LG in order to comply with Buy America.

Changes in the Work

General

The construction industry recognizes it is unrealistic to expect a construction project to be built without deviating from the project plans. Project designers should be diligent and exercise due care in developing the plans. However, there are many peculiarities (e.g., unforeseen site conditions, utility conflicts, changes in the geology, etc.) that can arise during construction, and every project should anticipate the potential need for changes. Only the construction engineer is in a position to judge the adequacy of project designs and respond to needed changes.

For a project involving an agreement between a LG and TxDOT, TxDOT must formally concur with proposed major extra work or major changes in the contract plans and provisions before work begins. However, when emergency or unusual conditions justify, TxDOT may give advance verbal concurrence and formally confirm as soon as practical. Non-major changes and non-major extra work also require formal concurrence. However, such concurrence may be given retroactively at TxDOT's discretion. The <u>LGPM Guide</u> provides a definition of a major change.

Early coordination between the LG and TxDOT district is essential in the review of change orders. There are five basic components TxDOT will consider during its review of change orders, which are described in detail in the LGPM Guide. These considerations are:

- 1. impact on the original "scope of the work;"
- 2. eligibility;
- 3. consultant design errors;
- 4. basis of payment; and
- 5. time extensions.

Federal Requirements

- 23 CFR §635.120 Requires, for design-bid-build projects, all changes to federal-aid highway projects must be approved by the FHWA. TxDOT assumes this responsibility for projects administered under the provisions of the TxDOT/FHWA Stewardship/Oversight Agreement for Design and Construction. The bid documents should include language describing administration of change orders.
- 2. For design-build projects, since design and construction are performed under the same contract, it is not anticipated that change orders for plan errors or omissions would be approved. (This is a matter of FHWA policy. See FHWA's <u>Contract Administration Core Curriculum Participant's Manual</u>). However, TxDOT or a LG may direct changes to a design-build contract after work begins, in which case a change order may be appropriate.

State Requirements

- 1. Texas Local Government Code §252.048 Requires that:
 - a. the governing body of the municipality may approve changes;
 - b. the total contact price may not be increased unless there are available funds;
 - c. the original contract price may not be increased by more than 25 percent; and
 - d. the original contract price may not be decreased by more than 25 percent without the consent of the contractor.
- 2. <u>Texas Local Government Code §262.031</u> Provides that the county commissioner's court has authority to make changes. The total contract cost may not be increased unless there are available funds.
- 3. <u>Texas Local Government Code §271.060</u> Allows a governing body to approve change orders if there are available funds.

Required Practices

The <u>LGPM Guide</u> provides a detailed description of the required practices for requesting and processing change orders. In general, the LG must get TxDOT approval of change orders.

Child Support Statement

General

For all LG projects, the contractor must certify the business entity is not ineligible due to the requirements for child support included in the Texas Family Code. In accordance with Texas Family Code §231.006, a contractor's bid for a contract must include the name and Social Security number of the individual or sole proprietor and each partner, shareholder or owner with an ownership interest of at least 25 percent of the business entity submitting the bid. The following language must be included in the bid document verbatim.

"Under Section 231.006, Family Code, the vendor or applicant certifies that the individual or business entity named in this contract, bid, or application is not ineligible to receive the specified grant, loan, or payment and acknowledges that this contract may be terminated and payment may be withheld if this certification is inaccurate."

Failure to submit the required information with a bid makes it non-responsive and ineligible for award. If the LG determines an individual or business entity awarded the contract is ineligible to receive payment due to ineligibility, the contract may be terminated. In addition, if the required certification listed above is shown to be false, the contractor is liable to the LG for attorney's fees, the costs necessary to complete the contract, including the cost of advertising and awarding a second contract, and any other damages provided by law or contract.

Federal Requirement

1. No comparable statute.

State Requirement

- 1. <u>Texas Family Code §231.006</u> Applies to recipients of state funds and state contracts.
 - a. Requires inclusion of a verbatim certification in bid documents.
 - b. Requires bidders to include the name and Social Security number of individuals with at least a 25 percent ownership.

Required Practices

The LG must follow the required practices outlined in the <u>LGPM Guide</u> in accordance with state statutory requirements related to child support.

Claims

General

A claim is a continued demand for payment by a contractor if it has been previously denied under the LG's normal procedures for change order approval. Both the LG and the contractor share in the responsibility for claims.

Federal Requirements

1. <u>23 CFR §635.124</u> – States federal participation on design-bid-build projects is determined on a case-by-case basis to the extent the claim is supported by the facts and is founded in the contract.

State Requirements

1. No comparable state statutes specifically address the claims process for local governments.

Required Practices

The LG must develop processes and procedures for the submittal, review, analysis and determination of claims. The process should be approved by TxDOT and incorporated in the bid documents. The <u>LGPM Guide</u> provides a description of the required practices that must be followed by the LG and TxDOT district when submitting or processing claims.

Contract Time

General

The term of the contract is an important part of every construction project. Too little contract time may result in higher construction costs, while too much contract time may encourage inefficiencies, increased user costs and potential delays and inconvenience to the public.

The LG must have an acceptable procedure for determining contract time and the appropriate method of charging contract time. This procedure should include a comparison of the actual construction time against the estimated completion time for several projects to ascertain whether its procedures result in appropriate contract times. The goal should be to strive for the least practical number and duration of traffic interruptions during highway construction.

Federal Requirements

1. <u>23 CFR §635.121</u> – Requires recipients of federal funding for highway projects to have adequate procedures for determining contract time.

State Requirements

1. No comparable state statutes specifically address contract time determination. Each entity has broad authority to determine procedures to deliver projects, including methods to determine contract time.

Required Practices

In general, the LG should develop a time determination process and obtain TxDOT approval. The <u>LGPM Guide</u> describes the required practices and responsibilities of the LG and TxDOT.

Debarment Certification

General

Contractors are not allowed to participate in federally funded projects if they are suspended or debarred by the U.S. General Services Administration (GSA), other federal agencies or state agencies. The contractor is required to certify its current eligibility status. Certification is also required of all prospective participants in lower-tier transactions. This includes subcontractors, material suppliers, vendors, etc. Each participant 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 years for certain types of offenses."

GSA has the responsibility to compile, maintain and distribute the list of suspended and debarred parties excluded from all federal procurement and non-procurement programs. The GSA list is distributed to all FHWA field offices and is provided to TxDOT to assure suspended or debarred parties are not awarded federal-aid highway projects. GSA's list of debarred firms may be accessed on the System for Award Management (SAM) website. The state of Texas has similar requirements prohibiting contracts with debarred contractors. The state's list of debarred firms may be accessed on the Comptroller's Vendor Performance Tracking System (comptroller's list) website or on TxDOT's Contractor Prequalification website.

Federal Requirements

1. <u>2 CFR Part 180</u> and <u>2 CFR Part 1200</u> – Prohibits contractors and subcontractors that are debarred by any federal agency from participating in federally funded projects. A current list of debarred contractors is listed at the SAM website.

State Requirements

1. <u>43 TAC Chapter 9, Subchapter G</u> – Provides for contractor sanctions by the TxDOT executive director. A current list of debarred contractors is listed on the <u>comptroller's list</u> website, as well as on TxDOT's Contractor Pregualification website.

Required Practices

The <u>LGPM Guide</u> provides a description of the required practices that must be implemented by the LG and TxDOT to ensure contractors have not been suspended or debarred.

Designated Material Sources/Disposal Sites

General – Material Sources

Most construction contracts require the contractor to furnish all materials to be incorporated into the work. However, the LG can either furnish materials or require the contractor to use designated sources of materials under certain conditions. FHWA policy requires the contractor must furnish all materials to be incorporated in the work, and the contractor shall be permitted to select the sources from where the materials are to be obtained. Exceptions to this requirement may be made when there is a definite finding by the LG, with concurrence by TxDOT, that it is in the public's interest to require the contractor to use materials furnished by the LG or from sources designated by the LG. The LGPM Guide describes the exception policy.

General - Mandatory Disposal Sites

Normally, the disposal site for surplus excavated materials is to be of the contractor's choosing, although an optional site(s) may be shown in the contract provisions. A mandatory site shall be specified when there is a finding by the LG, with the concurrence of TxDOT, that such placement is the most economical or that the environment would be substantially enhanced without excessive

cost. Discussion of the mandatory use of a disposal site in the environmental document may serve as the basis for the public interest finding.

Summarizing federal policy for the mandatory use of borrow or disposal sites:

- Mandatory use of either requires the LG to develop a public interest finding and gain TxDOT's concurrence prior to advertising for receipt of bids.
- Mandatory use of either may be based on environmental considerations, where the
 environment will be substantially enhanced without excessive additional cost. Where the use is
 based on environmental considerations, the discussion in the environmental document may be
 used as the basis for the public interest finding.
- Factors to justify a public interest finding should include such items as cost effectiveness, system integrity and local shortages of material.

Federal Requirements

- 1. <u>23 CFR §635.407</u> Provides for the use of materials made available by a public agency in the following cases.
 - a. Contractors must be permitted to select sources of materials. One exception is when there is a determination that it is in the public's interest to require use of material from designated source.
 - b. Material meeting specification requirements may be made an optional source without a public interest determination.
 - c. Except for natural materials, designated materials must be acquired by competitive bidding as a condition of federal participation. Other procurement methods may be approved if there is an approved public interest determination.

State Requirements

1. No comparable statute.

Required Practices

The <u>LGPM Guide</u> provides the required practices that should be used by the LG (and approved by TxDOT) for designating material sources and disposal sites.

Differing Site Conditions

General

Due to the nature of highway construction and the conditions under which work is performed, designers cannot always accurately determine and describe the conditions existing at project sites. Consequently, actual conditions encountered during construction may differ from those indicated in the contract documents, resulting in a change in construction costs.

Situations may also develop during construction requiring the LG to order the contractor to slow down or stop construction through no fault of the contractor. These slowdowns or stoppages in the work may cause a change in construction costs. There also may be situations encountered during construction requiring the LG to make alterations to the design. In addition to changing the amount of contract work, such alterations could significantly affect the contractor's production costs. In accordance with federal regulations, differing site or changed condition clauses must be included verbatim in the contract.

The standardized changed condition clauses in <u>23 CFR §635.109(a)</u> must be included verbatim in all contracts. The regulation requires the use of three different clauses, which are described in detail in the <u>LGPM Guide</u>:

- 1. differing site conditions clause;
- 2. suspensions of work ordered by the engineer (LG); and
- 3. material changes in the scope of the work.

Federal Requirements

- 1. <u>23 CFR §635.109</u> design-bid-build
 - a. Requires specific language be incorporated verbatim into all construction contracts. The language covers: differing site conditions; suspensions of work ordered by the engineer; and significant changes in the character of work. There are provisions for alternate language.
 - b. FHWA's <u>Additional Guidance on 23 CFR 635A</u> (formerly Federal-aid Policy Guide Non-regulatory supplement to 23 CFR Part 635 Subpart A) advises the "differing site condition" clause must be made part of the contract unless prohibited by state law.
- 2. <u>23 CFR §635.109(c)</u> design-build Encourages administering agencies to use "suspensions of work ordered by the engineer" clauses and may consider "differing site conditions" and "significant changes in the character of work" clauses appropriate for the risks and responsibilities shared with the private entity.

State Requirements

1. <u>Texas Government Code §2269.363(1)(B)</u> – Provides that, on design-build projects, the LG assumes the risks and costs associated with unknown or differing site conditions unless otherwise provided for in the request for proposals and final contract.

Required Practices

The LG must include the required contract language for differing site conditions as described in the LGPM Guide.

Disadvantaged Business Enterprises, Historically Underutilized Businesses and Small Business Enterprises

General

The federal and state programs for disadvantaged business enterprises (DBE), historically underutilized businesses (HUB) and small business enterprises (SBE) have been developed to encourage participation in the construction industry by a wide variety of contractors and therefore expand diversity in the industry.

All federal-aid projects are subject to the DBE requirements. The U.S. Department of Transportation (USDOT) must approve each state's DBE program and its annual goals to ensure compliance with all DBE program requirements. FHWA has determined a LG must operate under TxDOT's DBE program even if its own program is already approved by USDOT. The AFA includes language that requires the LG to adopt and comply with TxDOT's DBE Program. By signing the AFA the LG is agreeing to operate under TxDOT's DBE Program. LGs are encouraged to contact TxDOT's Civil Rights Division for assistance, as well as review the Local Government DBE Compliance and Monitoring Guide manual. Guidance may also be found at the USDOT's Office of Small and Disadvantaged Business Utilization Office website. FHWA's Federal Aid Essentials website is an additional source for general information regarding DBE requirements.

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."

The DBE participation requirements in federal-aid highway contracts are contract provisions like any other contract provisions and should be administered as such. DBE administrative issues that will require review and attention may arise during a project. These issues will require the LG to have an adequate background of the DBE program. The LG should solicit the advice of TxDOT in resolving these issues as needed.

TxDOT's DBE specifications and contract provisions include the following:

- DBE program policy;
- definitions:
- DBE contract goal;
- eligibility criteria;
- good faith effort provisions;
- DBE obligations;
- commercially useful function (CUF) evaluations;

- sanctions on failure to comply with DBE requirements;
- determination procedures on counting DBE participation toward the DBE goal;
- award documentation and procedures;
- post-award compliance provisions; and
- records and reporting requirements.

<u>49 CFR Part 26</u>, titled "Participation by Disadvantaged Business Enterprises in Department of Transportation Programs," implements a requirement that all federal agencies "narrowly tailor" their affirmative action programs to "meet a compelling government interest." Transportation agencies (including LGs) must set their goals based on local evidence of the actual availability of qualified DBEs.

- 1. State transportation departments must provide for a public participation process in establishing their overall goals. Once goals are established, LGs must maximize race-neutral methods, such as technical assistance and outreach, to meet as much of their overall goals as possible. The remainder of the overall goal will be met through race-conscious measures such as contract goals. All contracts should be individually reviewed and evaluated for the DBE goal standards and applicability. In some instances a project may justify a zero goal given the external or contributing factors.
- 2. To participate in the DBE program a business must not exceed small business size standards or individuals must not exceed \$750,000 personal net worth cap. To be seen as a small business, a firm must meet Small Business Administration (SBA) size criteria as defined by current size standard(s) found in 13 CFR Part 121 and average annual gross receipts as defined by SBA regulations (13 CFR §121.104).
- 3. One-stop shopping certification programs have been established in Texas so businesses may obtain certification as a DBE to apply for contracts in highway, transit and airport agencies. The Texas Unified Certification Program is a certification process for the federal DBE programs in Texas. A business' DBE certification is valid at any Texas entity receiving USDOT funds and has a DBE program.
- 4. Contractors will not be penalized if they fail to meet contract DBE goals as long as they follow the good faith effort guidelines in 49 CFR Part 26, Appendix A and submit their good faith effort to their appropriate district DBE coordinator for review, guidance and approval.
- 5. Contractors who fail to meet DBE goals and fail to make a good faith effort may be found to be in violation of the contract. The violation may result in:
 - a. the termination of the contract;
 - b. the deduction of the dollar amount of DBE goal not accomplished; or
 - c. such other remedy or remedies as deemed appropriate.

Federal Requirements

- 1. <u>49 CFR Part 26</u> design-bid-build Requires the DBE program to not restrict competition or provide in-state or other local preference.
- 2. <u>23 CFR §635.107(b)</u> design-build Applies the provisions of <u>49 CFR Part 26</u> and the receiving agency's approved DBE plan. If DBE goals are set, DBE commitments above the goal must not be used as a proposal evaluation factor in determining the successful proposer.

State Requirements

- 1. <u>Texas Transportation Code §201.702</u> Requires TxDOT to set goals for awarding state or federally funded contracts to disadvantaged businesses. The goals must approximate the federal requirement for federal funds.
- 2. 43 TAC §§9.354-9.355 Requires TxDOT to establish overall HUB participation goals and assign individual project goals to achieve the overall goal. Note that the Comptroller of Public Accounts (CPA) certifies HUBs and provides that the CPA recognize some TxDOT-certified DBEs as HUBs. Requires provisions addressing HUBs to be included in TxDOT contracts funded entirely with state and local funds. The HUB requirements do not apply to contracts with federal funds.
- 3. <u>43 TAC §§9.314-9.315</u> Requires TxDOT to establish annual SBE contracting goals. Notes that TxDOT maintains a SBE directory and provides that TxDOT-certified DBEs and HUBs also meet SBE requirements without having to apply for SBE eligibility. Allows provisions addressing SBEs be included in TxDOT contracts funded entirely with state and local funds. The SBE requirements do not apply to contracts with federal funds.
- 4. Texas Government Code Chapter 2161 (see also 43 TAC §§9.350-9.367) Provides that the HUB program is applicable to state agencies and institutions of higher learning. Includes certification of HUBs and maintenance of a directory of certified HUBs. This requirement does not apply to local or other entities.
- 5. Texas Government Code Chapter 2252 Subchapter E Defines the general requirements for a contractor (including a subcontractor) claiming status as a DBE or HUB. Applies to all agencies and entities. It does not include language concerning requirements for agencies to consider DBEs or HUBs in contract administration.
- 6. <u>Texas Transportation Code §366.184</u> Requires regional tollway authorities (RTAs) to set goals for disadvantaged businesses consistent with general law.
- 7. <u>Texas Transportation Code §370.183</u> Requires RMAs to set goals for disadvantaged businesses consistent with general law.

Required Practices

In general, the LG must follow state and federal guidelines in adopting TxDOT's DBE program and developing local DBE goals as described in the <u>LGPM Guide</u>.

Equal Employment Opportunity

General

The LG, as a contracting agency, has a responsibility to ensure all federal-aid contractors, subcontractors, vendors and material suppliers do not discriminate in employment and contracting practices based on race, color, religion (in the context of employment), sex, national origin, age or disability.

As a sub-recipient of federal funds, the LG has the responsibility to ensure equal opportunity requirements are included in federal-aid contracts and to ensure contractors are in compliance with those requirements under the LG's authority. [The LG has no authority under Executive Order 11246 to enforce compliance with Office of Federal Contract Compliance Programs (OFCCP) requirements.]

A contractor's federal regulatory requirements are set forth in the Required Contract Provisions Federal-aid Construction Contracts (Form FHWA-1273) and are applicable to contractors and subcontractors that hold federal or federal-aid contracts of \$10,000 or greater. Form FHWA-1273 includes federal equal employment opportunity contract provisions and proposal notices required to be physically incorporated in each direct federal and federal-aid highway construction contract and subcontract (at any tier) of \$10,000 or greater and by reference in purchase order agreements, rental agreements and other agreements for supplies and services of \$10,000 or greater. The requirements of FHWA-1273 are described in detail in the LGPM Guide.

The LG imposes specific nondiscrimination and affirmative action obligations on federal-aid highway contractors relating to its employment practices under the federal authorities listed under "Federal Requirements" below.

Federal Requirements

- 1. Title VI of the Civil Rights Act of 1964
- 2. The Civil Rights Restoration Act of 1987
- 3. The Age Discrimination Act of 1975
- 4. The Rehabilitation Act of 1973
- 5. <u>23 U.S.C. §140</u> Nondiscrimination and <u>23 U.S.C. §324</u> Prohibition of discrimination on the basis of sex
- 6. <u>49 CFR Part 21</u> Nondiscrimination in Federally-Assisted Programs of the Department of Transportation
- 7. <u>23 CFR Part 200</u> Title VI Program and Related Statutes Implementation and Review Procedures
- 8. <u>23 CFR Part 230</u> FHWA external program regulations
- 9. <u>23 CFR §1.9</u> Limitation on Federal Participation and <u>23 CFR §1.36</u> Compliance with Federal Laws and Regulations

- 10. 23 CFR §635.117(d) and 23 CFR §635.117(e) Labor and Employment
- 11. Form FHWA-1273
- 12. <u>FHWA Order 4710.8</u> Clarification of FHWA and State Responsibilities under <u>Executive Order 11246</u> and Department of Labor Regulations in <u>41 CFR Chapter 60</u> (the Office of Federal Contract Compliance Programs administers and enforces the equal employment opportunity requirements referenced in Executive Order 11246 and 41 CFR Chapter 60)

State Requirements

- 1. <u>43 TAC §9.4</u> Requires TxDOT to monitor recipients of federal funds for Title VI activities.
- 2. <u>Texas Labor Code, Title 2, Subtitle A, Chapter 21, Subchapter B</u> Prohibits employer discrimination on the basis of race, religion, sex, color, national origin, age or disability.

Required Practices

The LG, contractor, TxDOT and FHWA must cooperate to implement an equal opportunity contractor compliance program as described in detail in the LGPM Guide.

Equipment Rental Rates

General

The LG may elect to use its own equipment or rent equipment when performing force account work. The LG must follow federal and state regulations in order to get reimbursed for the costs associated with the equipment and must use actual costs to determine extra work payments.

Under federal policy, the LG may specify the acceptable rate guides and equipment rate schedules in construction contracts. The federal cost principles applicable to rental rates for contractor furnished equipment are contained in <u>48 CFR Part 31</u>. The provisions in <u>2 CFR Part 200</u> apply when LG-owned equipment is used. Details related to the procedures to be used for determining equipment rental rates are contained in the <u>LGPM Guide</u>.

Federal Requirements

- 1. <u>FHWA Additional Guidance on 23 CFR §635A</u> (formerly Federal-aid Policy Guide Non-Regulatory Supplement to 23 CFR §635A) Equipment Rental Rates
 - a. Requires actual costs be used for extra work payments.
 - b. Allows predetermined rate guides to be used for equipment rates for contractor-owned equipment in lieu of actual cost. The Blue Book is an acceptable guide.
 - c. Allows reimbursement of reasonable rental cost if the contractor leases equipment.
- 2. <u>48 CFR Part 31</u> Sets forth the federal cost principles applicable to rental rates for contractor furnished equipment.
- 3. 2 CFR Part 200 Sets forth regulations applicable when LG-owned equipment is used.

State Requirements

- 1. <u>43 TAC §26.33(g)(1)</u> Requires specifications for projects administered by a RMA to conform to TxDOT standard specifications (including Article 9.7.1.4).
- 2. <u>43 TAC §27.56(c)(3)(A)</u> Requires specifications for projects administered by a RTA must conform to TxDOT standard specifications (including Article 9.7.1.4) as a condition of state fund participation.

Required Practices

Equipment rental rates for all projects with federal or state funds must comply with TxDOT standard specifications. The required practices and responsibilities of both the LG and TxDOT are included in the LGPM Guide.

Form FHWA-1273 and Required Contractor Certifications

General

<u>Form FHWA-1273</u>, Required Contract Provisions Federal-aid Construction Contracts, is a collection of contract provisions and proposal notices required by regulations disseminated by FHWA and other federal agencies. The provisions contained in Form FHWA-1273 are applicable to all federal-aid construction projects and must be made a part of, and physically incorporated into, all contracts, as well as all lower-tier subcontracts.

The LG is not permitted to modify the provisions of <u>Form FHWA-1273</u>. Minor additions covering other requirements may be included in a separate supplemental specification, provided they do not conflict with state or federal laws and regulations and do not change the intent of the required contract provisions.

Other certifications, covering provisions related to certain prohibited boycott and discriminatory actions, and disclosures of public information are required for transportation projects performed in the state of Texas.

Federal Requirements

1. <u>23 CFR §633.102(b)</u> – Requires specific contract provisions to be physically incorporated into all contracts and all lower-tier subcontracts.

- 1. <u>Texas Government Code §809.051</u> Requires a written verification affirming that the contractor does not boycott energy companies.
- 2. <u>Texas Government Code §2271.002</u> Requires a written verification affirming that the contractor does not boycott Israel.

- 3. Texas Government Code, Chapter 552, Subchapter J Requires the disclosure of public information by contractors executing a contract with a governmental body that results in the expenditure of at least \$1 million in public funds.
- 4. <u>Texas Government Code §2274.002</u> Requires TxDOT to verify that a contractor certifies that it does not discriminate against a firearm entity or firearm trade association.

Required Practices

The inclusion of <u>Form FHWA-1273</u> is required on all projects with federal funds and the contract certifications are required on LG projects. The <u>LGPM Guide</u> describes the responsibilities of the LG and TxDOT.

Liquidated Damages

General

Liquidated damages are required as a means of recovering, at a minimum, construction engineering costs from a contractor. Contract time is an essential element of the contract, and it is important the work be monitored closely to ensure completion within the time limits specified in the contract. The cost to the LG for the administration of the contract, including engineering, inspection and supervision, increases as the contract time increases. Likewise, the road user costs also increase as the completion date of the contemplated facility is extended. The liquidated damages contract provision provides a mechanism for the LG to recover these costs associated with the contract time overrun. TxDOT is required to have the LG incorporate liquidated damages provisions into its federal-aid contracts as a condition of the project agreement. The procedures used to determine liquidated damages are described in the LGPM Guide.

Additional guidance may be obtained from TxDOT's <u>Accelerated Construction Strategies</u> Guideline.

Federal Requirements

- 1. <u>23 CFR §635.127</u>
 - a. Requires entities to develop liquidated damage rates for a contract time overrun. At a minimum, the rate should include the average daily cost of construction engineering.
 - b. Allows other costs to be included in liquidated damage rates.
 - c. Allows incentive/disincentive provisions to be included in the contract but must be separate from liquidated damages.
 - d. Every two years the change in liquidated damage rates must be approved or justification must be provided after review that the updated rates are not warranted.

- 1. <u>Texas Transportation Code §223.012</u> Requires TxDOT to develop a schedule of liquidated damages.
- 2. <u>43 TAC §26.33(g)(1)</u> Requires specifications for projects connecting to a state highway administered by a RMA to conform to TxDOT standard specifications (including Article 8.6).
- 3. <u>43 TAC §27.56(c)(3)(A)</u> Requires specifications for projects administered by a RTA to conform to TxDOT standard specifications (including Article 8.6) as a condition of state fund participation.

Required Practices

In general, the LG must follow TxDOT policy on liquidated damages as described in the required practices and LG responsibilities contained in the <u>LGPM Guide</u>.

Lobbying Certification

General

Lobbying is the attempt to influence decisions made by officials in the government, including elected officials and those who work for regulatory agencies. 49 CFR Part 20 prohibits federal funds from being expended to influence or attempt to influence a federal agency or Congress in connection with the award of any federal contract or grant. This prohibition applies to all recipients, including lower-tier subrecipients of a federal contract or grant. The LGPM Guide provides additional information related to the procedures that must be followed by the LG to ensure proper disclosure of lobbying activities.

Federal Requirements

- 1. <u>23 CFR §635.112(g)</u> Requires that:
 - a. the administrating entity must include the lobbying certification in the bid documents (by virtue of putting Form FHWA-1273 into the contract);
 - b. by signing a bid document including <u>Form FHWA-1273</u>, the bidder certifies they meet lobbying requirements of <u>49 CFR Part 20</u>; and
 - c. the prime contractor must include lobbying certification in all lower-tier contracts in excess of \$100,000.
- 2. <u>49 CFR Part 20</u> Places new restrictions on lobbying.
 - a. Requires recipients of federal funds in excess of \$100,000 to file a disclosure form with FHWA.
 - b. Contains details of the certification.

1. <u>Texas Transportation Code §556.0055</u> – Prohibits political subdivision or private entity from using state funds to pay lobbying expenses of the recipient or to pay any entity that must register as a lobbyist with such funds.

Required Practices

In general, the LG must include the lobbying certification in the bid documents and appropriate language must be included in the subcontractors' documents as described in the LGPM Guide.

Local Hiring Preference

General

Some states and local public agencies have implemented policies encouraging or mandating the use of local employment. In such cases, federal-aid contracts may contain specific provisions stating such preferences. Compliance with local preference provisions will not be a condition of responsiveness in the consideration of bids or a condition of responsibility prior to the award of contract. LGs are not allowed to specify on federal-aid contracts a local preference for bidders (including invitations for bids or request-for-proposal documents).

Federal Requirements

- 1. <u>23 CFR §635.117(b)</u> Prohibits including provisions in the contract documents requiring or encouraging a contractor to give preference in hiring on any project including federal funds. Compliance with local preference provisions will not be a condition of responsiveness in the consideration of bids or a condition of responsibility prior to the award of contract.
- 2. "Enhancing Highway Workforce Development Opportunities Contracting Initiative" notice Authorizes a recipient or subrecipient of federal-aid funding to implement a local or other geographical or economic hiring preference relating to the use of labor for construction projects.

State Requirements

1. <u>Texas Transportation Code §223.043</u> – For projects on the state highway system, allows TxDOT to require a citizen of the United States and of the county in which the project is being proposed to be given preference in employment to perform manual labor.

Required Practices

In general, the LG may include local hiring preferences on federal-aid projects and must obtain TxDOT approval for preferences used on other projects as described in the required practices in the LGPM Guide.

Non-resident Bidder and Texas Preference

General

Similar to the requirements described in the "Local Hiring Preference" provisions stated above, federal laws do not allow states to provide a bidding preference for resident bidders for federal-aid contracts.

For state-funded projects, the Legislature enacted a statute regarding non-resident bidders. <u>Texas</u> <u>Government Code</u> §2252.002 states:

"A governmental entity may not award a governmental contract to a non-resident bidder unless the non-resident underbids the lowest bid submitted by a responsible resident bidder by an amount that is not less than the greater of the following: (1) the amount by which a resident bidder would be required to underbid the non-resident bidder to obtain a comparable contract in the state in which the non-resident's principal place of business is located; or (2) the amount by which a resident bidder would be required to underbid the nonresident bidder to obtain a comparable contract in the state in which a majority of the manufacturing relating to the contract will be performed."

TxDOT refers to this law as the "reciprocity requirement." Information about states with bidding preference laws may be obtained from the Texas Comptroller of Public Accounts Office, including a <u>List of States with Resident Bidding Preferences</u>.

Federal Requirements

- 1. <u>23 CFR §635.110(b)</u> Prohibits any procedures prohibiting consideration of a bid by any responsible contractor, whether a resident or non-resident of a state in which the work will be performed.
- 2. <u>23 CFR §635.110(f)(1)</u> Prohibits, for design-build projects, any procedures giving geographical preference in the selection process.

State Requirements

1. Texas Government Code §2252.002 – Prohibits governmental entities from awarding a contract to a non-resident bidder unless the non-resident bidder underbids the lowest resident bidder by a reciprocal percentage.

Required Practices

The LG must follow the requirements of federal and state statutes with respect to state hiring preferences as described in the <u>LGPM Guide</u>.

Material State or Local Preference

General

For projects involving federal funding, the LG may not impose any requirement or enforce any procedure requiring the use, or providing a price differential in favor, of articles or materials produced within a state or other political subdivision. This includes requirements prohibiting,

restricting or discriminating against the use of articles or materials shipped from or prepared, made or produced in any state, territory or possession of the United States. Materials produced within a designated area may not be favored to the exclusion of comparable materials produced outside of the area on federal-aid projects.

For projects with only state and/or local funding, state and local material preferences may apply. State and local preference clauses give particular advantage to the designated source and, thus, restrict competition. However, local and state material preference provisions may not be used on any federal-aid construction projects.

This policy also applies to preference actions against materials of foreign origin, except as otherwise permitted by federal law. The LG may not give preference to in-state material sources over foreign material sources on federal-aid projects. Under the Buy America provisions, the state or LG is permitted to expand the Buy America restrictions provided the state or LG is legally authorized under state law to impose more stringent requirements.

Federal Requirements

- 1. <u>23 CFR §635.409</u> Prohibits any contract provisions requiring the use of or providing a price differential in favor of articles or materials produced within the state.
- 2. <u>23 CFR §635.410</u> Requires all iron and steel products to be of domestic origin. Waivers may be approved by FHWA.

State Requirements

- 1. <u>Texas Government Code §2155.444</u> Requires state agencies to give preference to goods produced in Texas if the cost and quality are equal.
- 2. <u>Texas Government Code §2155.449</u> Requires state agencies to give preference to goods produced in economically depressed or blighted areas if the cost and quality are equal.
- 3. <u>Texas Government Code §2252.002</u> Prohibits governmental entities from awarding a contract to a non-resident bidder unless the non-resident bidder underbids the lowest resident bidder by a reciprocal percentage.
- 4. <u>Texas Transportation Code §223.045</u> Provides that contracts for the state highway system without federal funds must contain the same preference provisions for steel and steel products required under federal law for an improvement made with federal funds.

Required Practices

The LG must comply with state and/or federal statutes, as applicable for the source of funding on a project. The <u>LGPM Guide</u> provides the required practices related to contracting with material state or local preferences.

Materials

General

Materials used in a LG construction project must be clearly defined in the PS&E. Plans and specifications need to describe the types, locations and construction requirements for materials in detail to facilitate the construction, the contract control and the estimation of construction costs of the project. The estimate must reflect the anticipated cost of the project in sufficient detail to provide an initial prediction of the financial obligations to be incurred by the LG, TxDOT or FHWA and to permit an effective review and comparison of the bids received.

Federal Requirements

- 1. <u>23 CFR §630.205</u> Requires the plans and specifications to describe the construction requirements for materials in sufficient detail to facilitate construction.
- 2. <u>23 CFR Part 636 Subpart B</u> Requires solicitations for design-build projects to describe evaluation factors, which may include particular material quality requirements or design performance criteria (i.e., pavement design life).
- 3. <u>23 CFR Part 637 Subpart B</u> Describes a program to determine specification compliance for materials incorporated into the project. See the project requirement "Quality Assurance Program" in <u>Chapter 9 Construction</u> for more details.
- 4. <u>23 CFR §200.216</u> and <u>23 CFR §200.471</u> Describes the prohibition of incorporating services or systems that are produced by named manufacturers, or services or systems that contain components produced by named manufacturers.

- 1. <u>Texas Local Government Code §262.025</u> Requires a notice for receipt of competitive bids must include specifications describing the item to be purchased. This applies to counties.
- 2. <u>Texas Local Government Code §271.025</u> Requires a governmental entity advertising for competitive bids must include information describing the work.
- 3. <u>Texas Government Code §2269.058</u> Requires the LG to provide or contract for material engineering, testing and verification testing for design-build projects that is independent from the design-build firm.
- 4. <u>43 TAC §26.33(g)(1)</u> Requires specifications for projects connecting to a state highway administered by a RMA must conform to TxDOT standard specifications.
- 5. <u>43 TAC §27.56(c)(3)(A)</u> Requires specifications for projects administered by a RTA must conform to TxDOT standard specifications as a condition of state fund participation.
- 6. <u>Texas Transportation Code §221.003(d)</u> Prohibits a county commissioner's court from making improvements to the state highway system until the plans and specifications have been approved by TxDOT.
- 7. <u>Texas Transportation Code §366.185</u> Requires contracts by RTAs must be procured by a competitive bid procedure.

8. <u>Texas Transportation Code §370.306</u> – Requires a RMA using a comprehensive development agreement for procurement to publish the criteria used to evaluate proposals. The criteria may include materials requirements.

Required Practices

In general, the LG must adopt TxDOT's standard specifications for materials or obtain TxDOT approval of alternate specifications. The <u>LGPM Guide</u> provides more detailed required practices for the LG and TxDOT.

Method of Construction (or Method of Bidding)

General

Construction contracts are to be awarded by competitive bid. One of the most basic tenets of federal-aid contracting is that construction contracts are to be awarded competitively to the responsible contractor submitting the lowest responsive bid. This mandate is set forth in <u>23 U.S.C.</u> <u>§112</u> and reinforced by <u>23 CFR §635.114(a)</u>, which requires that:

"Federal-aid contracts shall be awarded only on the basis of the lowest responsive bid submitted by a bidder meeting the criteria of responsibility as may have been established by the STD (TxDOT)..."

The act of a LG negotiating with an apparent low bidder prior to award is defined as "bid rigging in reverse" and is expressly prohibited by 23 CFR §635.113(a).

Alternative Construction Contracting

There may be situations supporting the use of a contracting method other than competitive bidding. Noncompetitive construction contracting or other unusual methods of construction may be approved under one of two conditions:

- 1. the option is proven to be more cost effective; or
- 2. an emergency exists and time is a critical factor.

23 CFR Part 635 Subpart B allows that "rare" circumstances may justify the use of force account, negotiated contract or other unusual method of construction. The regulations clearly indicate, in the absence of an emergency, situation circumstances are unlikely to justify the use of other methods of construction. Therefore, the consideration of any noncompetitive construction contract method requires a cost effectiveness determination as well as an evaluation that demonstrates the circumstances are unusual and unlikely to recur.

A cost effectiveness finding is required for the TxDOT approval of any LG proposal to use a non-competitive method of contracting. <u>23 CFR §635.205</u> cites the following situations as possible reasons for the use of noncompetitive construction contracting.

When the rights or responsibilities of the community are so affected as to require a special
course of action, including situations where there is a lack of competition or unreasonable
bids, it may be determined to be cost effective to use force account.

 When by reason of the inherent nature of the operation, it is deemed cost effective to do minor adjustments of railroad and utility facilities (major work still to be accomplished by competitive bidding) by force account.

Under the first circumstance, the use of force account may be found cost effective when properly documented. Under the second circumstance, FHWA has determined the use of force account is always cost effective and, therefore, no additional documentation is required.

Force account work using LG forces is discussed in 23 CFR Part 635 Subpart B and is defined as:

"...the direct performance of highway construction work by (a LG) by use of labor, equipment, materials, and supplies furnished by them and used under their direct control."

Force account contracts with a private contractor are an exception to normal construction contracting procedures and should rarely be approved.

Circumstances justifying a negotiated construction contract should be even more of an exception, making approvals of such contract methods extremely rare.

Federal Requirements

- 1. <u>23 CFR §635.104</u> Requires construction work to be performed by competitive bids unless some other method is more cost effective or an emergency exists.
- 2. <u>23 U.S.C. §112(b)(3)</u> Allows design-build as an acceptable contracting method for certain "qualified" federally funded projects as defined in the regulation.
- 3. <u>23 CFR Part 636</u> Provides implementing language on design-build contracting.

- 1. <u>Texas Local Government Code §252.021</u> Requires municipalities to use competitive sealed bids for contracts in excess of \$50,000.
- 2. <u>Texas Local Government Code §262.023</u> Requires counties to use competitive bidding procedures for purchases over \$50,000.
- 3. <u>Texas Local Government Code §271.006</u> Requires a municipality to comply with the requirements of Chapter 252 and a county to comply with the requirements of Subchapter C, Chapter 262.
- 4. <u>Texas Government Code §2269.360</u> Requires the LG to select a design-build firm for a design-build project using a combination of technical qualifications and cost.
- 5. <u>Texas Transportation Code §223.201</u> Allows TxDOT to enter into a comprehensive development agreement with a private entity to design, develop, finance, construct, maintain, repair, operate and extend roadways.
- 6. <u>Texas Transportation Code §366.185</u> Requires for contracts let by a RTA to be let by a competitive bidding procedure.

- 7. <u>Texas Transportation Code §370.185</u> Requires for contracts let by a RMA to be let by a competitive bidding procedure.
- 8. <u>Texas Transportation Code §370.302</u> A RMA may negotiate and enter into a "development agreement" with a public or private entity.

Required Practices

The LG must obtain TxDOT approval for its competitive bidding process as described in required practices and responsibilities contained in the <u>LGPM Guide</u>.

Non-collusion Statement

General

The submission of a non-collusion statement protects the integrity of the federal-aid highway program by serving as a deterrent to bid rigging activities. The certification also becomes evidence in prosecuting cases involving construction contract bid rigging. A non-collusion 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 non-responsive and ineligible for award consideration.

The LG must include provisions in the bidding proposals requiring all bidders to include a non-collusion statement with their bids. The FHWA, in consultation with the U.S. Department of Justice, has concluded the non-collusion statement may be either an unsworn declaration made under penalty of perjury under the laws of the United States or a sworn affidavit executed and sworn before a person who is authorized to administer oaths by the laws of the state.

All non-collusion certifications shall be retained by the LG in accordance with the retention policy of <u>2 CFR §200.333</u>. These certifications could serve as important evidence in the event that collusion or bid rigging is discovered at a later date.

Federal Requirements

1. <u>23 CFR §635.112(f)</u> – Requires, for all projects with federal funds, a non-collusion statement from each bidder to be submitted as part of the bid package. If not submitted, the bid is non-responsive.

State Requirements

1. No comparable state statute.

Required Practices

In general, the LG must require all bidders to submit a non-collusion statement with their bid as described in the LGPM Guide.

Non-discrimination against Persons with Disabilities

General

Discrimination on the basis of disability by public entities is prohibited. The prohibition extends to all activities of state and LGs participating in federally assisted programs. There are three federal laws requiring accessible planning, design and construction, and actions to integrate people with disabilities into mainstream society.

- 1. The Americans with Disabilities Act of 1990, 42 U.S.C. Chapter 126 (ADA) prohibits discrimination against people with disabilities in all aspects of life, including transportation, public services, employment, housing, public accommodations, education, communication, recreation and health services, regardless of funding source.
- 2. <u>Section 504 of the Rehabilitation Act of 1973, 29 U.S.C. §794</u> (as amended by the <u>Civil Rights Restoration Act of 1987, 20 U.S.C. Chapter 38</u>) addresses compliance with Federal design standards for accessibility.
- 3. The <u>Architectural Barriers Act of 1968</u> requires access to facilities designed, built, altered or leased with federal funds.

In addition, the <u>Texas Architectural Barriers Act of 1969</u>, as amended, requires each building and facility subject to the Act to be accessible to and functional for persons with disabilities. Subject facilities include facilities used by the public that are constructed, renovated or modified, regardless of funding source. The law requires compliance with the <u>Texas Accessibility</u> <u>Standards</u> and the rules promulgated by the Texas Department of Licensing and Regulation (TDLR) in <u>16 TAC Chapter 68</u>.

The LG must ensure accessibility for individuals with disabilities is provided in the construction of all new transportation facilities. When altering existing transportation facilities, the LG must also ensure the alterations are made in such a way as to provide access and utilization by individuals with disabilities. Additional information related to accessibility requirements and the related responsibilities of the LG and TxDOT during construction are included in Chapter 9 — Construction of the LGPP Manual and LGPM Guide.

Federal Requirements

- 28 CFR Part 35 Nondiscrimination on the Basis of Disability in State and Local Government Services –
 - a. Prohibits discrimination on the basis of disability by public entities.
 - b. Requires the design and construction of new and altered facilities by, on behalf of or for the use of a public entity shall be designed and constructed in such a manner that the facility is readily accessible to and usable by individuals with disabilities.
 - c. Established the <u>Americans with Disabilities Act Accessibility Guidelines for Buildings</u> and <u>Facilities</u> (see also <u>Appendix A to 28 CFR Part 36</u>) as a standard for compliance.

- Departures from particular requirements by the use of other methods shall be permitted when it is clearly evident that equivalent access to the facility is thereby provided.
- d. Requires newly constructed or altered streets, roads and highways must contain curb ramps or other sloped areas at any intersection having curbs or other barriers to entry from a street level pedestrian walkway.
- e. Requires newly constructed or altered street level pedestrian walkways must contain curb ramps or other sloped areas at intersections to streets, roads or highways.
- f. Requires public entities to ensure communications with members of the public with disabilities are as effective as communication with others.
- 2. <u>49 CFR Part 37</u> Prohibits discrimination against an individual with a disability in connection with the provision of transportation services. It also provides requirements for the construction or alteration of transportation facilities by the following entities, whether or not they receive federal financial assistance:
 - a. any public entity providing designated public transportation or intercity or commuter rail transportation;
 - b. any private entity providing specified public transportation; and
 - c. any private entity not primarily engaged in the business of transporting people but operates a demand responsive or fixed route system.

- Texas Government Code, Chapter 469 State law to ensure each building and facility subject
 to this chapter is accessible to and functional for persons with disabilities without causing the
 loss of function, space or facilities. This chapter relates to non-ambulatory and semiambulatory disabilities, sight disabilities, hearing disabilities, disabilities of coordination and
 aging.
 - a. <u>Texas Government Code §469.052</u> Requires TDLR to adopt standards, specifications and other rules under this chapter that are consistent with standards, specifications and other rules adopted under federal law.
 - b. Texas Government Code §469.101 Requires all plans and specifications for the construction of or for the substantial renovation or modification of a building or facility to be submitted to TDLR for review and approval if the building or facility is subject to this chapter and the estimated construction cost is at least \$50,000.
 - c. <u>Texas Government Code §469.105</u> Requires inspection of buildings and facilities covered by the statute by TDLR or registered accessibility specialist.
- 2. <u>Texas Accessibility Standards</u> Sets standards for accessibility to: public buildings and facilities; privately owned buildings and facilities leased or occupied by state agencies; places of public accommodation; and commercial facilities by individuals with disabilities. Subject buildings and facilities are addressed in more detail in <u>16 TAC §68.20</u>. These standards are to

be applied during the design, construction and alteration of such buildings and facilities to the extent required by regulations issued by TDLR.

- 3. <u>16 TAC §68.31</u> Establishes a variance procedure to address requests to waive or modify an accessibility standard.
- 4. <u>16 TAC §68.102</u> Updates rules applicable to projects within the public right of way. Estimated cost of construction is based on the pedestrian elements only. Clarifies specific issues related to sidewalks, curb ramps and handrail.
- 5. <u>Texas Occupations Code §1001.452(5)</u> Provides that a licensed engineer is subject to disciplinary action under <u>Texas Occupations Code §1001.451</u> for a failure to timely provide plans or specifications to TDLR.

Required Practices

In general, the LG (with oversight by TxDOT) must ensure all new and existing transportation facilities comply with the provisions of state and federal statutes. The required practices and responsibilities of each entity are described in the LGPM Guide.

Non-responsive Bid

General

A non-responsive bid is deemed not to meet all of the written requirements of the advertisement and proposal. The subject of a non-responsive bid is briefly discussed Chapter 8 – Letting and Award in the "Bid Opening and Tabulation" sub-section. A list of reasons for a bid to be considered non-responsive must be included in the bid document in conjunction with 23 CFR §635.112(h). The reasons must be clearly defined and may not be subject to the discretion of the LG. The FHWA has stressed the use of potential subjective reasons must be eliminated – the bid is either responsive or non-responsive.

The LG must follow federal and state guidelines when determining the reasons for not accepting a bid. FHWA has determined the reasons for a bid being non-responsive listed in the proposal cannot be "waived." Therefore, common provisions allowing a LG to waive technicalities determined to be in its best interest cannot be invoked regarding a non-responsive bid.

Federal Requirements

1. <u>23 CFR §635.112(h)</u> – Requires bid documents to contain requirements with which a bidder must comply to make the bid responsive. Failure to comply with these requirements makes the bid non-responsive and not eligible for award.

State Requirements

1. <u>Texas Local Government Code §271.0245</u> – Requires a county to provide all bidders with the opportunity to bid on the same items on equal terms and have bids judged according to the same standards as set forth in the specifications.

- 2. <u>43 TAC §26.33(g)(1)</u> Requires specifications for projects connecting to a state highway administered by a RMA to conform to TxDOT standard specifications.
- 3. <u>43 TAC §27.56(c)(3)(A)</u> Requires specifications for projects administered by a RTA to conform to TxDOT standard specifications as a condition of state fund participation.
- 4. <u>Texas Transportation Code §370.306(c)</u> Requires a RMA must include criteria used to evaluate proposals in the request for proposals for projects acquired by comprehensive development agreement.

Required Practices

In general, the LG must follow state and federal guidelines. The <u>LGPM Guide</u> describes the required practices and LG and TxDOT responsibilities for determining a non-responsive bid.

Non-segregated Facilities

General

For projects with federal funds, federal law does not allow the contractor to discriminate against any person by having segregated facilities. By entering into the contract, the contractor certifies he maintains non-segregated facilities conforming to the requirements of 41 CFR §60.1.8. This certification is included in Form FHWA-1273. The prime contractor is required to obtain a similar certification from each subcontractor and supplier, as applicable.

One exception to the non-segregated facilities provision is for the disabled when the demands for accessibility override the need to non-segregate (e.g., disabled parking). In addition, single-user or separate bathrooms or dressing facilities are also allowable for privacy purposes.

Federal Requirements

- 1. <u>23 CFR Part 633 Subpart A</u> Requires contractors and subcontractors to certify they do not discriminate by providing segregated facilities or prohibiting minorities access to facilities. Does not prohibit providing access to the disabled and single-user or separate bathrooms or dressing facilities for privacy.
- 2. <u>41 CFR §60.1.8</u> Provides the basis for the non-segregated facilities certification.

State Requirements

1. No comparable statutes.

Required Practices

In general, the LG must comply with the federal statutes related to non-segregated facilities on all projects with federal funds using procedures described in the LGPM Guide.

Patented/Proprietary Products

General

A "proprietary" purchase is the acquisition of a product or service that limits competition to one manufacturer or vendor and does not allow an equivalent product to be supplied. Prior to October 28, 2019, federal funds would not participate in a premium or royalty on any patented or proprietary product. However, this regulation was revised per FHWA Guidance to provide that project sponsors may procure patented or proprietary products, and will no longer be required to provide certifications, request public interest findings (PIFs), or develop research or experimental work plans.

The LG should provide notification to TxDOT with the proposed PS&E if it intends to specify patented or proprietary products in a contract. The primary purpose of the policy is to allow TxDOT an opportunity to ensure compatibility with existing systems and specifications.

Federal Requirements

 No federal statutes currently restrict the specification for use of patented or proprietary products, as provided by <u>FHWA guidance</u> discussing the revisions to <u>23 CFR §635.411</u>.

State Requirements

1. <u>Texas Government Code §2155.067</u> – Requires a written justification to be provided to the Texas Facilities Commission for products proprietary to one vendor and procured through the Comptroller.

Required Practices

A LG may not specify the use of proprietary products in its contracts without prior notification to TxDOT as described in the LGPM Guide.

Prequalification

General

The LG may include provisions for prequalification in invitations for receipt of bids. The American Association of State Highway and Transportation Officials (AASHTO) defines prequalification as a means of predetermining job experience and work capacity and to identify individuals and organizations from whom the agency may accept a bid. AASHTO has also encouraged the use of prequalification procedures in its 1981 Suggested Guidelines for Strengthening Bidding and Contract Procedures. The process used for prequalification is described in the LGPM Guide.

Although the LG may have a compelling reason (e.g., state or local law) to utilize a procedure differing from acceptable federal-aid practice, the procedure may not be applied to a federal-aid project. 23 CFR §635.112(d) specifically requires the LG to inform bidders of contract provisions not applying to federal-aid projects. This information must be included in the advertisement, specifications, special provisions or other governing documents as appropriate.

Federal Requirements

- 1. 23 CFR §635.110 Contains the following provisions for design-bid-build projects.
 - a. Cannot include any procedure or requirement that may operate to restrict competition or provide in-state preference.
 - b. Cannot require a contractor to be licensed before submitting a bid or before consideration of a bid. However, an entity may require the bidder to have various technical licenses (master electrician, etc.) if the requirement is consistent with competitive bidding practices, i.e. it is applied uniformly to all contractors.
- 2. $\underline{23}$ CFR $\underline{\$635.110(f)(1)}$ Contains the following provisions for design-build projects.
 - a. Geographic location of a firm's office may not be part of the selection criteria.
 - b. Can require the successful design bidder to establish a local office after the award of contract.

State Requirements

- 43 TAC §9.12 Requires potential bidders to be prequalified by TxDOT as a condition of submitting a bid. Includes waiver provisions for small projects, maintenance projects and specialty projects.
- 2. <u>Texas Government Code §2269.357</u> Requires the LG to solicit qualifications outlined in this section for design build projects.

Required Practices

In general, the LG must require bidders to be prequalified by TxDOT on all projects on the state highway system. The <u>LGPM Guide</u> describes the required practices and includes the types of projects requiring prequalification.

Prevailing Minimum Wage (Davis-Bacon Act)

General

The payment of predetermined minimum wages for certain job classifications used on federal-aid contracts is derived from the Davis-Bacon Act of 1931 (40 U.S.C. §3141 et seq.) and is prescribed by 23 U.S.C. §113. The Davis-Bacon Act requires the payment of locally prevailing wages and fringe benefits to laborers and mechanics employed on federal contracts in excess of \$2,000 for construction, alteration or repair (including painting and decorating) of public buildings or public works. Davis-Bacon was enacted as a means to prevent contractors from importing cheap labor from outside the area; thereby, keeping capital at home with the local labor force where it would do the most good. Davis-Bacon provisions are covered in Form FHWA-1273. The procedures that must be followed to comply with the Davis-Bacon provisions are described in the LGPM Guide.

Applicability of Davis-Bacon - Site of Work

The Davis-Bacon Act limits coverage to laborers and mechanics "employed directly upon the site of the work." Since 1972, the U.S. Department of Labor (USDOL) and the courts have been addressing various aspects of the applicability of Davis-Bacon requirements to site-of-work facilities.

USDOL's implementing regulation, <u>29 CFR §5.2(1)(2)</u>, extends coverage to off-site facilities dedicated exclusively and in proximity to the actual construction site.

29 CFR §5.2 (l)(1) states:

"The site of the work is the physical place or places where the building or work called for in the contract will remain; and any other site where a significant portion of the building or work is constructed, provided that such site is established specifically for the performance of the contract or project ..."

The <u>LGPM Guide</u> provides examples and additional guidance on the applicability of Davis-Bacon Act to the site of work. USDOL has made the determination that when transportation will take place in more than one wage determination area, the applicable wage determination will be the wage determination for the area in which the construction will remain when completed. This determination will apply to all bidders, regardless of where they propose to construct significant portions of the project.

FHWA has taken the position that since this is the USDOL's program, it is inappropriate for FHWA to provide guidance in this area. FHWA encourages LGs to work jointly with TxDOT, the FHWA division office and the DOL regional offices to resolve "site of work" issues.

Applicability of Davis-Bacon to Specific Work Types

The <u>LGPM Guide</u> provides a detailed discussion of the applicability of the Davis-Bacon Act to specific work types. Additional discussion on specific work types can be found in the <u>DOL's Field</u> Operations Handbook.

Federal Requirement

- 1. <u>23 U.S.C. §113</u> Requires laborers and mechanics to be paid wages at rates not less than those prevailing on the same type of work on similar construction in the immediate locality as determined by the Secretary of Labor. This provision applies to all projects with federal funds on roadways functionally classified above a rural minor collector.
- 2. <u>40 U.S.C. §3141et seq.</u> Davis-Bacon Act of 1931
- 3. <u>18 U.S.C. §874</u> (Copeland Act) Protects workers from paying "kickbacks" to employers for the "privilege" of being employed.
- 4. <u>23 CFR §633.102</u> Requires <u>Form FHWA-1273</u> to be included in all construction contracts that have federal funds.
- 5. <u>23 CFR §635.309(f)</u> Provides that minimum wage rates determined by the USDOL in accordance with the provisions of <u>23 U.S.C. §113</u> are in effect and will not expire before the end of the period within which it can reasonably be expected the contract will be awarded.

- 6. <u>23 CFR §636.119</u> Requires projects developed under a public-private partnership to comply with all non-procurement provisions of <u>Title 23 U.S.C.</u>
- 7. 29 CFR Parts <u>1</u>, <u>2</u> and <u>5</u> Provides procedures for predetermination of wage rates, Copeland Act and enforcement provisions.

State Requirement

- 1. <u>Texas Government Code §2258.021</u> Requires a worker employed on a public work by or on behalf of the state or a political subdivision of the state shall be paid:
 - a. not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the work is performed; and
 - b. not less than the general prevailing rate of per diem wages for legal holiday and overtime work.
- 2. <u>Texas Government Code §2258.022(a)</u> Requires the public body to determine the general prevailing rate of per diem wages in the locality in which the public work is to be performed for each craft or type of worker needed to execute the contract and the prevailing rate for legal holiday and overtime work.
- 3. <u>Texas Government Code §2258.023</u> Provides for penalties assessed a contractor or subcontractor who violates the statute.
- 4. <u>Texas Government Code §2258.024</u> Specifies records to be maintained by the contractor and subcontractor.
- 5. <u>Texas Government Code Chapter 2258, Subchapter C</u> Describes enforcement actions for violations of the statute.

Required Practices

The LG must use accepted wage rates (approved by TxDOT) complying with the provisions of the Davis-Bacon Act. The <u>LGPM Guide</u> provides the required practices and responsibilities of the LG and TxDOT for compliance with the Act.

Prison-Produced Materials

General

Prison-produced materials are products made by convict labor. There are limitations on using materials produced by convict labor in a federal-aid highway project. Materials produced after July 1, 1991, by convict labor may only be incorporated in a federal-aid highway construction project if:

1. such materials have been produced by convicts who are on parole, supervised release or probation from a prison; or

2. Such material has been produced in a qualified prison facility (Texas does not have a qualified prison facility meeting the requirements of the regulation).

Federal Requirements

 23 CFR §635.417 – Prohibits the use of materials produced in a prison facility or by prison labor on federally funded projects for roadways functionally classified above a rural minor collector.

State Requirements

1. No comparable state statute.

Required Practices

The LG must follow the federal statute using the required practices described in the LGPM Guide.

Publicly Owned Equipment

General

Publicly owned equipment is defined as "... equipment previously purchased or otherwise acquired by the public agency involved for use in its own operations." Publicly owned equipment should not normally compete with privately owned equipment on a contracted project. However, in exceptional cases, the use of publicly owned equipment may be justified if the LG can show it is clearly cost effective. When supported by a public interest finding, TxDOT may approve the LG's proposal to use publicly owned equipment. The <u>LGPM Guide</u> describes the procedures that must be followed in order to use publicly owned equipment.

Federal Requirements

1. <u>23 CFR §635.106</u> – Prohibits publicly owned equipment from competing with privately owned equipment on a project to be let to contract. There are limited exceptions when justified in writing as being in the public interest.

State Requirements

1. No comparable statute.

Required Practices

The LG may only use publicly owned equipment when supported by a public interest finding approved by TxDOT. The LG must follow the required practices as described in the <u>LGPM Guide</u>.

Railroad Insurance Provision

General

Contractors are required to purchase railroad protective liability insurance when work under the contract is located in whole or in part within railroad right of way. The insurance is for the benefit of the railroad. The requirement to provide the insurance is located at 23 CFR §646.107. The standards for railroad protective insurance established at 23 CFR §646.109 and §646.111 must be adhered to the extent permitted by the insurance laws of the state. The types and amounts of coverage are described in the LGPM Guide.

Federal Requirements

1. <u>23 CFR Part 646</u> – Requires a construction contractor to carry public liability and property damage insurance when working on railroad right of way. <u>23 CFR §646.109</u> prescribes the types of coverage, and <u>23 CFR §646.111</u> provides the amounts of coverage required.

State Requirements

1. No comparable statutes.

Required Practices

The LG must follow the requirements of the federal statute when a project is located in whole or in part within a railroad right of way. The required practices and responsibilities are included in the LGPM Guide.

Retainage

General

Retainage is a portion of the construction contract fee that is withheld until the LG is satisfied the work is substantially complete. Section §2252.032 of the Texas Government Code allows up to 10 percent of the contract price to be retained depending on the contract value. However, federal concerns over prompt pay (49 CFR §26.29) for subcontractors require that one of three options be used if federal funds are utilized. These options are described in the LGPM Guide.

Federal Requirements

- 1. While there is no federal statute addressing retainage, FHWA policy allows recipients of federal funds to set retention rates from progress payments to protect the federal interest.
- 2. 49 CFR §26.29 Establishes a contract clause, as part of the DBE program, to require prime contractors to pay all subcontractors for satisfactory performance of their contracts no later than 30 days (changed to 10 days by Texas Government Code §2251.022) from receipt of each payment made by the LG to the prime contractor. Retainage may only be withheld if the contract provides for incremental acceptance of work with retainage paid to the prime contractor based on this partial acceptance. The prime must then pay all retainage to the subcontractor within 30 days (changed to 10 days by Texas Government Code §2251.022) after the prime contractor receives payment for satisfactory completion of the accepted work.

- 1. <u>43 TAC §26.33(g)(1)</u> Requires a RMA to use specifications that conform to the latest TxDOT standard specifications on projects connecting with the state highway system.
- 2. <u>43 TAC §27.56(c)(3)</u> Requires a RTA to use specifications that conform to the latest TxDOT standard specifications on projects with state fund participation.
- 3. <u>Texas Government Code §2251.022</u> Requires a vendor receiving payment from a governmental entity to pay a subcontractor the appropriate share of the payment not later than 10 days from payment to the vendor.
- 4. Texas Government Code §§2252.032-033 Provides that a governmental entity may deposit retainage in an interest-bearing account for contracts with a value exceeding \$400,000 but less than \$5 million and have a retainage clause of more than 5 percent. The interest must be paid to the contractor. Contracts over \$5 million in contract value cannot provide for retainage in excess of 5 percent. Allows partial payments to a contractor if the contract includes such provisions.

Required Practices

The LG may or may not hold a retainage but must follow state and federal guidelines as described in the required practices in the <u>LGPM Guide</u>.

Safety

General

The FHWA is required by law to ensure compliance with construction safety standards. The <u>LGPM Guide</u> describes the sections of <u>Form FHWA-1273</u> that relate to safety. The LG has enforcement responsibilities of any applicable state standards. In addition, the LG should cooperate with and alert other responsible agencies regarding violations and provide full cooperation and assistance as required.

Federal Requirement

- 1. <u>23 CFR §635.108</u> Requires contracts to include provisions to ensure full compliance with all applicable federal, state and local laws governing safety, health and sanitation and to require the contractor to provide all safeguards, safety devices and protective equipment. This is implemented in Section VII of Form FHWA-1273.
- 2. <u>29 U.S.C. Chapter 15</u> Describes the establishment and implementation of standards employers are to follow for the safety of their employees.
- 3. 29 CFR Part 1910 and Part 1926 Contains health and safety standards for construction.

- 1. Texas Labor Code §411.103 Requires employers to:
 - a. provide and maintain employment and a place of employment that is reasonably safe and healthful for employees;

- b. install, maintain and use methods, processes, devices and safeguards, including methods of sanitation and hygiene, that are reasonably necessary to protect the life, health and safety of the employer's employees; and
- c. take all other actions reasonably necessary to make the employment and place of employment safe.

Required Practices

The LG (with oversight by TxDOT) must comply with state and federal safety standards as described in the LGPM Guide.

Subcontracting

General

Federal regulations impose limitations on the amount of work than can be subcontracted. This provision prohibits a prime contractor from "brokering" (subletting all contract work). Subcontracting limitations are included in Form FHWA-1273 and described in the LGPM Guide.

FHWA requires each subcontract to be approved in writing by the LG. This allows some control to screen subcontractors that are not qualified or that may be ineligible (e.g., debarred). It also assures all federal and state requirements will be included in the subcontract. In order to reduce the amount of paper flow, the FHWA division administrator may permit the LG to satisfy the subcontract approval requirement by instituting a certification process. This process must require the contractor to certify that each subcontract arrangement will be in the form of a written agreement containing all the pertinent provisions and requirements of the prime contract. The LG must demonstrate it has an acceptable plan for monitoring such a certification.

Employee Lease Agreements

Employee lease agreements are typically not considered a subcontract and are not subject to the 30 percent subcontract limitation. Employee lease arrangements are acceptable for federal-aid projects if the leased employees are under the direct supervision and control of the contractor's superintendent and/or supervisor. The requirements for leased employees are included in the <u>LGPM Guide</u>.

Federal Requirements

- 1. <u>23 CFR Part 633</u> Requires contractors to include <u>Form FHWA-1273</u> in all subcontracts.
- 2. <u>23 CFR §635.116</u> Requires that:
 - a. contractors must perform at least 30 percent of the work on a contract; and
 - b. subcontractors are not allowed to perform work on a project until the subcontract has been approved in writing by the contracting entity.
- 3. 23 CFR §635.116(d) Applies to design-build contracts.

- a. The contracting entity may establish a percentage of work that must be performed by the design-builder. The 30 percent limitation does not apply.
- b. The only goals that may be prescribed are those relating to the DBE program.

State Requirements

- 1. <u>43 TAC §26.33(g)(1)</u> Requires a RMA to use specifications conforming to the latest TxDOT standard specifications on projects connecting with the state highway system.
- 2. <u>43 TAC §27.56(c)(3)</u> Requires a RTA to use specifications conforming to the latest TxDOT standard specifications on projects with state fund participation.
- 3. <u>Texas Government Code Chapter 2269</u>, <u>Subchapter H</u> Allows a local governmental entity to use the design-build method for the construction, rehabilitation, alteration or repair of a civil works project.

Required Practices

The LG must follow state and federal guidelines related to subcontracting as described in the required practices outlined in the LGPM Guide.

Termination of Contract

General

Termination is an action taken by the contracting agency to cancel a contract. Federal-aid contracts exceeding \$10,000 must contain suitable provisions for termination by the LG. The provisions must identify the manner by which the termination will be effected and the basis for settlement. There may be a number of grounds to warrant termination, including termination for cause, termination for convenience and termination for default.

Prior to termination of a federal-aid contract for which TxDOT concurred in the award, the LG shall consult with and receive the concurrence of TxDOT. Federal-aid participation in a terminated contract is decided by the individual merits of the particular case. However, in no instance will federal funds participate in any allowance for anticipated profits on work not performed.

If the LG awards a contract for completion of a federal-aid contract previously terminated for default, FHWA policy limits the amount eligible for federal participation. The amount eligible is the lesser of the original contract or the sum of the new contract plus the payments made under the original contract. The LGPM Guide provides a description of Termination for Cause or Convenience and Termination for Default and additional information related to notice to contractor and surety of default considerations.

Federal Requirements

1. <u>23 CFR §635.125</u> – Requires contracts exceeding \$10,000 to contain provisions for termination of a contract, including the manner by which the termination will be effected and the basis for settlement. In addition, such contracts must describe conditions where 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.

2. <u>23 CFR §635.125(b)</u> – Requires prior concurrence by FHWA for termination of a federal-aid contract.

State Requirements

- 1. <u>43 TAC</u>, §26.33(g)(1) Requires a RMA to use specifications conforming to the latest TxDOT standard specifications on projects connecting with the state highway system.
- 2. <u>43 TAC</u>, §27.56(c)(3) Requires a RTA to use specifications conforming to the latest TxDOT standard specifications on projects with state fund participation.

Required Practices

The LG must include termination language in the contract in conformance with state and federal statutes. The <u>LGPM Guide</u> describes the required practices and responsibilities of the LG and TxDOT.

Time Extensions

General

Contract time extensions granted by a LG that affect project costs or liquidated damages shall be subject to the concurrence of TxDOT and will be considered in determining the amount of federal participation. Details regarding specific time extensions that must be followed and properly documented are found in Chapter 9 Construction of the <u>LGPM Guide</u>.

Federal Requirements

 23 CFR §635.121 – Provides that time extensions for federal-aid projects are subject to approval by the FHWA and will be considered in determining the extent of federal participation.

State Requirements

1. No comparable state statutes.

Required Practices

The LG must have TxDOT approval of time extensions as described in the LGPM Guide.

Title VI Compliance

General

<u>Title VI of the Civil Rights Act of 1964</u> is the federal law that states "no person in the United States shall, on the grounds of race, color, or national origin be excluded from participation in, be

denied the benefits of, or be otherwise subjected to discrimination under any program to which this part applies." Additional regulations and statutes broadened non-discrimination to include religion, sex, age, retaliation and disability.

The two main authorities enabling Title VI implementation, compliance and enforcement are the <u>Civil Rights Act of 1964</u> and the <u>Civil Rights Restoration Act of 1987</u>. Various other statutes, laws and regulations, executive orders and the U.S. Constitution provide guidance for the effective execution of the objectives of Title VI. These include, but are not limited to the:

- Federal-Aid Highway Act of 1973, 23 U.S.C. Chapter 1;
- Section 504 of the Rehabilitation Act of 1973, 29 U.S.C. §794;
- Americans with Disabilities Act of 1990, 42 U.S.C. Chapter 126;
- Age Discrimination Act of 1975, 42 U.S.C. §§6101-6107;
- Executive Order 12898 Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations; and
- Executive Order 13166 Improving Access to Services For Persons With Limited English Proficiency.

Pursuant to <u>Title VI of the Civil Rights Act of 1964</u>, as amended, the <u>Restoration Act of 1987</u> and other nondiscrimination authorities, it is the policy of TxDOT that discrimination based on race, color, national origin, sex, age or disability shall not occur in connection with any of its programs or activities. Any recipient or sub-recipient receiving federal financial assistance shall adopt this assurance or provide one in accordance with <u>49 CFR §21.7</u> and follow all applicable laws, regulations and guidance including <u>49 CFR Part 21</u> and <u>23 CFR Part 200</u>.

Federal Requirements

- 1. <u>49 CFR Part 21 Nondiscrimination in Federally-Assisted Programs of the Department of Transportation</u>
- 2. <u>23 CFR Part 200 Title VI Program and Related Statutes Implementation and Review Procedures</u>

State Requirements

1. 43 TAC §9.4 – Civil Rights - Title VI Compliance

Required Practices

In general, the LG may not discriminate and must comply with all applicable state and federal laws. The <u>LGPM Guide</u> provides a listing of the required practices and responsibilities of the LG and TxDOT to ensure compliance with Title VI.

Trench Safety

General

Provisions of the Occupational Safety and Health Administration (OSHA) apply to all federal, state and LG projects. According to OSHA, dozens of people are killed each year and hundreds are injured in trenches on construction sites. The <u>LGPM Guide</u> describes trench safety requirements established by OSHA. To assure trench safety receives the attention it deserves, <u>Texas Health and Safety Code</u>, <u>Chapter 756 Subchapter C</u> outlines several construction project requirements. Additional guidance can also be found in <u>Section 6.4 of TxDOT's Geotechnical Manual</u>.

Federal Requirements

1. <u>29 CFR Part 1926 Subpart P</u> – Sets forth specific excavation requirements and requirements for protective systems established by OSHA to be utilized in excavation and trenching on construction projects involving open excavations.

State Requirements

- 1. <u>Texas Health and Safety Code §756.022</u> Trench Excavation in State Requires any bid documents (if bid documents are used) and the construction contract to contain the following provisions for any trench excavation exceeding a depth of five feet:
 - a. a reference to OSHA standards for trench safety;
 - b. a copy of special shoring requirements, if any, of the state or of a political subdivision in which the construction project is located, with a separate pay item for the special shoring requirements;
 - c. a copy of any geotechnical information obtained by the LG for use in the design of the trench safety system; and
 - d. a separate pay item for trench excavation safety protection.
- 2. <u>Texas Health and Safety Code §756.023 Trench Excavation for Political Subdivision</u> Requires the same bid and contract provisions as <u>Texas Health and Safety Code §756.022</u> plus additional requirements for cities and counties. The political subdivisions are required to have pay item for trench excavation safety protection and must be based on the linear feet of trench excavated or square foot of shoring used.

Required Practices

The LG's contractor must follow trench safety guidelines for all projects as described in the required practices in the LGPM Guide.

Warranties and Warranty Clauses

General

With certain limitations, warranties may be specified for LG construction projects. Prior to 1991, the FHWA had a longstanding policy restricting the use of warranties on federal-aid projects to electrical and mechanical equipment. The rationale for the restriction was that such contract

requirements may indirectly result in federal-aid funds participating in maintenance costs. The use of federal-aid funds for routine maintenance is prohibited by law.

<u>23 CFR §635.413</u> addresses warranties related to projects on the national highway system (NHS). The regulation states warranty provisions shall be for a specific construction product or feature. Routine maintenance items are still ineligible.

The LG may include warranty provisions in NHS construction contracts in accordance with the guidelines listed in the LGPM Guide.

Federal Requirements

- 1. <u>23 CFR §635.413</u> Allows the use of warranty provisions for a specific product or feature for projects on the NHS. Warranties for the entire project are not acceptable. Contractors may not be required to warrant items over which they do not have control.
- 2. <u>23 CFR §635.413(e)</u> Allows for certain regulatory changes for design-build projects on the NHS, as appropriate.
 - a. General project warranties may be used with limitations.
 - b. Contracting entities may allow proposers to submit alternate warranty proposals for determination of best value.

State Requirements

1. No comparable state statute.

Required Practices

In general, the LG must submit warranty procedures to TxDOT for approval. The <u>LGPM</u> <u>Guide</u> provides required practices and responsibilities.

Workers' Compensation Insurance

General

The state of Texas requires contractors and subcontractors performing on a building or construction to contract with a governmental entity provide workers' compensation insurance coverage for each individual employed on the public project.

Federal Requirement

1. No provision

State Requirement

 Texas Labor Code §406.096 – Provides that a governmental entity entering into a building or construction contract shall require the contractor to certify in writing that the contractor provides workers' compensation insurance coverage for each employee of the contractor employed on the public project.

Required Practices

In general, the LG must require the contractor to provide certification of the workers' compensation insurance coverage as described in the <u>LGPM Guide</u>.

Chapter 8: Letting and Award

Contents:

Section 1: Introduction

Section 2: Letting

Section 3: Contract Award

Section 1: Introduction

The Contracting phase of a project involving a local government (LG) and the Texas Department of Transportation (TxDOT) includes three stages: bid document preparation; letting and award; and contract execution. The first stage (bid document preparation) is included in Chapter 7 – Plans, Specifications & Estimates (PS&E) Development. The second stage (letting and award) is included in this chapter. The last stage (contract execution) is included at the beginning of Chapter 9 – Construction. The tasks associated with the letting and award are described in detail with references to two types of procurement: design-bid-build; and design-build.

Before a transportation project can be placed under contract, the contracting agency must "let" it, or make the project available for bidding. Letting involves the request for a submission of bids through a public advertisement, the receipt of bids and the selection of the most responsive bid using a competitive selection process based on qualifications, best value, experience or any other factors included by the LG or required by TxDOT or federal funding requirements. When stated in the advance funding agreement (AFA), the LG is responsible for the letting process for local projects, although TxDOT maintains oversight for projects involving state or federal funding. A well-planned and executed bidding process allows the LG and TxDOT to get the most competitive price and allows businesses to compete fairly for business.

Chapter 4 – Preliminary Engineering and Design describes the process for preparing and obtaining TxDOT approval of the procurement procedures. Chapter 7 – Plans, Specifications and Estimates (PS&E) Development outlines the procedures for preparing and obtaining TxDOT approval for the PS&E and bid documents. The LG must follow the approved procedures, submit the local funds to TxDOT for costs to be incurred by TxDOT for oversight (as required by the AFA) and obtain TxDOT approval prior to beginning the Letting phase (advertising) and Construction phase (contract execution) of the project. This chapter of the Local Government Projects Policy Manual and Local Government Project Management Guide describe the responsibilities of the LG and TxDOT during the letting phase of the project.

Section 2: Letting

Overview

This section addresses the steps needed for letting the project, starting with the TxDOT approval to proceed, as provided in the state letter of authority (SLOA), and ending with the bid analysis.

State Letter of Authority

As described in Chapter 4 – Preliminary Engineering and Design, a SLOA is required for a local government (LG) let construction project prior to initiating the Letting phase. The SLOA from TxDOT to the LG functions as the Notice to Proceed with the Letting phase and must be signed and dated prior to advertisement of the project. For projects where the LG is performing construction by force account, the SLOA must be signed and dated prior to commencement of construction by the LG's forces. Federal-aid projects require a federal project authorization and agreement (FPAA) in addition to the SLOA.

Advertising

General

An advertisement is the public announcement to invite bids for work to be performed or materials to be furnished. The <u>Local Government Project Management Guide</u> (LGPM Guide) contains detailed information on the process to be used by the LG for advertisement of the project.

LGs may only advertise a project after receiving TxDOT approval of the plans, specifications and estimates (PS&E) package and the execution of a SLOA and FPAA, if applicable. Refer to Chapter 4 - Preliminary Engineering and Design for information about the SLOA.

The LG's advertising policy and practices must assure free and open competition. The policy should address issues concerning licensing, bonding, prequalification and bidding, as well as the announcement itself in relation to <u>Title VI of the Civil Rights Act of 1964</u>, as amended, regarding nondiscrimination with regard to age, race, religion, color, sex, national origin, disability, etc. More information on equal employment opportunity and Title VI compliance is included in <u>Chapter 7</u>.

On federal-aid projects, the minimum advertisement period is three weeks (21 days). With prior approval by TxDOT, exceptions are permitted when circumstances warrant (an emergency situation when an accelerated procurement is required to prevent the threat to life, health, safety and the welfare of property, or to avoid undue additional cost). For large or complex projects, the LG should consider an advertisement period longer than three weeks to permit prospective bidders adequate time to prepare a responsive bid proposal. Scheduling a pre-bid meeting to address prospective contractors' concerns and questions may be appropriate but is not required by state or federal regulations.

Federal Requirement

- 1. <u>23 CFR §635.112</u> Contains the following requirements:
 - a. projects may not be advertised for receipt of bids until after a FPAA is issued by FHWA [23 CFR §635.112(a)];
 - b. the advertisement and the approved PS&E must be available for a minimum of three weeks before bid opening [23 CFR §635.112(b)]; and
 - c. for design-build projects, FHWA's approval of the request for proposals has the same significance as PS&E approval [23 CFR §635.112(i)(1)].
- 2. Federal and state regulations may differ, but federal regulations take precedence on projects receiving federal funds.

State Requirement

- 1. Texas Local Government Code §252.041 (municipalities) Requires a municipality to publish the advertisement at least once a week for two consecutive weeks in a newspaper published in the municipality. The date of the first publication must be prior to the 14th day before the date set to publicly open the bids and read them aloud. If no newspaper is published in the municipality, the notice must be posted at the city hall for 14 days before the date set to publicly open the bids and read them aloud.
- 2. Texas Local Government Code §262.025 (counties) —Requires a county to publish an advertisement at least once a week for two consecutive weeks in a newspaper of general circulation in the county, with the first day of publication occurring prior to the 14th day before the date of the bid opening. If there is no newspaper of general circulation in the county, the notice must be posted in a prominent place in the courthouse for 14 days before the date of the bid opening.
- 3. <u>Texas Local Government Code §271.025</u> (municipalities, counties and other LGs) Requires governmental entities to advertise for bids. If no legal requirement for publication exists, the advertisement must be published at least twice in one or more newspapers of general circulation in the county or counties where the work is to be performed. The second publication must be on or before the 10th day before the first date bids may be submitted.
- 4. <u>Texas Local Government Code §271.908(d)(3)</u> Requires design-build projects to be advertised, including the time and place of bid opening, according to any manner prescribed by law.
- 5. <u>Texas Government Code §2155.083</u> Requires procurements of more than \$25,000 by all state agencies to be placed on the Comptroller's Electronic State Business Daily website for a minimum of 21 days prior to bid opening.
- 6. <u>Texas Transportation Code §366.185(b)</u> Requires regional tollway authorities (RTAs) to adopt rules governing the award of contracts through competitive bidding.
- 7. <u>Texas Transportation Code §370.184</u> Requires regional mobility authorities (RMAs) to adopt rules governing the award of contracts.

Required Practices

The <u>LGPM Guide</u> provides additional information on the required practices to be followed by the LG and TxDOT during the advertising of a LG project.

Distribution of Bid Documents

General

For projects with federal funds, the advertisement and approved plans and specifications must be available to bidders a minimum of three weeks prior to opening of bids in accordance with <u>23 CFR §635.112</u>. Shorter periods may be approved by TxDOT in special cases when justified. State requirements must be followed for projects with state or local funds with no federal funds.

Federal Requirement

- 1. 23 CFR §635.112(b) For design-bid-build projects:
 - a. requires bid documents must be made available to bidders a minimum of three weeks before bid opening; and
 - b. allows for approval of shorter periods in special cases where justified.
- 2. <u>23 CFR §635.112(i)</u> For design-build projects:
 - a. provides that FHWA's approval of the request for proposals constitutes approval to release the document; and
 - b. allows the administering entity to determine the appropriate distribution schedule.

State Requirement

- 1. <u>Texas Local Government Code §262.025</u> (counties) Requires the advertisement to include a statement regarding where specifications may be obtained.
- 2. <u>Texas Local Government Code §271.025</u> (municipalities, counties and other LGs) Requires the advertisement to state the location where bid documents may be examined.
- 3. Texas Local Government Code §271.908(d)(3) Allows design-build projects to be advertised, including the time and place of bid opening, according to any manner prescribed by law.
- 4. <u>43 TAC §9.13</u> Requires TxDOT to give bid documents to bidders meeting prequalification requirements on request of the bidder.
- 5. <u>Texas Government Code §2155.083</u> (state agencies) Requires part of the notice in the Electronic State Business Daily to include all of the information necessary for a bidder to make a successful bid.
- 6. <u>Texas Transportation Code §366.185</u> Requires RTAs to adopt rules governing competitive bidding.

7. <u>Texas Transportation Code §370.184</u> – Requires RMAs to adopt rules governing procurement of projects.

Required Practices

The <u>LGPM Guide</u> provides guidance for the LG and TxDOT to use for the distribution of bid documents during the letting process.

Addenda

General

All bidders must bid the project on the same or comparable basis so no particular advantage or disadvantage accrues to any potential bidder or to the LG. 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 each addendum as expeditiously as possible.

The definition of "expeditious," in terms of an adequate time frame to get an addendum out to all prospective bidders prior to the bid opening, is subjective. Each case should be judged on the complexity of the addendum. The most important consideration in an addendum process is to give all potential bidders enough time to fully evaluate the effect of the changes and to adjust their bid accordingly. The LG should develop policy guidance identifying an adequate time frame.

Since an addendum constitutes a deviation from the TxDOT-approved PS&E, the obligation of federal-aid funds may be impacted by the change. Therefore, TxDOT must approve an addendum prior to release to the prospective bidders. Any approval or concurrence will be based on the LG's assurance that all potential bidders will receive the approved addendum.

Federal Requirement

- 1. <u>23 CFR §635.112(c)</u> Requires:
 - a. addenda containing a major change to the plans and/or specifications must be approved by FHWA/TxDOT prior to release to prospective bidders;
 - b. minor addenda must be identified prior to, or with the request for, concurrence in award;
 - c. addenda must be sent to all bidders; and
 - d. bidders must acknowledge receipt of all addenda (failure to acknowledge addenda renders a bid non-responsive).
- 2. 23 CFR §635.112(i)(4) For design-build projects, requires:
 - a. addenda resulting in major changes to the request for proposals must be approved by FHWA/TxDOT prior to release to offerors;
 - b. addenda must be sent to all offerors; and

- c. the LG must provide assurance that all offerors received all addenda prior to requesting concurrence in award.
- 3. <u>23 CFR §635.114(b)</u> Requires FHWA must formally concur in the award of all federal-aid contracts. This is a prerequisite to federal participation in construction costs and is considered as authority to proceed with construction, unless specifically stated otherwise. Concurrence in award shall be formally approved and shall only be given after receipt and review of the tabulation of bids.

State Requirement

- 1. <u>Texas Local Government Code §271.0065</u> Requires all bidders to have the opportunity to bid on the same items on equal terms. Applies to municipalities, counties, and other LGs.
- 2. <u>Texas Transportation Code §366.185</u> Requires a RTA to develop competitive bidding procedures to award contracts to the lowest responsible bidder complying with the authority's criteria.
- 3. Texas Transportation Code §§370.184 and 370.185 Requires a RMA to adopt rules governing award of contracts. A contract may be let by a competitive bidding procedure to the lowest responsible bidder complying with the authority's criteria.

Required Practices

In general, TxDOT must approve addenda prior to release to prospective bidders. The <u>LGPM</u> <u>Guide</u> provides practices that must be followed by the LG and TxDOT for approval of major and minor addenda for various types of projects.

Bid Opening and Tabulation

General

The bid opening is a public forum for the announcement of all bids and is the point in time where the bids are opened and read aloud. Bid tabulations provide a means of evaluating bids and a mechanism for tracking construction costs.

Bid Opening

While FHWA does not have specific policies on how a bid opening should be conducted, the competitive bidding policy relies on the phrase in 23 §CFR 635.113(a) that "... all bids ... shall be publicly opened and announced." In common terms, "publicly opened" means being opened in front of the "public," particularly those people who are stakeholders in the letting. The specific details of the advertisement and bid opening procedures are governed by federal and state statute. Texas Transportation Code §223.004 requires all bids must be opened in a public meeting allowing attendance by all interested bidders. All bids must be opened in the presence of any interested bidders.

Reasons for not reading a bid include the bid itself being nonresponsive and/or the bidder is determined to not be responsible. The differences between a responsive bid and responsible bidder are:

- a **responsive bid** meets all the requirements of the advertisement and proposal; and
- a **responsible bidder** is physically organized and equipped with the financial wherewithal to undertake and complete the contract.

The <u>LGPM Guide</u> provides a detailed discussion of the procedures and practices associated with the bid opening.

Bid Tabulations

As a basis for tracking current construction costs and forecasting future construction costs, the LG must provide bid tabulation data to TxDOT.

Federal Requirement

- 1. <u>23 CFR §§635.113(a) and (b)</u> For design-bid-build projects:
 - a. requires all bids received be publicly opened and read (if a bid is received and not read, the bidder's name must be identified and the reason for not reading the bid must be announced);
 - prohibits negotiating with contractors between the bid opening and the contract award;
 and
 - c. requires a tabulation of bids to be submitted to FHWA.
- 2. 23 CFR §635.113(c) For design-build projects:
 - a. requires all proposals received to be opened and reviewed in accordance with the terms of the solicitation; and
 - b. requires a post-award tabulation of proposal prices to be submitted to FHWA.
- 3. <u>23 CFR §635.114</u> Requires bids shall be evaluated for conformance with the engineer's estimate. Extreme variations and obvious unbalancing shall be thoroughly evaluated to assure good competition and the lowest possible price was received.

State Requirement

- 1. <u>Texas Local Government Code §252.041</u> Requires a municipality to publish a notice containing the time and place bids will be publicly opened and read.
- 2. <u>Texas Local Government Code §252.0415</u> Allows a municipality to receive bids electronically if the municipality adopts rules to assure confidentiality until opening.
- 3. <u>Texas Local Government Code §262.025</u> Requires a county to publish a notice containing the time and place bids will be received and opened (does not mention a public opening).

- 4. <u>Texas Local Government Code §262.026</u> Requires a county official to open bids on the date specified in the notice. All bids must be opened at the same time.
- 5. <u>Texas Local Government Code §271.026</u> Restricts a county to open bids only at a public meeting or in a county office.
- 6. <u>Texas Local Government Code §271.908(d)(3)</u> Requires design-build projects to be advertised, including the time and place of bid opening, according to any manner prescribed by law.
- 7. <u>Texas Local Government Code §271.908(d)(3)</u> and <u>Texas Government Code §2269.360</u> Requires the LG to select a design-build firm using a combination of technical qualifications and cost for design-build projects.
- 8. <u>43 TAC §26.33(g)</u> Requires a RMA to use TxDOT specifications or approved alternate specifications for projects connecting to or on the state highway system.
- 9. <u>43 TAC §27.56(c)(3)</u> Requires requestors to use TxDOT specifications or approved alternate specifications for toll projects including state funds. TxDOT may consider alternative specifications if a project is not intended to become part of the state highway system or otherwise under TxDOT jurisdiction.
- 10. <u>Texas Transportation Code §223.004</u> Requires TxDOT to open bids at a public meeting.
- 11. <u>Texas Transportation Code §223.154</u> Requires TxDOT to open proposals in a manner that does not disclose their contents to competing offerors during negotiations.
- 12. <u>Texas Transportation Code §366.185(b)</u> Requires RTAs to adopt rules governing award of contracts through competitive bidding.
- 13. <u>Texas Transportation Code §370.184</u> Requires RMAs to adopt rules governing award of contracts.
- 14. <u>Texas Transportation Code §370.185</u> Allows RMAs to award contracts using a competitive bidding.
- 15. <u>Texas Transportation Code §370.306</u> Requires RMAs to evaluate proposals for comprehensive development agreements based on criteria in the notice.

Required Practices

In general, the LG must open the bids in public and provide the post-award tabulation to TxDOT for concurrence in the award. The <u>LGPM Guide</u> describes the required practices and the LG and TxDOT respective responsibilities for bid opening and tabulation.

Bid Analysis

General

The engineer's estimate is part of the PS&E. One of the purposes of the estimate is to serve as a guide to analyze bids. The estimate should be accurate, credible and based on realistic data. TxDOT maintains written procedures for justifying the award of a contract or for rejection of the bids when the low bid appears excessive or rejection is being considered for other reasons (refer to Chapter 6: Letting of TxDOT's Project Development Process Manual for more information).

The bid analysis process is an examination of the unit bid prices for reasonable conformance with the engineer's estimated prices. The <u>LGPM Guide</u> provides other factors that may be considered in the bid analysis.

Unbalanced Bids

The LG should perform an analysis of the tabulations and the project estimate to determine the presence of unbalanced bids. As defined in <u>23 CFR §635.102</u>, the two types of unbalanced bids are listed below.

- A mathematically unbalanced bid is a bid containing 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.
- A materially unbalanced bid is a bid generating reasonable doubt that an award to a bidder would result in the lowest ultimate cost to the government. A materially unbalanced bid should not be awarded.

The LG must obtain TxDOT concurrence on the determination of whether or not a bid is unbalanced. Information related to unbalanced bid determination is available in the <u>LGPM Guide</u> and in TxDOT's <u>Project Development Process Manual, Chapter 6: Letting</u>

Lowest Bidder

The award of a contract, if awarded, must be made to the lowest responsive bid submitted by a responsible bidder. Negotiations of bid item prices are strictly prohibited from the time of bid opening to construction contract execution.

Federal Requirements

- 1. <u>23 CFR §635.114(a)</u> Federal-aid contracts shall be awarded only on the basis of the lowest responsive bid submitted by a bidder meeting the criteria of responsibility.
- 2. <u>23 CFR §635.113(a)</u> Negotiation with contractors, during the period following the opening of bids and before the award of the contract, shall not be permitted.

State Requirements

1. <u>Texas Transportation Code §223.0041</u> – Stipulates the award of the contract must be made to the lowest bidder.

2. <u>Texas Transportation Code §223.045</u> – Requires federal Buy America provisions to be applied to contracts awarded by TxDOT for improvement of the state highway system, regardless of whether federal funds are being utilized.

Required Practices

Related regulations, the required practices and a description of the LG and TxDOT responsibilities for the bid analysis process are included in the Concurrence in Award section below and in the LGPM Guide.

Section 3: Contract Award

Overview

The contract award follows the bid analysis and includes the award of the contract to the selected bidder. Contract award is the commitment to go forward with the project. The Letting phase of the project includes the selection of the bidder for the award of the contract by the local government (LG) and the concurrence in the award by TxDOT. The actual execution of the contract is included at the beginning of the construction phase of the project and is described in Chapter 9— Construction.

Concurrence in Award

General

Concurrence in contract award is not just a formality, it is the authorization from TxDOT to the LG to proceed with construction. The LG must formally request concurrence by TxDOT in the award of contracts. The basic policy is explained in 23 CFR §635.114(a):

"Federal-aid contracts shall be awarded only on the basis of the lowest responsive bid submitted by a bidder meeting the criteria of responsibility as may have been established by the STD [LG] in accordance with 23 CFR 635.110. Award shall be within the time established by the STD [LG] and subject to the prior concurrence of the Division Administrator [TxDOT]."

Regulation 23 CFR §635.114(b) further states:

"... concurrence in award ... is a prerequisite to federal participation in construction costs and is considered as authority to proceed with construction, unless specifically stated otherwise."

TxDOT's concurrence of an award shall be formally documented in writing and shall include any qualifying statements concerning the concurrence. Verbal concurrence in the award must be avoided and should only be used in unusual circumstances. Verbal concurrence must be documented and should be followed by a written concurrence in award reflecting the date of verbal concurrence.

When the LG determines the lowest bidder is not qualified, <u>23 CFR §635.114(f)</u> requires:

"If the STD [LG] determines that the lowest bidder is not responsive or the bidder is not responsible, it shall so notify and obtain the Division Administrator's [TxDOT's] concurrence before making an award to the next lowest bidder."

23 CFR §635.114(h) covers the situation when the LG makes a decision to reject all bids.

"Any proposal by the STD [LG] to reject all bids received for a federal-aid contract shall be submitted to the Division Administrator [TxDOT] for concurrence, accompanied by adequate justification."

To ensure the sanctity of the low-bid system, FHWA's <u>Contract Administration Core</u> <u>Curriculum</u> states, "the act of a contracting agency negotiating with an apparent low bidder prior to award is defined as 'bid rigging in reverse,' and is expressly prohibited by <u>23 CFR §635.113(a)</u>."

Post-bid

After the bids are opened and the apparent low bidder identified, the district will be advised of the cost of the bid items. The TxDOT district engineer will be asked to verify the bid prices are acceptable to the LG. If the district engineer indicates the bid amounts are not acceptable to the LG, the contract will not be awarded.

The LG must evaluate the bids as described above and make a recommendation to TxDOT for award of the bid to the selected bidder. The LG also has the option to reject all bids or to cancel the project.

Add Alternates

Many architectural projects use the concept of "add or deductive alternates." This concept allows the owner to maximize the available funding. While the concept is not normally associated with federal-aid highway projects, it may be used if the alternates are listed in the proposal in priority order, with an explanation to all bidders of how the alternates will be used to determine the low bidder and contract award.

Federal Requirement

- 1. <u>23 CFR §635.113(a)</u> Prohibits the negotiation with contractors during the period following the opening of bids and before the award of the contract.
- 2. <u>23 CFR §635.114</u> Requires that:
 - a. Contracts be awarded only on the basis of the lowest responsive bid submitted by a bidder meeting the criteria of responsibility as may have been established in accordance with §635.110.
 - b. The award is subject to the prior concurrence of FHWA (TxDOT may act on behalf of FHWA on certain projects). Prior concurrence is a condition of federal participation.
 - c. The request to concur in award of an unbalanced bid must be supported by written justification.
 - d. Decisions to either award to someone other than the low bidder or reject all bids must be have prior FHWA (TxDOT) concurrence.
- 3. <u>23 CFR §635.114(k)</u> Requires design-build contracts shall be awarded in accordance with the request for proposals.
- 4. 23 CFR Part 636 Provides that, for design-build projects:
 - a. <u>subpart B</u> lists acceptable procedures for selection and award of design-build projects; and

b. the award is based on "best value" evaluated using the criteria established in the request for proposals.

State Requirement

- 1. <u>43 TAC §9.15(e)</u> Requires TxDOT to examine low bids for reasonable conformance with TxDOT's estimate. Bidders found to have submitted a materially and mathematically unbalanced bid will not be allowed to submit future bids on the same project.
- 2. <u>43 TAC §26.33(g)</u> Requires a RMA to use TxDOT specifications or approved alternate specifications for projects connecting to or on the state highway system.
- 3. <u>43 TAC §27.56(c)(3)</u> Requires requestors to use TxDOT specifications or approved alternate specifications for toll projects including state funds. TxDOT may consider alternative specifications, including if a project is not intended to become part of the state highway system or otherwise under TxDOT jurisdiction.
- 4. <u>Texas Transportation Code §223.0041</u> Establishes TxDOT contracts shall be awarded to the lowest bidder.
- 5. <u>Texas Local Government Code §252.043</u> Requires a municipality to award a contract to the bidder providing the best value. Includes factors that may be considered in the "best value" determination.
- 6. <u>Texas Local Government Code §252.0435</u> Allows a municipality to consider a bidder's safety record if:
 - a. the governing body has adopted a written definition and criteria for accurately determining the safety record of a bidder;
 - b. the governing body has given notice to prospective bidders in the bid specifications that the safety record of a bidder may be considered in determining the responsibility of the bidder; and
 - c. the determinations are not arbitrary and capricious.
- 7. <u>Texas Local Government Code §252.0436</u> Allows a municipality to refuse award of a contract to a bidder indebted to the municipality.
- 8. <u>Texas Local Government Code §262.027</u> Requires a county commissioner's court to award the contract to the "lowest and best" bid or reject all bids and publish a new notice.
- 9. <u>Texas Local Government Code §262.0271</u> Allows a county to give preference to a bidder who provides health insurance comparable to health insurance for county employees.
- 10. <u>Texas Local Government Code §262.0275</u> Allows a county to take into account the safety record of the bidder if:
 - a. the commissioner's court has adopted a written definition and criteria for accurately determining the safety record of a bidder;

- b. prospective bidders are given notice in the bid specifications; and
- c. the determinations are not arbitrary and capricious.
- 11. <u>Texas Local Government Code §262.0276</u> Allows a county to refuse award of a contract to a bidder indebted to the county.
- 12. <u>Texas Local Government Code §262.0305</u> Allows a county to negotiate modifications after award if in the best interest of the county.
- 13. <u>Texas Local Government Code §271.0065</u> Requires a county to provide potential bidders the opportunity to have their bid judged to the same standards.
- 14. Texas Local Government Code §271.027 Requires a county to award contracts to the lowest responsible bidder, but "the contract may not be awarded to a bidder who is not the lowest bidder unless before the award each lower bidder is given notice of the proposed award and is given an opportunity to appear before the governing body of the governmental entity or the designated representative of the governing body and present evidence concerning the bidder's responsibility."
- 15. <u>Texas Local Government Code §271.908(d)(3)</u> and <u>Texas Government Code §2269.360</u> Requires the LG to select a design-build firm using a combination of technical qualifications and cost for design-build projects.
- 16. <u>Texas Transportation Code §366.185</u> A regional tollway authority must award contracts by a competitive bidding procedure where the contract is awarded to the lowest responsible bidder meeting the authority's criteria.
- 17. <u>Texas Transportation Code §370.184</u> A regional mobility authority (RMA) must adopt rules governing award of contracts.
- 18. <u>Texas Transportation Code §370.312</u> A RMA must adopt rules governing selection of private partnerships.

Required Practices

The <u>LGPM Guide</u> describes the required practices for the concurrence in award and also provides the LG and TxDOT responsibilities during the process.

Review of Financial Obligation

After concurrence of the award, TxDOT will compare the bid amount to the authorized financial obligation to determine whether a request for an adjustment of the obligation is appropriate. TxDOT will submit such requests to FHWA for all federal-aid projects.

Chapter 9: Construction

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Section 1: Introduction

Each year TxDOT awards billions of dollars of construction and maintenance contracts for projects ranging from new roads and bridge improvements to sidewalk and hike/bike trails. Many of these projects are completed in partnership with local governments (LG). The Construction phase of the LG/TxDOT project follows the Preliminary Engineering and Design, Plans Specifications & Estimates (PS&E) Development, and Letting and Award phases (Chapters 4, 7 and 8). This phase involves both the administration of the advance funding agreement (Chapter 2) between the LG and TxDOT, as well as the implementation of the executed contract between the construction contractor and the LG.

As described in <u>Chapter 7 – Plans</u>, <u>Specifications & Estimates (PS&E) Development</u>, the PS&E and other bid documents are submitted by the LG and reviewed and approved by TxDOT [the Federal Highway Administration (FHWA) may also review the PS&E and bid documents on certain LG projects of FHWA division interest]. A state letter of authority and federal project authorization and agreement (FPAA), if required, are issued, which allow for the advertising of the construction phase of the project. <u>Chapter 8 – Letting and Award</u> describes the letting process for local projects and the subsequent concurrence in the award by TxDOT. Once the LG has received concurrence, the construction is authorized to begin, and the LG may award the contract to the selected bidder and execute the contract. The following sections describe the Construction phase of the project and the regulations required for proper administration of the contract during construction.

As part of the LG program, the LG should have an established system to maintain and organize the project records (see Chapter 2 - Project Initiation). Early organization of the project documents and files by the LG will ensure an audit by TxDOT or FHWA during or at the close of the project will proceed smoothly. Proper record keeping also aids in the administration of the project during construction by documenting compliance with local, state and federal procedures and policies. This chapter of the Manual provides information related to the administration of the project during construction, including the rules and regulations related to initiating the construction project and that must be addressed throughout construction of the project. The companion chapter of the Local Government Project Management Guide (LGPM Guide) provides the procedures and required practices which must be used by the LG and TxDOT during construction.

Section 2: Contract Administration

Overview

The goal of contract administration is to ensure the requirements as outlined in the contract documents are performed accurately and completely and the responsibilities of all parties are properly satisfied. The primary objectives of contract administration are:

- to verify performance for the purpose of payment;
- to identify "material breach of contract" by assessing the difference between contract performance and material non-performance;
- to determine if corrective action is necessary; and
- to take such action, if required.

The Construction phase is initiated after TxDOT concurs in the award of the contract to the selected bidder. The LG may then award and execute the contract. During construction of the project, the LG must administer the contract and ensure the contractor and subcontractors abide by the requirements and clauses contained in the contract documents. A discussion of the federal and state laws and statutes related to contracting requirements is contained in Chapter 7 - Plans, Development and Chapter 8 - Letting and Award of this Manual. This section describes key state and federal requirements for the administration of the contract by the LG during construction and refers the LG to the appropriate sections in previous chapters for more information on specific compliance and on documentation requirements. The required practices and specific responsibilities of the LG and TxDOT district office are described in the companion chapters of the LGPM Guide.

Contract Award and Execution

Upon receipt of the TxDOT concurrence in award, the LG may award the contract to the selected contractor. Upon receipt of all submittals required from the contractor, the LG and selected contractor will execute the contract and the LG will provide a copy to TxDOT.

Project Coordination Meeting

Soon after the contract is awarded and executed, a project coordination meeting is held with the LG project manager, the LG qualified person, the TxDOT project manager and other LG and TxDOT project staff. The purpose of the meeting is to review the contract requirements and responsibilities of the LG and TxDOT throughout the construction phase of the project. The meeting is described in more detail in the <u>LGPM Guide</u>.

Pre-Construction Meeting

General

The LG must conduct a pre-construction meeting with all parties (including TxDOT) before construction can begin. The <u>LGPM Guide</u> provides the required practices associated with the meeting and the responsibilities of the LG and TxDOT district office.

Federal Requirements

1. None identified

State Requirements

1. None identified.

Notice to Proceed

General

The construction phase starts with the issuance of a Notice to Proceed (NTP) or Authorization to Begin Work by the LG. The NTP is usually in the form of a letter and is issued by the LG to the selected contractor. The required practices for issuing a NTP, and the respective responsibilities of the LG and TxDOT, are described in the <u>LGPM Guide</u>.

Federal Requirements

1. None identified.

State Requirements

1. None identified.

Environmental Concerns

All projects will comply with TxDOT policy to protect, preserve and, when practicable, enhance the environment. For construction projects, environmental concerns should be identified early in the project during the Preliminary Engineering and Design phase so any mitigation may be addressed and accurately reflected in the PS&E documents using the appropriate form [environmental permits, issues and commitments (EPIC)]. Chapter 5 – Environmental Compliance of this Manual and the LGPM Guide provide the associated federal and state regulations, required practices, and LG and TxDOT responsibilities.

Inspection

General

All projects involving state or federal funds must be completed in accordance with the approved plans, specifications and authorized changes. To assure the project is being constructed accordingly, both the LG and TxDOT have certain inspection responsibilities on construction projects. Some federally funded projects have direct FHWA involvement, meaning that FHWA is part of all approval actions. For the majority of federal-aid projects, TxDOT assumes FHWA's approval authority. The required practices associated with inspections during construction and the responsibilities of both the LG and TxDOT relative to inspections are described in detail in the LGPM Guide.

By executing an agreement with TxDOT, the LG assures it is adequately staffed and suitably equipped to manage all project functions. TxDOT verifies the LG's actions by conducting periodic inspections; however, it is the LG's day-to-day responsibility to determine compliance with the approved plans, specifications and contract administration requirements and to develop and keep adequate project documentation. The LG must provide assurance the contractor has complied with the plans, specifications and contract administration requirements, including requirements associated with the quality of the construction and the contract administration as described fully in the LGPM Guide.

Federal Requirement

- 1. <u>23 CFR §1.36</u> Provides that if FHWA determines a state (or LG) has violated or failed to comply with federal laws, then payment may be withheld for the project or approval may be withheld for further projects in the state (or to the LG).
- 2. <u>23 U.S.C. §114</u> Requires federally funded projects to be constructed under the direct supervision of the state transportation agency (TxDOT).
- 3. <u>23 U.S.C. §302</u> Requires states to have a transportation department with adequate powers and be suitably equipped and organized to carry out the duties required by this title.
- 4. <u>23 CFR §635.105</u> For projects under an LG's jurisdiction, authorizes TxDOT to allow the LG to directly manage projects if TxDOT has assurance the LG staffing and inspection is adequate. This means all federal requirements shall be met, including:
 - a. the LG must be adequately staffed (including an employee in responsible charge of the project) and suitably equipped to undertake and satisfactorily complete the work; and
 - b. when the local public agency elects to use consultants for construction engineering services (inspection), the LG must provide a full-time employee of the agency to be in responsible charge of the project.
- 5. Procurement of consultant inspection staff must be procured using the provisions of <u>23 CFR Part 172</u>.

State Requirement

- 1. 43 TAC Chapter 9, Subchapter C
 - a. Allows TxDOT to contract for construction engineering and inspection services.

- b. Provides selection criteria complying with state law and 23 CFR Part 172.
- 2. <u>Texas Government Code §2254</u> Provides for procurement of professional services by all governmental entities.
- 3. <u>Texas Local Government Code §271.908</u> and <u>Texas Government Code §2269.356</u> For design-build projects, requires the LG to provide or contract for inspection services independent from the design-build firm.
- 4. <u>Texas Occupations Code §1001.003</u> Includes "review of the construction or installation of engineered works to monitor compliance with drawings or specifications" in the definition of "practice of engineering."
- 5. <u>Texas Occupation Code §1001.407</u> Requires engineering construction of public works be performed under the supervision of an engineer. Applies to all political subdivisions in Texas.

Required Practices

In general, the LG must ensure adequate staffing for inspections and follow the practices described in the <u>LGPM Guide</u>. In turn, the TxDOT district office must also provide required inspections of the project as described in the <u>LGPM Guide</u>.

Supervision and Staffing

General

As discussed in detail in the subheading "Inspection," a LG must be suitably equipped and staffed before it can be given authority to manage federal-aid highway projects within its jurisdiction. 23 CFR §635.105 requires TxDOT to be suitably equipped and organized to carry out the federal-aid program. Therefore, TxDOT is responsible for design, contract administration and construction inspection of all federal-aid construction projects. This responsibility is formalized by the project agreement executed for each federal-aid project. FHWA and TxDOT are the two parties to the agreement.

When a federal-aid project is to be constructed on a facility not under TxDOT's jurisdiction, TxDOT may allow the LG having jurisdiction to perform the work with its own forces, or by contract, provided all of the following conditions are met.

- All federal requirements, including those prescribed in <u>23 CFR Part 635 Subpart A</u>, are satisfied on work performed under a contract awarded by a local public agency.
- Force account work shall be in full compliance with <u>23 CFR Part 635 Subpart B</u>.
- The LG is adequately staffed and suitably equipped to undertake and satisfactorily complete the work.
- The LG shall provide a full-time employee of the agency to be in responsible charge of each federal-aid project, including those employing consultants for construction engineering

services. The requirements for the responsible person in-charge (RPIC) are defined in Chapter of this Manual.

This arrangement does not relieve TxDOT of overall responsibility for the project. While 23 CFR §1.11(b) allows TxDOT to "utilize, under its supervision, the services of well-qualified and suitably equipped engineering organizations of other governmental instrumentalities for making surveys, preparing plans, specifications and estimates, and for supervising the construction of any project," 23 CFR §1.11(e) clearly states TxDOT is not relieved of its responsibilities under federal law and the regulations in 23 CFR Chapter 1 if it chooses to use the services of other governmental engineering organizations.

Supervision of Construction Engineering Consultants or Construction Management Firms

The LG's responsibilities for contract administration and construction inspection are not terminated should a consultant provide construction engineering and inspection services. While a consultant may provide daily inspection, the LG must have a RPIC assigned to the project at all times, although the RPIC does not need to be assigned solely to that project. The requirements for the RPIC are defined in Chapter 2 of this Manual.

If the LG uses the services of a consulting engineering or construction management firm, the services must be procured in compliance with 23 CFR Part 172.

Federal Requirement

1. <u>23 CFR §635.105</u> – For projects under the LG's jurisdiction, authorizes TxDOT to allow the LG to directly manage projects if TxDOT has assurance the LG is adequately staffed and suitable equipped to undertake and satisfactorily complete the work.

State Requirement

- 1. <u>Texas Occupations Code §1001.407</u> Requires engineering construction of public works be performed under the supervision of an engineer. Applies to all political subdivisions in Texas.
- 2. <u>Texas Transportation Code §201.113</u> Allows TxDOT to enter into an agreement with a regional tollway authority for projects on the state highway system.
- 3. <u>Texas Transportation Code §370.302(a)</u> Allows TxDOT to enter into an agreement with a regional mobility authority (RMA) to implement, operate and maintain a project on behalf of TxDOT.
- 4. <u>Texas Transportation Code §370.302(b)(1)</u> Allows a RMA to negotiate with private entities through a development agreement. The negotiations may include financing.

Required Practices

In general, the LG must conform to state and federal requirements for ensuring adequate staffing on a construction project. The <u>LGPM Guide</u> describes the required practices and LG and TxDOT responsibilities.

Specification Compliance

General

Compliance with the specifications contained in the bid documents is required, and any changes to the bid documents must be approved by TxDOT before federal and state funds can be released. It is the LG's responsibility to ensure compliance with the approved plans, specifications and authorized changes through inspections and other contract administration actions.

23 CFR §1.36 states:

"If the (Federal Highway) Administrator determines that a State (or LG) has violated or failed to comply with the Federal laws or the regulations in this part with respect to a project, he may withhold payment to the State (or LG) of Federal funds on account of such project, withhold approval of further projects in the State (or to the LG), and take such other action that he deems appropriate under the circumstances, until compliance or remedial action has been accomplished by the State (or LG) to the satisfaction of the Administrator."

Federal Requirement

1. <u>23 CFR §635.105</u> – Assigns the responsibility for the construction of all federally funded projects to TxDOT. TxDOT is not relieved of such responsibility by authorizing performance of the work by a LG. Ensuring compliance with specifications is part of that responsibility.

State Requirement

1. No comparable statute

Required Practices

In general, the LG must ensure the project is constructed in compliance with the PS&E. The <u>LGPM Guide</u> provides the required practices associated with this compliance.

Quality Assurance Program

General

For all LG projects, independently of the contractor, the LG shall provide inspection services and construction materials testing as part of the LG's quality assurance program (QAP). The LG's construction materials testing shall be used for materials acceptance or for verification of a contractor's test results to be used for acceptance, if applicable, and used to assure the materials incorporated into the project substantially meet project plans and specifications. The LG may develop its own QAP or adopt the appropriate TxDOT QAP pertinent to the type of project delivery method used:

- QAP for design-bid-build projects; or
- QAP for design-build projects.

If the LG develops its own QAP, it will need to submit the QAP to TxDOT for review and approval. This QAP must include an acceptance program and an independent assurance program as described in the <u>LGPM Guide</u>. Any program developed by the LG must receive approval from TxDOT prior to use.

Federal Requirement

- 1. <u>23 CFR Part 637 Subpart B</u> For projects on the national highway system, requires the contracting agency to have a QAP approved by FHWA. The program must provide for an acceptance program and an independent assurance program and is intended to assure the quality of materials used in construction.
- 2. <u>23 CFR Part 637 Subpart B, Appendix A</u> Provides a written certification that materials incorporated into a project on the national highway system are in conformity with the approved plans and specifications.
- 3. <u>23 CFR §637.207(a)(1)(iv)</u> For design-build projects, allows the use of warranties where appropriate.
- 4. <u>23 CFR §637.207(b)</u> For design-build projects, provides that the requirements for a QAP still apply. The program shall meet <u>FHWA Technical Advisory 6120.3</u> in addition to <u>23 CFR §637.207(b)</u>. There is some added flexibility to use the design-builder's quality control testing, but there must be independent verification of those results.

State Requirement

- 1. <u>Texas Local Government Code §271.908</u> Requires a municipality or county governmental entity to provide or contract for, independently of the contractor, the inspection services, the testing of construction materials engineering and the verification testing services necessary for acceptance of the facility or project by the governmental entity.
- 2. <u>Texas Local Government Code §271.908</u> and <u>Texas Government Code §2269.356</u> For design-build projects, requires the LG to provide or contract for material engineering, testing and verification testing that is independent from the design-build firm.
- 3. <u>43 TAC §26.33(g)(1)</u> Requires a RMA to use specifications conforming to the latest TxDOT standard specifications on projects that connect with the state highway system.
- 4. <u>43 TAC §27.56(c)(3)</u> Requires a regional tollway authority to use specifications conforming to the latest TxDOT standard specifications on projects with state fund participation.

Required Practices

The <u>LGPM Guide</u> describes the required practices that must be followed by the LG and the TxDOT district office with respect to a QAP.

Records

Project records provide documentation and support for the payments for contract work during construction. Chapter 2 – Project Initiation contains a detailed description of the types of documentation that must be kept for any transportation project and lists the federal and state requirements governing records retention.

Project records unique for construction projects are described in the <u>LGPM Guide</u>.

Subcontracting

Federal regulations impose limitations on the amount of work than can be subcontracted and are described in Chapter 9 of the <u>LGPM Guide</u>. In general, the LG must adopt the <u>TxDOT standard specifications</u>, <u>Form FHWA-1273</u> and other policies as applicable, must approve all subcontracts in writing and must coordinate with the TxDOT district. Details regarding specific subcontracting and debarment certification that must be followed and properly implemented are found in <u>Chapter 7 – Plans</u>, <u>Specifications & Estimates (PS&E) Development</u> of this Manual.

Statements and Payrolls

The LG is responsible for receiving and paying statements from the contractor during construction and for ensuring workers are being paid fairly by both the contractor and subcontractors. The <u>LGPM Guide</u> provides a description of the sections related to payrolls on <u>Form FHWA-1273</u>.

29 CFR Part 5 and 23 U.S.C. §113 require the LG to meet the federal regulations for ensuring the contractor and subcontractors are paying the prevailing wage. For purposes of this guide, the LG is considered the "contracting agency." The LG is required to ensure:

- a representative sampling of employees is interviewed to verify contractor and subcontractor compliance; and
- contractor and subcontractor payroll records are reviewed on a sampling basis.

The regulation does not require 100 percent coverage; it requires coverage frequency "... as may be necessary to assure compliance." All contractors and subcontractors on the project must be included in the spot check. Contractors or subcontractors with violations must be reviewed in more detail.

Federal Requirement

- 1. <u>29 U.S.C. §§201-219</u> The Fair Labor Standards Act addresses various requirements applicable to employees including minimum wages, maximum hours and various child labor provisions.
- 2. <u>23 U.S.C. §113</u> Requires the Secretary of Transportation to take all steps necessary to assure laborers and mechanics working on federally funded projects are paid no less than the prevailing wage for similar work.

- 3. <u>40 U.S.C. §3141 et seq.</u> Requires the Secretary of Labor to implement regulations including a provision that each contractor and subcontractor shall furnish a weekly statement with respect to the wages paid each employee during the preceding week.
- 4. <u>29 CFR §§3.1</u> and <u>3.3</u> Requires contractors and subcontractors to submit weekly statements of wages paid on work covered by Davis-Bacon.
- 5. <u>29 CFR §5.6(a)(3)</u> Requires recipients of federal funds to conduct investigations at a frequency necessary to assure compliance. The investigations must include employee interviews and examination of payroll data.
- 6. <u>23 CFR §635.118</u> Requires the state transportation department (TxDOT) to retain copies of payrolls and statements of wages paid, filed with the state as set forth in the required contract provisions for the project, for the time period pursuant to <u>2 CFR §200.333</u> (3 years) for review as needed by FHWA, the Department of Labor, the General Accounting Office or other agencies.
- 7. <u>23 CFR §636.119(c)</u> Requires design-build projects to conform to all non-procurement requirements, including Davis-Bacon.

8. Form FHWA-1273:

- a. Section IV.3 requires weekly, certified payroll submissions by the contractor and subcontractors; and
- b. Section IV.5 incorporates the Department of Labor regulations in the Copeland Act (anti-kickback provisions).

State Requirement

- 1. <u>Texas Government Code §2258.024</u> Describes records to be kept by the contractor and subcontractor concerning minimum wages paid. The records must be made available to inspection by the contracting entity.
- 2. <u>Texas Government Code §2258.026</u> Allows a contractor to accept a certification from a subcontractor in lieu of actual records.
- 3. <u>Texas Government Code §2258.051</u> Requires the public entity to investigate complaints and withhold payment for violations.

Required Practices

The <u>LGPM Guide</u> provides the required practices and responsibilities that must be followed in order to ensure compliance with wage rates.

Progress Payments

General

Progress payments are compensation paid to the prime contractor for the value of work performed during a covered period. The LG shall promptly review the contractor's progress payment requests in accordance with applicable state and federal laws and regulations. In addition, consistent billing by the LG to TxDOT is required for federal-aid projects. A federal-aid project may be defined as an inactive project obligation by the FHWA if no expenditures are made for a year (see "Project Accounting" in Chapter 2 of this Manual). All requests for federal reimbursements of payments to the contractor by the LG must go through TxDOT.

The following general requirements apply for stockpiled materials, retention for subcontract work and final payment. The <u>LGPM Guide</u> provides detailed information and guidelines related to these topics.

- Stockpiled Materials When the contract provisions provide for stockpiled materials, federal
 participation is based on the appropriate value of approved specification materials delivered by
 the contractor to the project site.
- **Retention for Subcontract Work** The federal DBE regulation in 49 CFR §26.29 requires recipients to include a "prompt pay clause" in all federally funded contracts that requires contractors to pay subcontractors within 30 days of receiving an invoice (10-day requirement in Texas Government Code §2251.022) and also ensures prompt return of retainage payment within 30 days after a subcontractor's work is completed (10-day requirement in Texas Government Code §2251.022).
- **Final Payment** By statute [23 U.S.C. §121(b)] FHWA cannot make final payment for a project until TxDOT approves the completion of its construction. In addition, <u>Texas Government Code Chapter 2251</u>, <u>Subchapter B</u> stipulates payment from the LG to the contractor is considered late on the 31st day after certain conditions are met. Late payments to the contractor will be subject to the appropriate interest as determined by the comptroller in accordance with <u>Texas Government Code §2251.025</u>.

Federal Requirement

- 1. <u>23 U.S.C. §121(a)</u> Authorizes periodic payment of construction costs incurred. Payment may include the value of stockpiled material not yet incorporated into the project.
- 2. <u>23 U.S.C. §121(b)</u> Specifies the final payment may be made after project completion.
- 3. <u>23 CFR §635.122</u> Further defines periodic progress payments and requirements for federal participation in stockpiled material.
- 4. <u>23 CFR §635.122(c)</u> For design-build projects, requires procedures for making progress payments on lump sum contracts to be defined in the request for proposals.
- 5. <u>49 CFR §26.29</u> The USDOT's disadvantaged business enterprise regulation requires the prime contractor to pay subcontractors for satisfactory work performance within 30 days of receipt of payment from the contracting agency.

State Requirement

- 1. <u>43 TAC §26.33(g)(1)</u> Requires a RMA to use specifications conforming to the latest TxDOT standard specifications on projects connecting with the state highway system.
- 2. <u>43 TAC §27.56(c)(3)</u> Requires a regional tollway authority to use specifications conforming to the latest TxDOT standard specifications on projects with state fund participation.
- 3. Texas Government Code §403.071(b) States a claim may not be paid from an appropriation unless the claim is presented to the comptroller for payment not later than two years after the end of the fiscal year for which the appropriation was made. However, a claim may be presented not later than four years after the end of the fiscal year for which the appropriation from which the claim is to be paid was made if the appropriation relates to new construction contracts.
- 4. <u>Texas Government Code §2251.021</u> Requires payment to a contractor within 30 days or interest will accrue.
- 5. <u>Texas Government Code §2251.042</u> Allows payment of interest involving a claim if the claim is resolved in favor of the contractor.
- 6. <u>Texas Government Code §2251.022</u> Requires a contractor to pay a subcontractor not later than 10 days after receiving payment from a governmental entity.

Required Practices

The <u>LGPM Guide</u> provides a detailed discussion of the procedures that must be followed by the LG and TxDOT to ensure progress payments are made in a timely manner throughout the construction project.

Retainage

Retainage is a portion of the construction contract fee that is withheld until the LG is satisfied the work is substantially complete. §2252.032 of the Texas Government Code allows up to 10 percent of the contract price to be retained, depending on the contract value. However, federal concerns over prompt pay (49 CFR §26.29) for subcontractors require the LG to follow strict guidelines for holding retainage if federal funds are used for the project. Details regarding specific retainage that must be followed and properly documented are found in Chapter 7 - Plans, Specifications & Estimates (PS&E) Development of this Manual and corresponding LGPM Guide.

Contract Time

The term of the contract is an important part of every construction project. Too little contract time may result in higher construction costs, while too much contract time may encourage inefficiencies, increased user costs and potential delays and inconvenience to the public. The LG is responsible for coordinating closely with the TxDOT district regarding the determination and monitoring of contract time. Details regarding specific contract time that must be followed and properly implemented are found in Chapter 7 - Plans, Specifications & Estimates (PS&E)
Development of this Manual and LGPM Guide.

Time Extensions

Contract time extensions granted by a LG affecting project costs or liquidated damages shall be subject to the concurrence of TxDOT and will be considered in determining the amount of federal participation.

Events normally considered to be under the control of the contractor and, therefore, do not warrant a time extension include:

- shutdowns for maintenance;
- breakdowns;
- suspensions or stop work orders for violation of safety or pollution regulations;
- shutdowns for construction accidents; and
- material delays.

Section 7(c) of the FHWA Additional Guidance on 23 CFR 625A (formerly the Federal Aid Policy Guide Non-regulatory Supplement 23 CFR Part 635 Subpart A) provides further guidance on materials delays. The contractor is responsible for the timely order and delivery of materials for the project. A delay in delivery of materials does not in itself generally support an extension of contract time. However, if an unusual market condition (i.e., an industry-wide strike, natural disaster or area-wide shortage) occurs, a time extension may be in order.

Delays due to inclement weather should be expected and should generally not be the basis for a change in contract time. Weather should be factored into the original contract time determination.

Federal policy also covers granting time extensions due to utility, railroad and right-of-way clearance delays. Because of the assurances required from the LG prior to TxDOT project authorization, the policy generally does not permit participation in time extensions for such delays. Whenever the railroad or utility is permitted to adjust its facilities coincidentally with contract operations, such activities must be clearly addressed in the contract provisions. All parties should understand that any interference by the railroad or utility to the contractor's operations generally would not constitute an allowable delay. In general, an extension of contract time due to right-of-way delays is very unusual and is the exception rather than the rule.

Federal Requirements

1. <u>23 CFR §635.121</u> - Provides that time extensions for federal-aid projects are subject to approval by the FHWA and will be considered in determining the extent of federal participation.

State Requirements

1. No comparable state statutes.

Required Practices

The LG must have TxDOT approval of time extensions as described in the LGPM Guide.

Termination of Contract

Termination is an action taken by the contracting agency to cancel a contract. Federal-aid contracts exceeding \$10,000 must contain suitable provisions for termination by the LG. The provisions must identify the manner by which the termination will be effected and the basis for settlement. There may be a number of grounds to warrant termination, including termination for cause, termination for convenience and termination for default. Prior to termination of a federal-aid contract for which TxDOT concurred in the award, the LG shall consult with and receive the concurrence of TxDOT. Details regarding specific termination of contract provisions that must be followed and properly documented are found in Chapter 7 - Plans, Specifications & Estimates (PS&E)) Development of this Manual and corresponding LGPM Guide.

Claims

A claim is a continued demand for payment by a contractor if it has been previously denied under the LG's normal procedures for change order approval. Both the LG and the contractor share in the responsibility for claims. Details regarding specific claims processes that must be followed and properly documented are found in Chapter 7 - Plans, <a href="Specifications & Estimates (PS&E) Development of this Manual and in Chapter 9 of the LGPM Guide.

Section 3: Application of Contract Elements during Construction

Overview

The Construction phase of the project is guided by the elements included in the plans, specifications and estimates (PS&E) and bid documents executed during letting. These elements are described in detail in Chapters 7 and 8. This section highlights critical contract elements applicable to the construction process and refers the local government (LG) back to the appropriate sections in previous chapters for more information.

Change Orders

A construction project is implemented using the design and specifications provided in the bid documents or scope of work contained in a request for proposals. However, circumstances may arise during construction requiring changes to the scope of work contained in these documents. Known as "change orders," these changes become legal documents and, therefore, must be proposed by the construction engineer and approved by the contracting agency.

The LG is responsible for coordinating closely with the TxDOT district regarding all change orders as described briefly in the <u>Local Government Project Management Guide</u> (LGPM Guide) Chapter 9. The state and federal statutes and requirements related to change orders are provided in <u>Chapter 7 – Plans, Specifications & Estimates (PS&E) Development</u> of this Manual. Detailed guidelines for the procedures to be followed when implementing change orders are contained in the <u>LGPM</u> Guide Chapter 9.

Designated Material Sources/Disposal Sites

The federal and state requirements for selecting materials to be used in a construction project and for disposing of surplus excavated materials are described in Chapter 7 - Plans, Specifications & Estimates (PS&E) Development of this Manual. The LGPM Guide provides a brief description of the process used to comply with these requirements in Chapter 9, with a more detailed description of the required practices in the LGPM Guide Chapter 7.

Differing Site Conditions

Conditions for construction projects may differ from the original contract documents due to changes in physical site conditions, contractor work requirements or alterations to the design. The LG is responsible for including the appropriate differing site condition language in the bid document and coordinating closely with the TxDOT district regarding changed conditions encountered during construction. The federal and state statutes specifying the requirements related to differing site conditions are described in Chapter 7 - Plans, Specifications & Estimates (PS&E) Development of this Manual. The LGPM Guide provides a brief description in Chapter 9 of the

process used to comply with these requirements, with a more detailed description of the required practices in the <u>LGPM Guide</u> Chapter 7.

Disadvantaged Business Enterprises, Historically Underutilized Businesses, and Small Business Enterprises

The federal and state programs for disadvantaged business enterprises (DBE), historically underutilized businesses (HUB) and small business enterprises (SBE) have been developed to encourage participation in the construction industry by a wide variety of contractors and therefore expand diversity in the industry.

All federal-aid projects are subject to the DBE requirements. The U.S. Department of Transportation (USDOT) must approve each state's DBE program and its annual goals to ensure compliance with all DBE program requirements. FHWA has determined a LG must operate under TxDOT's DBE program even if it has its own program already approved by USDOT. Participation in TxDOT's approved DBE program is accomplished through a provision in the advance funding agreement (AFA) executed by both. LGs are encouraged to contact TxDOT's Civil Rights Division for assistance, as well as review the Local Government DBE Compliance and Monitoring Guide manual. Guidance may also be found at USDOT's Office of Small and Disadvantaged Business Utilization.

The LG must implement an appropriate DBE program and coordinate closely with the TxDOT district. Details regarding the application of DBE, HUB and SBE programs that must be followed and properly documented during the project are found in Chapter 7 - Plans, Specifications & Estimates (PS&E) Development of this Manual and in Chapter 9 of the LGPM Guide.

Equal Employment Opportunity

The LG, as a contracting agency, has a responsibility to ensure all federal-aid contractors, subcontractors, vendors and material suppliers do not discriminate in employment and contracting practices based on race, color, religion (in the context of employment), sex, national origin, age or disability.

As a sub-recipient of federal funds, the LG has the responsibility to ensure the equal opportunity requirements are included in federal and federal-aid contracts and to ensure the contractors are in compliance with those requirements under the LG's authority. The LG is responsible for implementing equal employment opportunity (EEO) policies for itself and its contractors and for coordinating closely with the TxDOT district during construction. Details regarding specific EEO requirements that must be followed and properly documented are found in Chapter 7 - Plans, Specifications & Estimates (PS&E) Development of this Manual and in Chapter 9 of the LGPM LGPM Guide.

Equipment Rental Rates

Federal regulations address participation in equipment owned or rented by the contractor and used in force account work. Specified cost accounting principles must be used to develop the rates. Ineligible costs include use of contingencies, replacement cost escalator factors and premium rental rates for rental periods less than one month.

Federal policy requires the actual costs to be used to determine extra work payments; however, actual equipment costs are usually not readily available. Therefore, FHWA permits a LG to specify the acceptable rate guides in construction contracts. The LG may also include any equipment rate schedules developed in conformance with the federal cost principles and FHWA policy.

The LG is responsible for adopting TxDOT specifications for equipment rental rates or for obtaining TxDOT approval for its own rental rates. Details regarding specific requirements related to equipment rental rates that must be followed and properly documented are found in Chapter 7 Plans, Specifications & Estimates (PS&E) Development of this Manual and the LGPM Guide.

Temporary Traffic Control Devices

Regulations related to temporary traffic control devices are intended to reduce the likelihood of fatalities and injuries to road users and to workers who are exposed to motorized traffic (vehicles using the highway for purposes of travel) while working on federal-aid highway projects.

Federal regulations exist concerning the use and payment of uniformed law enforcement officers, positive protection measures between workers and motorized traffic, and temporary traffic control devices on construction, maintenance and utility work zones. The regulations apply to all federal-aid highway projects, but state agencies are encouraged to adopt these on other types of projects as well.

The regulations require the LG to adopt TxDOT's <u>Temporary Traffic Control program</u> or obtain TxDOT approval for an alternate program. The LG should coordinate the implementation of a temporary traffic control program closely with the TxDOT district office during construction. The state and federal regulations related to the use of temporary traffic control devices are included in <u>Chapter 7 – Plans</u>, <u>Specifications & Estimates (PS&E) Development</u> of this Manual. Required practices for temporary traffic control devices that must be followed and properly documented are found in Chapter 9 of the <u>LGPM Guide</u>.

Form FHWA-1273

The <u>Form FHWA-1273</u>, Required Contract Provisions, is a collection of contract provisions and proposal notices required by regulations promulgated by FHWA and other federal agencies. The provisions contained in Form FHWA-1273 are generally applicable to all federal-aid construction projects and must be made a part of, and physically incorporated into, all contracts, as well as all appropriate subcontracts.

The LG is not permitted to modify the provisions of Form FHWA-1273. Minor additions covering other requirements may be included in a separate supplemental specification, provided they do not

conflict with state or federal laws and regulations and do not change the intent of the required contract provisions. Details regarding specific requirements related to Form FHWA-1273 that must be followed and properly documented are found in <u>Chapter 7 – Plans, Specifications & Estimates</u> (PS&E) <u>Development</u> of this Manual and the <u>LGPM Guide</u>.

Liquidated Damages

Liquidated damages are required as a means of recovering, at a minimum, construction engineering costs from a contractor. The LG is responsible for adopting a policy on liquidated damages and incentives/disincentives acceptable to TxDOT as described briefly in the LGPM Guide Chapter 9. Details regarding specific requirements for liquidated damages that must be followed and properly documented are found in Chapter 7 – Plans, Specifications & Estimates (PS&E) Development of both this Manual and the LGPM Guide.

Materials

The LG is responsible for adopting TxDOT <u>standard specifications</u> for materials or for obtaining TxDOT approval on alternate specifications as described briefly in the <u>LGPM Guide</u> Chapter 9 and in more detail in <u>LGPM Guide</u> Chapter 7. Details regarding specific state and federal requirements for materials specifications that must be followed and properly documented are found in <u>Chapter 7 – Plans, Specifications & Estimates (PS&E) Development</u> of this Manual.

Non-discrimination against Persons with Disabilities

<u>The Americans with Disabilities Act, 42 U.S.C. Chapter 126</u> (ADA) requires equal opportunity for individuals with disabilities. <u>Title II</u> of the ADA governs public facilities including roads and sidewalks. Such opportunity prohibits discrimination against individuals with disabilities in government services, public accommodations, transportation and telecommunications. Further, "reasonable accommodation" must be provided to qualified individuals with disabilities.

Federal Requirement

- 1. <u>28 CFR §35.151</u> Provides the construction of any facility or part of a facility after January 26, 1992, for use by a public entity shall afford ready accessibility and utilization by individuals with disabilities.
- 2. <u>49 CFR §37.41</u> Provides the construction of any new transportation facility shall afford ready accessibility and utilization by individuals with disabilities.
- 3. <u>49 CFR §37.43</u> Requires the LG, when altering any existing transportation facility, to ensure the alterations are made in such a way as to afford maximum opportunity to provide ready access and utilization by individuals with disabilities.
- 4. <u>49 CFR §37.3</u> Defines a facility as "...all or any portion of buildings, structures, sites, complexes, equipment, roads, walks, passageways, parking lots, or other real or personal property, including the site where the building, property, structure, or equipment is located."

State Requirements

- Texas Government Code, Chapter 469 State law to ensure each building and facility subject
 to this chapter is accessible to and functional for persons with disabilities without causing the
 loss of function, space or facilities. This chapter relates to non-ambulatory and semiambulatory disabilities, sight disabilities, hearing disabilities, disabilities of coordination and
 aging.
- 2. Texas Accessibility Standards Sets standards for accessibility to: public buildings and facilities; privately owned buildings and facilities leased or occupied by state agencies; places of public accommodation; and commercial facilities by individuals with disabilities. Subject buildings and facilities are addressed in more detail in 16 TAC §68.20. These standards are to be applied during the design, construction and alteration of such buildings and facilities to the extent required by regulations issued by the Texas Department of Licensing and Regulation (TDLR).

Required Practices

The procedures that must be followed to obtain approval for accessibility provisions from the TDLR are described briefly in the LGPM Guide Chapter 9 – Construction and in more detail in the LGPM Guide Chapter 7 – Plans, Specifications & Estimates (PS&E) Development. Additional information on accessibility requirements during the design and PS&E phase are covered in Chapter 7 of this Manual.

Non-segregated Facilities

The contractor cannot discriminate against any person by having segregated facilities. By entering into the contract, the contractor certifies that they maintain non-segregated facilities that conform to the requirements of 41 CFR §60.1.8. This certification is included in Form FHWA-1273. The prime contractor is required to obtain a similar certification from each subcontractor and supplier, as applicable.

The LG is responsible to ensure the contractor and subcontractors obtain the appropriate certifications and for coordinating closely with the TxDOT district office during construction. Details regarding the specific requirements for ensuring non-segregated facilities during construction that must be followed and properly documented are found in the LGPM Guide Chapter 7 – Plans, Specifications & Estimates (PS&E) Development. Chapter 7 of this Manual describes the state and federal statutes related to non-segregated facilities.

Patented/Proprietary Products

The LG should provide notification to TxDOT with the proposed PS&E if it intends to specify patented or proprietary products in a contract. The state and federal requirements regarding the use of patented or proprietary products are contained in Chapter 7 - Plans, Specifications & Estimates (PS&E) Development of this Manual. Chapter 7 of the LGPM Guide provides the procedures that must be followed and documented.

Prevailing Minimum Wage (Davis-Bacon Act)

The Davis-Bacon Act, 40 U.S.C. §3141 et seq. requires the payment of locally prevailing wages and fringe benefits to laborers and mechanics employed on federal contracts in excess of \$2,000 for construction, alteration or repair (including painting and decorating) of public buildings or public works. Davis-Bacon was enacted as a means to prevent contractors from importing cheap labor from outside the area, thereby, keeping capital at home with the local labor force where it would do the most good. The LG is responsible to ensure the provisions of the Act are implemented appropriately as described in the LGPM Guide Chapter – 7 Plans, Specifications & Estimates (PS&E) Development. Details regarding the specific requirements for prevailing minimum wage that must be followed and properly documented are found in Chapter 7 – Plans, Specifications & Estimates (PS&E) Development of this Manual.

Prison-Produced Materials

Prison-produced materials are products made by convict labor. There are limitations on using materials produced by convict labor in a federal-aid highway project. For the majority of projects in Texas, prison-produced materials are not allowed and the LG is responsible for including language prohibiting the use of prison-produced materials in the bid documents. Details regarding prison-produced materials that must be followed and properly documented are found in Chapter 7 — Plans, Specifications & Estimates (PS&E) Development of this Manual and Chapter 7 of the LGPM Guide.

Publicly Owned Equipment

The LG should not include contract provisions requiring the use of LG publicly owned equipment unless approved in writing by TxDOT as described briefly in the LGPM Guide Chapter 9. Details regarding the use of publicly owned equipment that must be followed and properly documented are found in the LGPM Guide Chapter 7 – Plans, Specifications & Estimates (PS&E) Development. The state and federal requirements related to publicly owned equipment are listed in Chapter 7 of this Manual.

Title VI Compliance

<u>Title VI of the Civil Rights Act of 1964</u> is the federal law stating "No person in the United States shall, on the grounds of race, color, or national origin be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program to which this part applies." Additional regulations and statutes broadened non-discrimination to include religion, sex, age, retaliation and disability.

Pursuant to <u>Title VI of the Civil Rights Act of 1964</u>, as amended, the <u>Restoration Act of 1987</u> and other nondiscrimination authorities, it is the policy of TxDOT that discrimination based on race, color, national origin, sex, age or disability shall not occur in connection with any of its programs or activities.

The LG is responsible to ensure both the LG and its contractors comply with <u>Title VI</u> and remedy any existing compliance problems during construction. Details regarding specific Title VI compliance requirements that must be followed and properly documented are found in <u>Chapter 7 – Plans, Specifications & Estimates (PS&E) Development</u> of this Manual. The procedures that should be used by the LG to ensure compliance are included in Chapter 7 of the <u>LGPM Guide</u>.

Safety: Accident Prevention

As described briefly in the <u>LGPM Guide</u> Chapter 9, the LG has enforcement responsibilities of any applicable state and federal safety standards. Details regarding specific accident prevention requirements that must be followed and properly documented are found in <u>Chapter 7 – Plans</u>, <u>Specifications & Estimates (PS&E) Development</u> of this Manual. Procedures for implementing these requirements are contained in the <u>LGPM Guide</u> Chapter 7.

Trench Safety

As described briefly in the <u>LGPM Guide</u> Chapter 9, the Occupational Safety and Health Administration (OSHA) has established trench safety requirements as set forth in <u>29 CFR Part 1926</u>, <u>Subpart P</u>, and the <u>Texas Health and Safety Code</u>, <u>Chapter 756</u>, <u>Subchapter C</u> outlines additional construction project safety requirements.

The LG is responsible for including the appropriate provisions for trench safety into the bid documents and for coordinating with the TxDOT district office during construction. Details regarding specific trench safety requirements that must be followed and properly documented are found in Chapter 7 – Plans, Specifications & Estimates (PS&E) Development of this Manual. Procedures that must be followed to implement these requirements are described in the LGPM Guide Chapter 7.

Purchase of Equipment

General

Equipment, as defined in <u>2 CFR §200.1</u>, means tangible personal property having a useful life of more than one year and an acquisition cost of \$5,000 or greater per unit. All other tangible personal property is considered to be "supply." A LG may need to purchase equipment to adequately meet the construction engineering requirements of a project. Costs may be eligible for state and federal-aid reimbursement using the procedures described in the <u>LGPM Guide</u>.

Federal Requirement

- 1. <u>23 U.S.C. §302</u> Requires states (and other governmental agencies) to be suitably equipped to discharge their duties.
- 2. <u>23 CFR Part 140</u> Allows for reimbursement to states (and other governmental agencies) for eligible construction engineering costs, railroad and audit work.

3. FHWA issued the Equipment Purchases for State Construction Engineering Use policy memorandum on May 5, 1993 (now referenced in FHWA Contract Administration Core Curriculum Manual October 2014, page 103) clarifying federal participation in equipment purchased by the contractor for the LG to discharge its construction engineering responsibilities.

State Requirement

1. No comparable statute.

Convict (Inmate) Labor

General

Convict labor is the work of prison inmates on a construction site. Convict labor restricts competition since convict labor can be furnished at rates well below market labor costs or force account rates; therefore, federal regulations place limitations on using convict labor on a federal-aid highway project. 23 CFR §635.117(a) states:

"No construction work shall be performed by convict labor at the site or within the limits of any Federal-aid highway construction project from the time of award of the contract or the start of work on force account until final acceptance of the work by the State Transportation Agency (TxDOT) unless it is labor performed by convicts who are on parole, supervised release, or probation."

This same principal applies to projects involving federal funding and administered by a LG.

The terms "parole, supervised release or probation" refer to the status of a person who has completed the condition of imprisonment. "Supervised release" does not include inmates currently serving their imprisonment terms while performing supervised work either inside or outside the walls of the incarcerating facility. Thus, it is not acceptable to have inmates who are currently serving the terms of their incarceration performing work on a project where convict labor is prohibited.

The Texas Transportation Code allows the use of inmate labor on highway projects involving state funding.

Federal Requirement

1. <u>23 CFR §635.117(a)</u> – Prohibits the use of convict labor for projects on roadways functionally classified above a rural minor collector.

State Requirement

1. <u>Texas Transportation Code §223.044</u> – Allows TxDOT to contract with a criminal justice agency for the provision of inmate labor on a state highway improvement project.

Required Practices

In general, the LG must obtain TxDOT concurrence before using convict or inmate labor on projects. The required practices that must be followed are described in the LGPM Guide.

False Statements

General

A false statement notice (Form FHWA-1022), as contained in 23 CFR §635.119, must be posted on each federal-aid highway project in one or more places where it is readily available to and viewable by all personnel concerned with the project. The LGPM Guide provides the wording for the notice and describes the required practices for posting the notice.

Federal Requirement

1. <u>23 CFR §635.119</u> – Requires a false statements notice to be posted on all federally funded projects (<u>Form FHWA-1022</u>).

State Requirement

1. No comparable statutes

Salvage Credits

General

Salvaged materials associated with a contract must be disposed of in accordance with the state statute requirements located at <u>Texas Government Code Chapter 2175 – Surplus and Salvage Property</u>. Texas Facilities Commission rules related to these statutory requirements that must be followed and properly documented are located at <u>1 TAC Chapter 126</u>.

Federal Requirement

- 1. <u>2 CFR §1201.317</u> Allows non-state agency grantees to use their own procurement procedures that reflect applicable state and local laws and regulations, provided the procurements conform to applicable federal law and the standards.
- 2. FHWA Policy Memorandum dated October 3, 1988 (now referenced in <u>FHWA Contract Administration Core Curriculum Manual October 2014, page 100</u>) Requires a credit for material salvaged from the project unless the state agency has a procedure in place that does not require salvage credit. The process to determine salvage credit is described.

State Requirement

- 1. <u>1 TAC, Chapter 126</u> Describes a process for disposal of surplus property owned by a state agency.
- 2. <u>Texas Government Code §2175</u> Describes procedures used by the Texas Facilities Commission for sale of excess state property.

Required Practices

The disposition of property must be made through competitive bidding or auction to the highest bidder. The required practices that must be followed are described in the <u>LGPM Guide</u>.

Chapter 10: Project Close-Out and Maintenance

Contents:

Section 1: Introduction

Section 2: Project Close-Out

Section 3: Maintenance

Section 1: Introduction

The final phase of a non-construction or construction project involving a partnership between a local government (LG) and the Texas Department of Transportation (TxDOT) is project close-out and the establishment of a maintenance agreement, if necessary. At the end of work on the project, the LG and TxDOT will concur the project scope has been completed according to the advance funding agreement and contract documents for both construction and non-construction projects. TxDOT and the LG will determine each party's final share of the project costs and make final payment. The parties will enter into a maintenance agreement if appropriate for the project. For the purposes of this chapter, the term "TxDOT" or "the TxDOT district" is referring to the TxDOT office, division, district or area office that has project oversight responsibilities.

This chapter of the Local Government Projects Policy Manual (LGPP Manual) provides policies and regulations required to close-out the project and establish a maintenance agreement, if required. The companion Local Government Project Management Guide (LGPM Guide) describes the procedures related to this phase of the project.

Section 2: Project Close-Out

Overview

Project close-out is a critical step in the project and is necessary to complete the requirements of the advance funding agreement (AFA). Close-out includes a project review by TxDOT to: (1) determine if all work was completed and acceptable to TxDOT; (2) determine each party's final cost share for the project; (3) process the final payment to close the work on the project; and (4) complete the project review. The close-out process requires the LG to provide physical or electronic access to all necessary project documentation to TxDOT for review. Upon completion of its review, the local government (LG) will retain in the project files as defined in the AFA.

Project Review

Within 30 days of project completion, the LG must submit to the TxDOT district the final reimbursement request with backup documentation and provide access to the project records for final review. All requests for reimbursable costs must be submitted no later than 90 days after the project completion end date as established pursuant to 2 CFR 200.211(b)(5). The Local Government Project Management Guide (LGPM Guide) describes the procedures that must be followed to complete the process.

Federal Requirements

- 1. <u>2 CFR §200.211(b)(5)</u> Requires a period of performance start and end dates to be established in the federal award documents.
- 2. <u>2 CFR §200.344(a)</u> All requests for reimbursable costs must be submitted no later than 90 days after the project completion end date.

Final Close-out

The primary responsibility to fiscally close-out a AFA project lies with the TxDOT district. The district maintains cost data throughout the project and should determine the actual shared cost at the conclusion of the work on the project. The <u>LGPM Guide</u> provides more information regarding the procedures for final close-out of the project. The district should prepare a statement of cost detailing the necessary information that would allow the TxDOT Finance Division (FIN) to refund money or notify FIN that additional funds must be being collected. FIN will submit <u>FHWA Form PR-20</u> to the Federal Highway Administration (FHWA).

Federal Requirements

1. <u>2 CFR §200.211(b)(5)</u> – Requires a period of performance start and end dates to be established in the federal award documents. All requests for reimbursable costs must be submitted no later than 90 days after the project completion end date.

- 2. <u>2 CFR §200.344(a)</u> Requires the LG to submit, no later than 90 days after the end date of the period of performance, all financial, performance and other reports as required by the terms and conditions of the federal award.
- 3. <u>2 CFR §200.344(g)</u> Requires the federal awarding agency or pass-through entity to complete all closeout actions no later than one year from the receipt and acceptance of all required final reports.

Audit

Provisions in the AFA between TxDOT and the LG dictate the project audit requirements. The AFA will contain project specific information on audit requirements.

The AFA will also contain a provision regarding the Inspection of Books and Records, which states: "the State, the Local Government, and the FHWA (if federally funded) and their duly authorized representatives shall have access to all the governmental records that are directly applicable to the agreement for the purposes of making audits, examinations, excerpts, and transcripts."

In addition, for federally funded agreements, the AFA will contain a provision regarding the Office of Management and Budget Audit Requirements requires the parties to the agreement to comply with the requirements of <u>2 CFR Part 200</u>, <u>Subpart F</u> regarding single audit reports (previously referenced and stipulated in OMB Circular A-133).

If there is some concern over project records or finances, the TxDOT district engineer can request an audit of a project by the TxDOT Audit Office.

Federal Requirements

1. <u>2 CFR Part 200</u>, <u>Subpart F</u> – Sets forth the audit requirements for the audit of non-federal entities expending federal awards.

Document Retention

When a contract is closed out, the project documents should be securely stored by the LG and protected until the legal document retention requirements have been met as specified in the AFA. The project documents must be kept during the contract period and for the length of time after completion of project activities as specified in the AFA, in accordance with any applicable federal requirements, until completion of all audits or until any pending litigation has been completely and fully resolved, whichever occurs last. However, if the AFA includes right of way or surviving (permanent) maintenance provisions, the file must be retained indefinitely.

More information on the retention of documents is included in <u>Chapter 2</u> and <u>Chapter 9</u> of this Manual. In addition to the project documents retained by the LG, TxDOT may also retain project-related documents. The TxDOT documents need to be retained pursuant to the AFA and TxDOT's document retention policy.

Federal Requirements

1. <u>2 CFR §200.334</u> – Requires all financial records, supporting documents, statistical records and all other LG records pertinent to a federally funded project be retained for a period of three years from the date of final submission of the final expenditure report, unless certain other exceptions arise such as litigation or ongoing audit.

Disposition of Excess Property

General

Consideration should be given for the disposition of property interests that have been recommended as being no longer needed for highway purposes. TxDOT's Right of Way Division is available to facilitate all dispositions of real property. Additional information on the disposition of property can be found in TxDOT's Right of Way Property Management Manual. Local governments should also be aware that certain requirements apply to the disposition of real property acquired as part of a federally assisted project.

Federal Requirements

23 CFR §710.409 – Specifies federally funded projects with real property interest in excess of transportation needs may be sold or conveyed to a public entity or to a private party in accordance with 23 CFR §710.403(d).

State Requirements

1. <u>Texas Transportation Code Chapter 202</u>, <u>Subchapter B</u> – Provides for the sale, exchange or return of any interest in real property no longer needed for a state highway purpose.

Required Practices

In general, the LG should coordinate the disposition of property with TxDOT at the completion of the project. The <u>LGPM Guide</u> provides the required practices for the disposition of property, as well as the responsibilities of the LG and TxDOT.

Section 3: Maintenance

Overview

Local governments (LG) and TxDOT district offices have frequently cooperated in the maintenance of the state highway system. From a contractual perspective, this is done either through a municipal maintenance agreement or through an advance funding agreement for a specific project. The LG may assume all or part of the responsibility for maintenance in these agreements; however, the district remains the primary contact between TxDOT and the LG and, therefore, takes the lead in assuring projects are maintained in accordance with agreement provisions.

Municipalities

The LG and TxDOT must follow state regulations related to maintenance activities and agreements within an incorporated city's limits. Jurisdiction of highways, streets or roads within an incorporated city rests with the governing body of the incorporated city except on those declared as controlled access highways by the Texas Transportation Commission. TxDOT must enter into an agreement with each incorporated city for authority to construct, reconstruct, maintain, control, supervise and regulate the designated highways within the city's limits and to establish the responsibilities of the department and the city.

Federal Requirements

None found.

State Requirements

- 1. <u>Texas Transportation Code §203.003</u> Specifies the jurisdiction of municipalities of roads within and incorporated city.
- 2. <u>Texas Transportation Code §221.002</u> and <u>43 TAC §29.5</u> Provides that TxDOT must enter into an agreement with each incorporated city for authority to construct or maintain a highway within the city's limits.

Federally Funded Projects

All projects built with federal funds have an executed agreement between the Federal Highway Administration (FHWA) and TxDOT. One agreement provision requires maintenance of the completed project. For projects on the state highway system, TxDOT will normally perform the maintenance with state forces or through a contract with a private vendor. For projects off the state highway system, the LG must assure the project is maintained "satisfactorily." Maintenance responsibilities are outlined in the advance funding agreement (AFA). Chapter 2 of the LGPP Manual and LGPM Guide contain more information on these two types of agreements. TxDOT

and FHWA retain authority to periodically review federally funded projects and assess the LG's efforts to maintain the project as designed.

Comprehensive Maintenance Management Agreement

When the LG agrees to maintain the highway facility, a comprehensive maintenance management agreement (CMMA) must be approved and executed. TxDOT's Maintenance Division serves as the approval agency for the CMMA.

Examples of areas of maintenance to be included in the agreement are in the <u>Texas Turnpike</u> <u>Authority, Programmatic Comprehensive Development Agreement Book 3 (Design-Build), Chapter 19</u>. The <u>LGPM Guide</u> provides the required practices and the responsibilities of the LG and TxDOT for these agreements.

Federal Requirement

1. None found.

State Requirement

- 1. The following laws and regulations allow the development of a CMMA for maintenance of a highway facility.
 - a. <u>Texas Transportation Code §§201.103</u>, <u>203.003</u>, <u>221.002</u>, and <u>222.104</u>
 - b. 43 TAC Chapter 5, Subchapter E

One-Year Maintenance Plans and Inspections

In addition to having a CMMA, each year a maintenance plan must be developed and submitted to TxDOT for approval at least 30 days before the beginning of the fiscal year. The plan shall follow the CMMA for items to be maintained by the LG. Each year the maintenance plan shall be updated and approved by TxDOT.

As specified in the AFA, regular inspections should be made by the LG to determine the condition of the highway in order to establish maintenance needs. TxDOT will make inspections to determine compliance with the maintenance requirements of the CMMA and one-year plan. The standard set in the CMMA may be revised by the one-year plan if approved by TxDOT.

Material Specifications

Materials utilized in maintenance of the facilities on the state highway system must conform to the latest version of TxDOT's <u>Standard Specifications for Construction and Maintenance of Highways</u>, <u>Streets</u>, <u>and Bridges</u> and must conform to TxDOT's required <u>special specifications and special provisions</u>. TxDOT may approve the use of an alternative specification if the proposed alternative specification is determined to be sufficient to ensure the quality and durability of the finished product for the intended use and the safety of the traveling public.

Materials utilized in maintenance of the facilities off the state highway system do not have to conform to TxDOT standards. However, if federal funds were used in the construction, the LG should use materials providing a comparable level of service and safety.