

Surface Transportation Project Delivery Program

FHWA 327 Monitoring Report #1 of the Texas Department of Transportation

Executive Summary

This is the first report of Federal Highway Administration's (FHWA)s monitoring (Report #1) of the Texas Department of Transportation (TxDOT) NEPA project review responsibilities since audits were completed and the NEPA assignment memorandum of understanding (MOU) was renewed on December 9, 2019. In comparison to the audits, this review was focused, collaborative with TxDOT staff, and deliberative.

The collaborative aspect between FHWA and TxDOT staff is demonstrated by the joint FHWA-TxDOT Monitoring #1 team (team) that was formed in October 2019 and selected environmental commitments as the main focus of this effort. Together the team developed the charter and work plan including a schedule that was revised appropriately based on need to complete various adequate and accurate milestone steps. The team met regularly in a deliberative fashion after January 2020 to analyze project files, data from the same and existing TxDOT Environmental Affairs Division (ENV) and District specific procedures to prepare this monitoring report. Prior to the virtual District and Division interviews, the team: (1) performed reviews of 27 project files in TxDOT's Environmental Compliance Oversight System (ECOS), (2) examined nine TxDOT District responses (two rounds) to the team's preliminary project file review summaries, and (3) developed interview questions for those same nine Districts and Environmental Affairs Division Subject Matter Experts (ENV SMEs). The on-site project site visit portion of this monitoring review was canceled due to the pandemic. The follow up virtual TxDOT District interviews were conducted remotely March 1-18, 2021. The ENV SMEs were sent written questionnaires that they provided written responses back to the team on April 2, 2021.

The TxDOT continues to develop, revise, and implement procedures and processes required to carry out the NEPA Assignment Program. Through project file reviews and quality controls as well as from interviews the team found evidence that TxDOT is committed to establishing a successful program. This report summarizes the team's assessment of several aspects of the recording and implementation of environmental commitments. The first part of the report describes the results of the project file review while the second part of the report relies on interviews and questionnaire responses from TxDOT staff to explain current TxDOT commitment processes and procedures. The report concludes with some observations and recommendations that TxDOT should consider to continuously improve their program. This report identifies many successful practices that the team urges TxDOT leadership to consider duplicating or implementing in districts

statewide when appropriate. Also, the team makes several observations that draw attention to aspects of the implementation of commitments that have been unseen or overlooked. We urge TxDOT leadership to consider what this report reveals in making changes and improvements. Finally, the project file reviews resulted in the identification of a few non-compliant observations for TxDOT to address as soon possible with corrective actions. By taking corrective action and making other adjustments to current practice and procedures based on the observations in this report, TxDOT will continue to improve the implementation of environmental commitments. The goal of FHWA's oversight of TxDOT's program assignment is to provide valuable information for TxDOT to continue to improve its program.

Background

The Surface Transportation Project Delivery Program allowed a State to assume FHWA's environmental responsibilities for review, consultation, and compliance for highway projects. This Program is codified at 23 U.S.C. 327. When a State assumes these Federal responsibilities for NEPA project decision-making, the State becomes solely responsible and liable for carrying out these obligations in lieu of and without further NEPA related approval by FHWA.

FHWA assigned the State of Texas the responsibility for making project NEPA approvals and other related environmental decisions for highway projects on December 16, 2014 and renewed that assignment in a MOU executed on December 9, 2019. The FHWA responsibilities assigned to TxDOT are specified in the MOU. These responsibilities include: compliance with the Endangered Species Act (ESA), Section 7 consultations with the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration National Marine Fisheries Service, and Section 106 consultations with the Texas Historical Commission (THC) regarding impacts to historic properties including public involvement (PI) and the results of the same. These responsibilities often, but not always, result in environmental commitments as part of TxDOT's NEPA project-level approval and beyond to design and construction.

The TxDOT 327 MOU specifies that FHWA conducts monitoring as part of its program oversight responsibilities since the completion of audits. The purpose of monitoring is to assess a State's compliance with the provisions of the MOU as well as all applicable Federal laws and policies. But monitoring differs from audits in being collaborative with TxDOT. The scope of a monitoring review is based upon agreed areas of interest related to TxDOT's NEPA project-level approval, like environmental commitments assessed during this review effort, that are directly associated with NEPA Assignment per the MOU. Implementation of most environmental commitments involves more than just one entity within TxDOT. ENV informed the team that Districts serve as the lead entity for implementation, perhaps with assistance from ENV, Civil Rights Office (CIV), Right of Way

Division (ROW), but primarily District environmental, design, ROW, construction (CST) staff and others.

The last way that consideration of environmental commitments is linked to monitoring under NEPA assignment is through the Risk Based Stewardship and Oversight agreement (23 USC 106) between TxDOT and FHWA-TX Division Office. That agreement is a basis for collaboration between the agencies to mutually identify issues of program risk and process improvement. While being an integral aspect of NEPA approvals, environmental commitments are also the basis of tasks and outcomes must be implemented by multiple TxDOT Divisions and Districts in order to be compliant with 23 CFR 635 and 771. This monitoring review revealed that the implementation of environmental commitments engages TxDOT department-wide.

What are environmental commitments and how are they part of NEPA assignment?

FHWA's NEPA regulations at 23 CFR 117.109(b) treat environmental commitments synonymously with mitigation measures that are a basis of a NEPA approval. It says that "the Administration (TxDOT under NEPA assignment), is responsible for implementing those mitigation measures stated as *commitments* in the environmental documents prepared." This means that all environmental commitments identified as part of a NEPA review (including TxDOT's response to public comment commitments) become recorded in environmental documents (EIS, EA and CEs) prepared. And that pursuant to 23 U.S.C. 106, "FHWA must ensure that the State highway agency constructs the project in accordance with and incorporates all committed environmental impact mitigation measures listed in approved environmental review documents." Also, the regulation says "FHWA will ensure that this (commitment) is accomplished as a part of its stewardship and oversight responsibilities." This means that all the environmental commitments be implemented and to ensure that they are as part of general oversight of program implementation. Finally, the regulations states that if a commitment is not implemented that its "deletion or modification (be) in writing."

Environmental commitments occur during all phases of project development and are also a vital component to the NEPA review process that (1) produce projects that better fit in their setting, reduce unnecessary project impacts, and mitigate impacts in order to address approval or permit requirements or design promises made by project staff to the public. Commitments also (2) allow TxDOT to apply what preliminary information that is available to complete the NEPA while providing reasonable assurance that all environmental review responsibilities would be completed during the appropriate phase whether prior to and/or during and after construction. In both these ways recording and implementing environmental commitments is either required by law, TxDOT procedure or public request. When TxDOT makes a NEPA approval, that approval normally includes several environmental commitments that are part of the basis of that approval. Any commitments made as part of a NEPA approval that are not implemented would render

that approval deficient and subject to re-evaluation pursuant to 23 CFR 771.129. The challenge for this review is that environmental commitments may occur during the design process, during construction, or even after construction, meaning the team needed to review a broad variety of records. The team identifies that commitments can be related to procedure and/or regulation and that errors in processing commitments may occur at various phases of project development, design and construction or even thereafter.

How Are Environmental Commitments Defined in TxDOT's NEPA Process?

The word "commitment" occurs frequently in TxDOT's Environmental Guide (Volume 2), often in the context of completing Environmental Compliance Oversight System (ECOS) activity documentation. Because an environmental commitment reflects an obligation or responsibility on TxDOT's behalf, to either take some action or achieve some result, the only shared attribute of commitments is that they have been written down and have become part of the environmental documentation (i.e., ECOS "activities" in the project file) environmental document (i.e., CE file documentation, EA or EIS), or decision document (CE concurrence, FONSI or ROD). A commitment could be stated in an agreement document either specific for a project or for a program of projects (programmatic agreement or programmatic consultation). For example, SHPO need not be consulted so long as the depth of construction does not exceed 2 feet with the commitment to no construction below 2 feet. A commitment also could be made as part of a TxDOT response to public comment. For example, the question: would access be maintained to our subdivision, be answered (in writing) yes, access during construction would be maintained. Finally, there are a number of commitments that result from a set of actions that routinely address common TxDOT obligations or responsibilities. For example, any time the ground surface is disturbed as part of construction, there is an obligation to develop and implement a Storm Water Pollution Protection Plan. Such commitments are normally addressed with standard provisions in the project plans or bid documents, even though they may not be specifically called out in ECOS but yet may be in a District project file or staffs working files.

The content of a commitment, for purposes of this monitoring review, were divided into two categories. One category includes procedural commitments that may be necessary to achieve a certain result(outcome), but may not be an end result itself. For example, TxDOT's Environmental Guide (Volume 2) says commitments be documented in ECOS as activities (e.g. perform programmatic coordination, perform background study, perform survey). Each activity would identify a responsible party such as the District or ENV SME to perform the commitment activity and when completed, "finalize" the commitment activity. If a commitment will be the responsibility of design, construction, or maintenance personnel, according to TxDOT's Project Development Process manual, (Section 50240) those commitments must be included in project plans, general notes, and specifications as appropriate. If the design reviewer fails to add a note to the plans, then the commitment is unlikely to be implemented.

The other category of commitments is result-driven. For example, if a commitment is expressed as an ECOS activity to complete an archeological survey of ROW parcels once a right-of-entry has been obtained, the activity is considered finalized once the survey has been completed. There are additional activities related to the commitment including to evaluate the survey results to determine if additional action is necessary. Defined in this manner commitments may be related to procedure and/or regulatory outcomes that may occur at various activities in ECOS. For commitments that are the responsibility for people other than environmental, documentation and tracking implementation status could occur at multiple stages of the project development process: right-of-way, design, and construction or even post-construction.

Per TxDOT Environmental Management System (EMS) manual, the way the “Chapter 3 (Communication of Legal and Regulatory Requirements) EPIC process” is expected to work is many environmental commitments for individual projects are implemented through TxDOT’s EMS process through environmental permits, issues and commitments sheets (EPICs). EPICs are any permit, issue, coordination commitment, or mitigation obligation necessary to address, offset, or compensate for social, economic, or environmental impacts of a project, including sole source aquifer coordination, wetland permits, stormwater permits, traffic noise abatement, threatened or endangered species coordination, or archeological permits, and any mitigation or other commitment associated with the project. The procedures for documenting and implementing EPICs are presented in TxDOT’s EMS manual. Per TxDOT manuals (both the Project Development Process manual and the EMS manual), the Project Design Engineer is responsible for ensuring that all relevant environmental permits, issues, and commitments are correctly communicated to the construction contractor. The EPIC Sheet is used to summarize the special environmental requirements and restrictions related to permitted construction activity and the conditions and status of any permits. For example, it may depict areas to avoid during construction due to the presence of, but not limited to endangered species, migratory birds, and wetlands. The EPIC Sheet may also include commitments made to the public, other entities, and regulators. These commitments may include, among others, the constructing of noise walls/sound barriers or the preservation of historic bridge plaques. All stipulated conditions of any permit must be met to prevent unnecessary project delays. All conditions shall be clearly outlined on the EPIC Sheet.

Scope and methodology

The scope of this monitoring review is defined both in statute (23 U.S.C. 327) and the MOU (Part 11). As a matter of policy, a monitoring review generally is a cooperative effort between TxDOT and FHWA. Even though monitoring is cooperative, FHWA is responsible for the report content. Any outcomes must be a result of an unbiased, official, and careful examination and verification of records and information about TxDOT’s assumption of

environmental responsibilities. The members of the team that conducted this monitoring review have previously completed special training in audit processes and methods that were applied to monitoring. The difference is that monitoring involves more partnership and greater interaction during the review between FHWA and TxDOT.

The diverse composition of the team, the process of developing the review report, and TxDOT's publishing it on their webpage for public inspection help maintain an unbiased review and establish the monitoring as an official action taken by FHWA. The team for Monitoring Review #1 included NEPA subject-matter experts (SMEs) from the FHWA Texas Division Office, as well as FHWA offices in Washington, DC, and Atlanta, GA, and TxDOT staff and management. In addition to the NEPA experts, the team included FHWA planners and engineers from the Texas Division office. One primary contact from TxDOT ENV was included on the team that played a critical role of back checking the team's preliminary findings from project file reviews, performing follow up with TxDOT Districts on pending information and final outcomes of analysis work, in addition to contributing to the content contained in the report.

Although this review has environmental commitments as a focus, this effort also evaluates TxDOT's technical competency and organizational capacity, adequacy of the financial resources committed by TxDOT to administer the responsibilities assumed. The team also assessed TxDOT's documentation, and quality assurance/quality control process. The standard of review was compliance with the MOU requirements, and compliance with applicable laws, regulations (emphasizing 23 CFR 771 and 635) and both federal and TxDOT policies and procedures in administering the responsibilities assumed.

The scope and focus of this monitoring review included reviewing the processes and procedures (i.e., toolkits and handbooks) used by TxDOT to reach and document its independent NEPA project approvals focusing on projects with environmental commitments. The team conducted a careful examination of 27 highway projects and relevant files in TxDOT's database called ECOS and other databases in addition to verified information on the TxDOT NEPA Assignment Program through inspection of other records (i.e. plan sets, e-mails, reports, etc.) and through interviews with TxDOT District environmental, design, ROW, Area Office and other staff as well as written responses to questions from ENV SMEs. The team gathered information that served as the basis for this monitoring review from three primary sources. First, a review of a judgmental sample of 27 project files with environmental commitments in various TxDOT databases with (ECOS recorded) approval dates after the execution of the MOU. The projects reviewed were drawn with the assistance of TxDOT Program Review (PR) staff for the purpose of assessing metro, urban as well as rural districts (since their makeup and amount of staff performing tasks varies). Second, TxDOT District's response(s) to the team's project file preliminary findings summaries from the review team. Third, the team hosted virtual interviews with TxDOT District staff in addition to written responses (to a team developed

questionnaire) from ENV SMEs (for a broader perspective). TxDOT provided information in response to FHWA preliminary project file summaries questions and requests for documents and provided written clarification to FHWA thereafter. That material covered the various topics of environmental commitments including but not limited to: Noise Walls/Sound Barriers; USACE and USCG permits, historic resources, animal and plant surveys, hazardous materials, etc. as well as public involvement concerns that warrant TxDOT action. Overall, the project file review process that the team performed was highly collaborative with TxDOT District and Area Offices input and feedback, as well as, quality review of findings from ENV Program Review (PR) staff via summarization and back check.

This review will also serve to assess the State's performance in carrying out the selected and identified procedures established for NEPA Assignment including compliance with fully carrying out environmental commitments as a result of TxDOT's project-level NEPA decision that fall outside of the Environmental Affairs purview but are still within TxDOT responsibility by TxDOT Districts (including Area Offices). The team identified the process usually includes various levels of interaction with the ROW, Design and Construction District contacts and/or Divisions and Contractors and should also include enhanced interaction with the Civil Rights Office when appropriate.

The intent of the review was to investigate whether commitments were identified, implemented and once implemented, how that fact was recorded. That investigation entailed overall consideration of TxDOT's Division (not just ENV related) and District procedures that implement environmental commitments (or lack thereof), whether all appropriate staff is aware of those procedures, and that staff implementation of commitments achieves compliance with NEPA and other assigned responsibilities. The review did not second guess project-specific decisions, as such decisions are the sole responsibility of TxDOT. The team focused on whether the procedures TxDOT followed complied with all Federal statutes, regulation, policy, procedure, process, guidance, and guidelines. In some cases, procedures within TxDOT (a decentralized organization) cross multiple Divisions (and 25 Districts) and require close coordination amongst all parties internal to TxDOT and TxDOT's Contractors to ensure compliance under the MOU.

The monitoring review did: (1) determine whether environmental commitments for 27 projects that a basis for TxDOT project NEPA approvals were implemented, (2) evaluate TxDOT's NEPA process and procedures for environment commitment documentation and implementation as part of responsibilities it assumed in the MOU and (3) when applicable, determine in what manner the completion of environmental commitments was documented. The project-level NEPA approvals included CE approvals, findings of no significant impacts (FONSI), and re-evaluations of EAs.

The monitoring review used the following terminology for describing our results:

Successful Practice – is a positive result that FHWA would like to commend TxDOT on developing. It could even be an idea or concept that may yet to be implemented. Successful practices are those we recommend be expanded upon by TxDOT with its' assumed NEPA responsibilities.

Observations – are noted items by FHWA. FHWA may make recommendations and/or suggestions that we encourage TxDOT to vet and/or implement to improve processes, procedures and/or outcomes based on observations. Observations are items that we would like to draw TxDOT's attention that might benefit from revisions and/or replication.

Non-Compliance Observations – This term means FHWA identified TxDOT deficient compliance with MOU, federal regulation, policy, process, procedure or guidance or State procedures. TxDOT will need to take corrective actions to address. These particular non-compliance observations are based on facts and come from a review of TxDOT procedures, project file documentation and interview information and are already verified and confirmed by TxDOT as partners on the team.

Most of this monitoring report is focused on whether a commitment was implemented or not, and if not implemented, would be described here either as a “non-compliance observation.” Because the substance of a commitment may be either procedural or result-driven (see commitments defined discussion above), we have labeled non-compliance observations either as “procedural non-compliance observation” or “regulatory non-compliance observation.” When a procedural non-compliance observation is identified, there also will be a mention of the TxDOT procedure was expected to be implemented. For the “regulatory non-compliance observation” a regulatory or statutory reference will be identified. In this manner, it is possible that for a certain result-driven commitment to end up being implemented due to a quality control review, even though a required procedure was not implemented that is identified in this report as a “procedural non-compliance observation.” There is the potential for the non-compliance observation to be both procedural and regulatory.

As part of the process to identify the set of project files for review, the team defined the timeframe for highway project with environmental approvals by TxDOT subject to this first monitoring and under construction. The population of project approvals selected for review derived as a judgmental sample that TxDOT selected and FHWA agreed had “enough” commitments to be meaningful to review. The project file review effort was intensive and took an in depth look at project file documentation including NEPA related documentation and plan sets from multiple TxDOT sources including, ECOS, ProjectWise, Plans Online, etc. The total number of projects that were initially reviewed for the Monitoring Review #1 totaled 27 projects. The contents of project files reflect a “moment in time” that represents information utilized in making the NEPA approval. Because the project development process has progressed from preliminary to final design through to

construction (at various stages), the project file is a historic look back at the commitments necessary to achieve a NEPA approval. Information supplemented in the project file and in other places (including verbal interview responses) since the NEPA approval provides the factual basis of whether commitments were implemented or not. In a few cases, a current status was provided since the commitment was not yet implemented.

Because TxDOT's delivery of its highway program is decentralized, the team focused its interviews on TxDOT's Districts including staff [District environmental quality coordinators (DEQCs); environmental coordinators (ECs) and specialists; designers; Area Office engineers; and when applicable District ROW] in nine of TxDOT's Districts. These interviews were conducted virtually in the following Districts: Austin, Beaumont, Brownwood, Bryan, Houston, Paris, Pharr, San Antonio and Yoakum. The team considered interviewing leadership and staff at the Environmental Affairs Division (ENV) Headquarters in Austin; but opted not to interview leadership and focus on ENV SMEs only. TxDOT staff from the Environmental Affairs Division (ENV) were provided written questions for response back to the team to gain perspective and details on how environmental commitments are processed. The team developed follow-up interview questions for Districts based on project file reviews (from their second round written responses) when appropriate. The outcome of this iterative interview process was a complete accounting of the implementation status for all the commitments defined in the 27 project files.

Overall Monitoring Report Opinion

TxDOT should make corrective actions changes to ensure the successful implementation of its program for satisfying NEPA requirements for assigned projects to meet regulatory requirements for all commitment processing.

TxDOT has the EMS process that has more success during the construction phase. We understand TxDOT is making efforts to expand the EMS and trying to tie it to other TxDOT processes both upstream (ECOS) and downstream. The processes are flexible and are designed to capture tangible documentation of commitments tracking. The review team was challenged to confirm whether all (environmental and other) commitments identified in project files were successfully implemented. This challenge was the result of the different ways TxDOT's District and section staff implement commitments and record when commitments have been satisfied. Therefore, the team encountered some difficulty in finding a written summary of all commitments and had to search several resources that are not publicly available to compile and review. Neither Districts nor ENV were able to provide a consistent method to provide a complete summary of all commitments to be included in the 100% PS&E (required per 23 CFR 635.309). These observations are evidence of varying degrees of both TxDOT lacking specific written procedures and written documentation. TxDOT's implementation of all commitments needs specific immediate attention to assure that a record is made when a commitment

has been completed. Tracking the implementation of commitments would be a straightforward task if the record of any completed commitment was located in the same electronic file.

This report identifies a few non-compliance observations that require corrective action immediately. These non-compliance observations come from a review of TxDOT procedures, project file documentation (including plan sets), and interview information and were confirmed by TxDOT as partners on this monitoring effort. There are also several observations where the team has made recommendations that TxDOT may consider for action (please see Section III below). The team acknowledges TxDOT's effort(s) to date to refine ENVs toolkits and guidelines. As a result of this monitoring review, FHWA requires TxDOT (including all Divisions and Offices when applicable including Districts) to make corrective actions (per the MOU) to clarify and/or establish additional written internal policies and procedures to clearly address the entire commitment documentation and implementation process to maintain substantial compliance with the NEPA Assignment program. The team found some evidence of TxDOT's ongoing efforts to train staff, clarify the roles and responsibilities of TxDOT staff, and to educate staff and in some cases Contractors in an effort to improve compliance with many of the assigned responsibilities.

Section I. District Information: Project File Review Specific Results and Interviews

Noted first is the FHWA-TxDOT confirmed status of the notable item indicating either: successful practice or observation. Thereafter, the following section is presented in topic format for non-compliance for ease of reference. Section 5.1.1 of the MOU requires the State to follow **Federal** laws, regulations, policy, and procedures to implement the responsibilities assumed. Section 7.2.1 of the MOU requires the State to develop **State** procedures to implement the responsibilities assumed. This review identified a couple of examples of deficient adherence to these federal and/or state procedures in addition to other relevant regulation(s). There are also instances where the team's findings were a combination of both regulatory and procedural non-compliance observations that are TxDOT's failure to comply as noted. As part of information gathered for this monitoring review, TxDOT has informed the team they are still implementing some improvements to their environmental commitment procedures. TxDOT will conduct follow-up reviews of non-compliance observations from this monitoring review and report back to FHWA within a reasonable timeframe.

Successful Practices and Observations (from District perspective)

This section summarizes the TxDOT's practices that the team believes are successful as well as observations about issues that TxDOT may consider as areas to improve.

A. Successful Practices noted by Team:

1. (Almost all) Districts interviewed showed a strong sense of stewardship in handling environmental commitments.
2. Two Urban and one Metro District had a very robust Environmental program with lots of interaction between project development and construction staff.
3. One Rural and One Urban District each established a “Cradle-to-grave” approach on their environmental documents. And in that Urban District uses their ECs as DEQCs to deliver commitments through the project development process all the way through construction. The DE gives the ECs full authority, responsibility and accountability to carry commitments.
4. One Metro and one Urban District each noted several practices that they followed some form of “tracking” for their environmental commitments.
5. One Rural District handled a wetland mitigation plan and asked ENV to develop a SOP so that others can replicate their successful practice more easily in the future.

B. General observations from Districts (areas to improve they put on radar):

Many districts identified areas they could improve upon or that need attention.

1. One Urban District noted that their LPA project oversight needed improvement.
2. Another Urban District identified additional needed training for one of their employees, (a need to add FTEs?)
3. One Rural District identified they could do a better job of reviewing the EPIC at 95% design to ensure commitments are included.
4. Another Rural District with one EC could use “backup” staff that handle the environmental items.
5. And even another Rural District with multiple ECs stated they could better interact with DEQC.
6. One Metro District stated their district-specific EPIC form appears to be working well and has allowed for clearer communication between the environmental and engineering groups. Although their district-specific EPIC form has helped, there are still several common situations that could be improved by better planning and constant communication between environmental staff, DEQC’s, engineering design staff and construction contractors.”

C. District observations of their interaction with ROW:

1. One Metro District ensures that ROW related items get addressed at District Design Review Team (DDRT) meetings. The team could not determine if this occurs at all Districts interviewed.
2. Another Metro District hands off ROW issues on Right Of Entry (ROE) for Archeological items and Hazardous Materials Leaking Petroleum Storage Tanks (LPSTs), and doesn’t look again at the issues after hand-off to others.

3. Four Districts of various sizes (Rural, Urban and Metro) noted good EC interaction with ROW on Haz Mat, Wetland mitigation and Arch). The team could not determine if this occurs at all Districts interviewed.
4. One Urban District noted interaction with ROW could be better.

D. District observations Tracking of environmental commitments:

1. There is no one TxDOT standard statewide SOP to track environmental commitments through completion.
2. Some Districts used individual spreadsheets or Stage Gate checklists in an attempt to track commitments. There is no one standard statewide method used.
3. One Metro District tracked specific bird survey commitments with reports specific to that District. The team could not determine if this occurs at all Districts interviewed.
4. One Rural District uses their T-Drive for files and Area Office (AO) has project binder(s). The team could not determine if this occurs at all Districts interviewed.
5. One Rural and one Urban District shared they rely specifically on their memory to follow through on commitments and/or use their outlook calendar for reminders.
6. In one Metro District they allow each of their ECs to use own preferred methods to track or carry out commitments.
7. Another Metro District allows ECs to handoff commitments to others in the District (AO, ROW, etc.) and do not personally see them through fruition/completion.
8. One Metro and one Urban District interviewed appeared to have a method tied to Biological Opinions to track all commitments. The remaining Districts interviewed have their own methods on how they track environmental commitments although the documentation of the same varies. There is no written SOP used to track commitments.

The team would like to convey to TxDOT that non-compliance observations as noted below point to either incomplete or non-existent and/or erroneously following procedures or regulatory missteps by TxDOT. TxDOT must take corrective actions to address these immediately. FHWA is available for further discussion about these project related facts.

TOPICAL Successful Practices, Observations and Non-compliance (Procedural and/or Regulatory):

A. Cultural Resource related-

1. Archeological

One Rural District project had a TxDOT self-imposed 2-foot depth for guardrail that was exceeded. TxDOT committed to the 2-foot depth in letter to Texas Historic

Commission (THC). This exceedance occurred as an internal mis-communication issue about design details between TxDOT District and ENV. They needed to follow Programmatic Agreement (PA) for 106 that is in place at time and is current to inform THC. This did not occur. This is a procedural non-compliance.

2. Historic

Three projects in three different Districts (two Urban and one Rural) had one historical marker each that required relocation. Contractors damaged two markers for two projects in two different Districts (one Urban and one Rural). They are being repaired or replaced and then relocated in the future. A third marker in a third Urban District is still on a bridge yet to be removed. That particular historical marker status is still pending but it is on TxDOT radar to complete successfully. Districts assured the team that each historic marker will be handled and relocated at the appropriate time. This is an observation.

B. Pollution Prevention and Abatement related-

1. Hazardous Materials

a. Texas Department of State Health Services (DSHS) notifications

For all District projects reviewed, Texas Department of State Health Services (DSHS) notifications are primarily managed by the TxDOT Area Office and in conjunction with District Construction Office. Activity appears to be in compliance with handling the notification, but the team did not analyze content of DSHS notifications. This is an observation.

b. Hazardous Materials IAA form

The team noted that a Hazardous Materials form is optional to be used by Districts; that it not used properly on at least one project in a Rural District. Per procedure the form should be done before the project is NEPA clear. Currently the form is not required to be uploaded into ECOS. It is unclear to the team how much of an issue this is with other Districts. The team noted the form did not require testing when testing was required. There was an incorrect conclusion in the form for testing requirements. This is a procedural non-compliance.

2. Noise

a. Date of Public Knowledge notification missing

Of 22 occurrences, in 13 occasions, TxDOT failed to notify public officials of the future contour line for noise impacts as part of the approved 2011 Noise Guidelines (in affect at the time) that specify the procedures for required notification as an outcome of the TxDOT NEPA decision and resulting construction project. Nine projects did provide the letter to officials. TxDOT ENV PR Section (that performs “after the fact” reviews) will ensure corrective

action is taken by Districts as soon as possible for all 13 projects. ENV PR is aware of the error and in process of requiring Districts to correct error(s). Based on the team's review these projects (23 CFR 772 and 1987 TA) are therefore regulatorily and procedurally non-compliant.

b. Noise Wall/Sound Barrier on projects (status)

i. The team identified five Districts (three Metro and two urban) with noise walls on projects. Through interviews the status updates provided informed the team that walls were either built or are pending construction, with exception of one District that needs to Change Order in a noise wall to a previously approved PS&E that was missing in the Urban District. All other District projects that had required walls; they were being constructed or are in the plans to be constructed. The walls in process are observations.

ii. The FHWA regulations 23CFR 635.309(j) require that the TxDOT incorporation of environmental commitments into PS&E is required prior to federal approval (ties to 23 CFR 771.109 – NEPA fulfilled & appropriate measures included in PS&E). FHWA requires that all components of the noise analysis are complete at 100% PS&E approval. This includes following all 2019 approved noise guidelines; especially any constructability analysis and workshop vote results must be completed and if any walls are “voted for” are then incorporated into 100% PS&E for LOA/FPAA approval -per 23 CFR 635.309 regulation. This is procedurally and regulatorily non-compliant. District corrected error as soon as they became aware of issue with missing noise wall in PS&E by adding it via change order to the existing contract.

c. Noise Constructability Analysis

i. One Metro District informed the team that they perform a Constructability Analyses and that a cost factor is applied consistently. Only two Districts, both Metro, that had projects with Constructability analysis, that they told the team they had minimum documentation which was in compliance with the 2011 guidance. ENV updated 2019 guidance on Constructability analysis to improve procedures and documentation, but does not require any consistent approach to documenting the same. This is an observation.

d. Other Noise items:

i. The team noted that one Metro District stated it needs more detailed guidance on how to handle off-ROW noise walls. This is an observation.

C. Natural Resource related-

1. Biology

a. Regular meetings with US Fish and Wildlife Service (USFWS)

Districts participate in monthly mtgs when their projects have to meet regulatory requirements with USFWS, hosted by ENV. One Rural District stated it meets with USFWS monthly. This is a successful practice.

b. Bird surveys

Bird nest survey handling and process varies. Six Districts (three Urban, two Metro and one Rural) regularly make the contractor responsible. In three Districts (one Metro and two Rural) TxDOT personnel usually handle bird surveys. There are two to three ways that Districts can employ to handle bird nest surveys as appropriate on projects. This is an observation.

c. Mussel surveys

Per TxDOT procedures, prior to proceeding to construction, surveys for species is required to occur and TxDOT will ensure and document that the project area is surveyed for presence or absence of species. One District was unaware of 2-year expiration of mussel survey. ENV confirmed that there is a 2-year maximum survey shelf-life. ENV offers annual call for mussel surveys needed in Districts. This is an observation.

2. **Water**

a. 404 permit modifications

i. Three districts (one Metro, Urban and Rural) had 404 permit modifications. Two were done by TxDOT and one modification was done by the contractor. TxDOT specifications state that modifications desired by contractors are the responsibility of the contractor. This is an observation.

ii. One Metro District noted that their DEQC corrects issue internally with Contractor. EPIC sheet did not account for the work required in a Water of the US. The assumed NWP was not initially noted. This is an observation.

iii. One rural District allowed a 404 permit to expire. USACE regulation 33 CFR 325.6 requires permit activity to be completed within a specified time frame in the permit or for an extension be granted before permit expiration. The District corrected the error with USACE as soon as they became aware of permit expiration (as a result of this monitoring review). This is a regulatory non-compliance.

b. Mitigation efforts

i. Four Districts had successful wetland and stream mitigation efforts: two Rural Districts performed offsite mitigation, and two Urban Districts performed onsite mitigation. This is an observation.

ii. One Rural District had an onsite wetland mitigation with permanent easement that encouraged ENV SOP development thereafter. This is a successful practice.

c. Assumed Nationwide Permits (NWPs)

Assumed NWPs are handled differently by Districts, some print it out and hand to Contractors, others tell contractors to google it and others don't communicate it beyond a mention at the pre-construction conference. This is an observation.

d. Reasonable assurance

Some Districts used "reasonable assurance" for delaying work by Contractors in Waters of the US areas where 404 permits are not yet issued. Districts have inserted precautions in place to make it clear that Contractor cannot assert delay claims against TxDOT/FHWA. Some used fencing as a pay item to keep work from occurring. Some managed through scheduling work and others documented in alternative plan sheets for scenarios with and without permits in hand. This is an observation.

e. EMS process

Per an ENV SME response, the EMS process effort is expanding out beyond Storm Water and starting to be used for other topic areas. This is an observation.

D. Project Delivery related-

1. Public Involvement

a. Public Involvement/Response to comment commitment

Five Projects in four Districts had six PI related commitments.

i. Two Districts, one Metro and one Urban had project issues (design related) raised by the public that TxDOT fully considered and made design changes to improve the project and was implemented per inclusion in the PS&E. This is a successful practice.

ii. One Rural District generated a computer animation (with the assistance of consultants) to help the public visualize the proposed project. This was a successful practice.

iii. Three PI related comments remain to be addressed in two Districts (one Metro and one Urban) and still need resolution at the time of the monitoring event. One Urban District received a verbal request at a public event for an existing ramp to stay in place, after consideration TxDOT agreed to keep the ramp in place and documented such in the response to comment but the PS&E still shows the ramp removal occurring. As a result of the team's monitoring

review, the District will execute a Change Order to keep ramp in place. In a Metro District, the public and HOA president requested that two access points remain open during construction. The team found TxDOT responded that both access points would remain open in the response matrix. Conflicting District verbal responses during the virtual interview were provided to the team. In addition, the HOA comment letter in the file was not responded to by TxDOT for the project files and the District only allowed one access was to remain open. The plan set showed a “road closed” sign at the second access point which forbids any traffic to access the area. The team made the District aware of the error regarding temporary access during construction. The FHWA regulations 23CFR 635.309(j) require TxDOT incorporation of environmental commitments into PS&E (ties to 23 CFR 771 – NEPA fulfilled & appropriate measures included in PS&E). Another project in the same Metro District, did not resolve a shoulder widening and Town signage request from a Mayor (in 2009) as it is unclear what TxDOT’s decision was based on the response matrix and whether TxDOT conveyed the final outcome to the Mayor. The PS&E showed no shoulder widening; and the District just added signage on April 9, 2021 to plan set as a reaction to this monitoring event. This lack of closing the loop on response to comments, or lack of TxDOT consideration and resolution of the same is procedurally non-complaint. FHWA requires that once TxDOT considers a PI comment to be performed; TxDOT should document the consideration and ultimately commit to properly fulfilling their decision as documented in the PS&E and carrying it out during construction. This is a procedural non-compliance observation.

E. Community Impacts Assessment (CIA)

1. Public Input and follow up

Per the ENV SME for CIA answering a question about public involvement, if the project design changes, the Districts have a role and responsibility to revisit commitments made in the plan set. The team was not able to assess whether this is performed consistently by TxDOT or not. This is an observation.

2. The team observed that the CIA SME made a link to Planning, ROW and Design activities (including multi-modal options and bike/ped) to identify that items related to the human environment commitment(s) will be implemented to mitigate the impact(s) to be compliant with the federal planning regulations, Uniform Relocation Act and TxDOT Design Policy. The team was not able to assess whether this is performed consistently by TxDOT or not. This is an observation.

3. The CIA toolkit is the public-facing list of resources and guidance that informs TxDOT policies and procedures on the subject area, while the internal SharePoint site is currently being built out as an internal location for resources

more relevant to consultants and districts preparing CIAs. Since ENV does not generally track or have responsibility for environmental commitments, there are no SOPs or guidance on those procedures. Instead, the CIA SME relies on guidance and SOPs in various TxDOT policy manuals. This is an observation.

Section II. TxDOT Divisions and Districts: POLICIES AND PROCEDURES (Black Box Info)

This section summarizes the District and ENV SME General Question Responses that provided some insight into the various ways environmental commitment items are handled and by whom. The team noted that there are TxDOT manuals that offer some direction and general procedures for processing EPICs. However, Districts and ENV SMEs vary in implementation of these procedures. It appears to the team that the existing procedure/process and/or answers provided, as the multitude of potential environmental commitments can potentially be delivered compliantly by various means or at times forgotten or lost as well, but documentation is scattered throughout files at best. As the 327 MOU is with all of TxDOT this needs to be revisited by TxDOT as a department to make needed corrective actions. The team found through our interviews that focused on ENV and District staff (EC, DEQC, AO, DES and ROW), that other sections within TxDOT have a roles and responsibilities to implement environmental commitments and the documented resolution of the same. The team asked Districts to invite any individual to the interviews whose responsibility is project design or construction oversight. Any District and any Divisions of the department can be participants in the commitment process. There may be observations that FHWA makes below that provide information to TxDOT to address in ways not yet being used. The information is both general in nature and specific at times and the team did it's best to provide context in any summaries made and/or trends noted. FHWA's expectation is that TxDOT comply with both State manuals and procedures and Federal policy, regulation and guidance.

A. Program Management

This is an overall TxDOT program assessment for all commitments by the department, not just ENV, and the source of the team's information is the General Responses from both Districts and ENV SMEs. The team also considered as part of our review TxDOT's existing manuals and procedures on this topic.

Successful Practices (District observed):

1. The team applauds the many staff of the nine TxDOT Districts virtually interviewed for their strong sense of stewardship regarding development and implementation of environmental commitments.

2. District staff interviewed described the positive interaction that occurs among the District Design & ROW (as needed) and Area Office and the Environmental Coordinator (EC) and DEQC to discuss projects being developed and discuss environmental commitments and revise plans and general notes if needed. Communication about environmental commitments also often occurs regularly as part of the Pre-Construction Conference.
3. Some Districts noted that they bring items of concern to ENVs attention and in the case of implementing on-site 404 wetland creation mitigation, one District's experience was used to develop an SOP to address the process from lessons learned so that other Districts can use a streamlined approach should they encounter the same need.

Observations (District and ENV related):

1. The team observed that the TxDOT EMS Manual, Chapter 3 (Communication of Legal and Regulatory Requirements) "EPIC process" works a bit differently than the procedures in the manual. Some Districts use the procedure, but the team found through project file reviews that only parts were used. Other Districts have and use their own methods in addition to these procedures. The team was not sure that all commitments were properly identified or that there was loop closure on the commitment. It was dependent on asking personnel. Per the manual, all EPICs should be identified within ECOS where all commitments (even those outside the environmental process) are required to be identified. It is not always clear when a commitment is made. The commitments are scattered throughout the project file and for the team it was a challenge to identify all the commitments. Implementation and resolution of commitments was not tracked overall.
2. ENV has developed an additional approach for Post-Environmental Clearance Activities (PECAs) that has been rolled out for actions to be performed and tracked in ECOS because they are the responsibility of District EC and ENV SMEs. PECAs fall into the realm of a moment in time after the NEPA approval where departmental environmental staff is responsible to fulfill or perform the work. The Environmental Guide has included the concept of PECAs, but does not call it that directly. PR's ECOS/Environmental Business Process Quick Find (an internal working document) was developed as a complimentary tool/aid to TxDOT's Environmental Guide regarding procedures and expectation for compliance which helps identify which of these activities are PECAs. The team is aware that other TxDOT manuals have not included the term PECAs per se, but may have addressed commitments to some degree in their areas of responsibility (ROW, DES, CST, etc.).
3. The team specifically asked District staff who was ultimately responsible for ensuring commitments were completed and fully compliant. The answer from all nine

Districts interviewed was the District Engineer (DE). There are 25 District Engineers at TxDOT. The clarification was offered, that the staff shared in the responsibility regarding commitments. The procedures note that the TPD is responsible for the project being ready to go to letting and the team expects this to include environmental commitments being carried out. That accountability is at the highest level of leadership at a TxDOT District. Districts are allowed to NEPA approve their own CE actions. ENV approves EAs and EISs that often times have more and usually complex commitments, but the accountability for carrying those out to fruition is transferred to the Districts (DE and staff alike). ECOS, according to the Environmental Guide, (Volume 2), is used to accomplish both the implementation and documentation of environmental commitments throughout the NEPA review process that environmental staff is responsible to complete.

EPIC sheets, according to the EMS Manual, are intended to track all other commitments not captured in ECOS for a project. Plan sheets are to capture all commitment items that require contractor action. The team identified a gap in the process here that may require procedural attention by TxDOT. Once TxDOT makes a NEPA approval, only the NEPA documentation type, approval date and letter of authority information from ECOS is transferred to DCIS/TxDOTConnect to state NEPA is complete. There is no transfer of environmental commitment details as part of this procedure. Per the EMS Manual, Stage Gate checklists have been developed to assist in the communication of commitments along the way. The team found that the Stage Gate checklists was not consistently used, reflected only point in time and was not updated, and sometimes don't always capture all commitments. ECOS manuals identify either District EC or ENV SME as responsible for implementing commitment activities during a particular phase of project development. Through interviews many ENV SMEs claimed they were confident that commitments got carried out by Districts but ECOS did not track such, nor any consistent form of documentation evidence, but evidence exists in various forms. District are responsible for the tracking of EPICs and use of Stage Gate checklists.

4. The team learned from interviews that different size Districts handle environmental commitments differently because of staff size and complexity of issues in Districts. Rural Districts with lesser staff (and projects) it appeared to the team to show a higher degree of individual ownership of seeing the commitment all the way through completion because there is no one else to do it. Where large metro Districts with many staff (and many projects) may have to hand off the commitment to others to complete. Similarly, different sections within ENV handle their responsibilities differently. Haz Mat and CRM have a more hands on approach and track things in ECOS to some degree even beyond NEPA approval, while other Sections do not do the same and have a more hands-off approach and do not track things in ECOS per

se. ENV SMEs mentioned that they are available for expert technical help to assist Districts in their areas of expertise when requested.

5. Just because commitment related items (permits, markers, surveys, testing, etc.) are handled differently does not mean things don't get handled appropriately and compliantly. And conversely that things may fall between the cracks and perhaps not get carried out adequately. Not having a central control allows for flexibility and even customization to some degree, but does not make it easy to track items or know status at moment in time or even determine and confirm compliance. Documentation of a summarized list of all commitments, beyond an EPIC sheet (that is not all encompassing by any means) is lacking at ENV and at Districts. There seems to be less of a feeling of ownership of the commitments by ENV SMEs since it is not their direct responsibility.
6. TxDOT uses a decentralized approach to carry out environmental commitments. Each District operates independently as does each Section within ENV. There is no one overriding SOP for commitments. FHWA learned from interviews that some of TxDOT's Rural and Urban Districts appear to have a better handle on how to manage environmental commitments because they know all the POCs locally really well. One large District appeared to have a little more difficulty keeping track of more project specifics regarding commitments that were handed off to others within the District and did not track their completion because the responsibility fell on others within the District. This observation could relate to a lesser sense of "ownership" of the commitment from the originator to the implementor. Within ENV Haz Mat and CRM have more control and use ECOS to document and track items and commitments. Other Sections allow Districts to be lead, like CIA, NRM and Project Delivery.
7. There is the TxDOT EMS program, however, interaction and/or "crossover SOPs" with other TxDOT Divisions (like ROW, DES and CST) appears to be somewhat lacking. The team learned from interviews that TxDOT ENV does not regularly interact with ROW, DES and CST Divisions to discuss internal needs and procedures for delivering environmental commitments resulting from NEPA approval for federal aid projects. Districts also have varied level of interaction with their own District design, ROW, and construction staff.
8. FHWA is aware that TxDOT has a Standing Committee on Environmental Management that is led by TxDOT Administration. The team understands this committee oversees things related to environmental commitments through the EMS program.

B. Documentation and Records Management

The team relied on information in ECOS, TxDOT's official file of record for NEPA approvals, to evaluate project documentation and records management practices for environmental commitments early on in project development. The team also reviewed District project PS&E plan sets for environmental commitments. TxDOT is a decentralized organization and so is their NEPA program. Relating specifically to environmental commitments, the Department does not have a centrally organized (even at the District level in some circumstances) system for documentation for tracking commitments post NEPA approval. Some Districts have come up with their own methods to track and record how they handle some environmental commitments. Many TxDOT toolkit and handbook procedures mention the requirement to store official NEPA related documentation in ECOS, but not necessarily all environmental commitments. Environmental commitments are a critical part of not only the NEPA process but the entire transportation project development process through ROW, design and construction

Observations:

1. Of the documentation reviewed (ECOS, ProjectWise and Plans Online) by the team we found it did not contain a summarized list of **all** commitments nor the entire "lifecycle" of a commitment. The team observed no complete summary of commitments at Districts either. This is problematic at best for public transparency and regulatory compliance purposes under 23 CFR 635.309.
2. District did state that design changes were reviewed for impacts to previously planned mitigation and commitments, when the changes triggered a re-evaluation and/or is this could be a Change Order item as well.
3. We learned from file reviews that several projects lacked clarity for complex projects, especially projects with multiple CSJs within long project limits with multiple phases, and how commitments were handled, carried forward or "retained" for later implementation on future phases of the project.
4. The team noted issues with Public Involvement. Through a project file review and follow up discussions with one TxDOT Metro District (on 2 different projects), a more definitive way to communicate what TxDOT agrees to implement through design and construction in relation to the PI Matrix is needed to better document the Public Involvement outcome of TxDOT's "consideration" and ultimate decision in relation to comments that turn into commitments.
5. The team learned from an interview with one Metro District that they do not track commitments throughout the life cycle of the commitment in ECOS as there is no requirement to do so.

C. Quality Assurance/Quality Control (QA/QC)

The team observed some successful practices within Districts in QA/QC. These successful practices should be considered for further implementation. Observations are items that warrant TxDOT attention.

Successful Practices:

1. Districts feel they can reach out to ENV staff and PR to ask questions to assist in the implementation of accidental discovery assistance and environmental commitments upon request. ENV SME interactions with District staff upon request is helpful.
2. NEPA Chats – are still well received by most Districts and District staff find them helpful to get updates on regulations, these may help Districts stay aware of changes and is a supplement to when guidance changes occur.
3. Programmatic commitments – the team noted that some topic (Archeological and Historical accidental discovery, storm water BMPs, etc.) related basic contingencies are covered by standard specification.
4. One Urban District’s environmental staff to take a “cradle to grave” approach to have ownership in overseeing that environmental commitments get carried out throughout the entire life-cycle of the project (at the direction of the District Engineer).
5. In one Rural District environmental staff provided insight into one 404 item they dealt with that included the need for a conservation easement with ROW staff and in this case, it helped ENV develop SOP documentation that is useful to other Districts that face similar situation.
6. ENV SMEs in Water track the issuance of all USACE issued (reportable) permits.
7. ENV SMEs in Biology track all USFWS issued Biological Opinions.

Observations:

1. There is no one consistent statewide approach to QA/QC for environmental commitments. There are various methods of QA/QC that Districts use.
2. The LOA approval process housed within ENV is run by one employee for review and approval of NEPA related clearance and environmental commitment inclusion for all TxDOT projects to proceed to letting. This appears to be a cursory review at best and does not appear to be structured in a way to fully ensure compliance with 23 CFR 771

or 635. PR review is after the fact only (post NEPA approval – related to ENV actions primarily and environmental actions in Districts) and appears to be much more thorough, but yet does not account for the related actions in other TxDOT Divisions like ROW, DES, CST. The review intensity does not prevent mistakes from happening, but rather is a feedback loop for future corrections only. At Districts the TPD is responsible for the approval for a project to proceed to letting that includes the environmental commitments. The team did not look into these processes specifically and it is unclear to the team what efforts occur to ensure how the environmental commitments are internally communicated within Districts and ultimately completed.

3. Some larger Metro District environmental specialists pass the environmental commitments off to others in design, ROW, and construction and never touch or look for them again.
4. Some smaller Rural and Urban Districts have more control and individual handling of environmental commitments throughout the process due to it being a personal responsibility or they are the only staff in the District able to perform the function(s).
5. Public involvement could trigger environmental commitments. Stating TxDOT will consider the comment during final design does not inform the public of the outcome. This is not as transparent as it could be. There is willingness/stewardship by the Districts to accommodate PI requests assuming such requests are getting communicated to the right TxDOT folks who can implement them.
6. StageGate Checklists provide an opportunity for Districts to perform QA/QC and the team found documentation in the file varied to some degree. It is a tool developed by the EMS program and does not appear to be utilized consistently by the District staff including (EC, design and DEQC staff)

D. TxDOT maintaining capable staff

Successful Practices:

1. The existing TxDOT District and ENV staff make efforts to maintain a high level of KSAs in their current staff in existing roles.
2. Districts mentioned to the team that there are opportunities to mentor staff informally to perform environmental related tasks.

Observations:

1. TxDOT has experienced turnover and attrition (loss of institutional knowledge) in an Urban District. It may more difficult to overcome in a one person EC District. The

team notes that a District mentioned that ENV could step in to assist for a period of time. Succession planning varied from District to District.

2. The effectiveness of TxDOT's decentralized environmental commitments process is dependent on many multiple moving parts, but truly relies upon ECs to remember and engage with other TxDOT staff throughout the ROW, design and construction processes. ECOS is not the one main commitment database for all of TxDOT, even though per the TxDOT EMS Manual it is required to be used for environmental commitments. This is problematic and a weakness in what the team found could be the cause for non-compliance observations.
3. TxDOT ENV has one staff for LOA approval (QA function), 3 staff in PR for post NEPA approval reviews (QA function) and three staff (at ENV) performing EMS related functions to improve processes. Districts perform QC and at minimum have one EC in rural Districts and one DEQC. Larger Districts have more staff but not necessarily enhanced functions.
4. The team observed most Districts indicated their reliance and use of ENVs guidance and tool kits. Districts did indicate that they do not have their own District specific procedures to accomplish these tasks. They instead relied on institutional knowledge.

E. Training Program

Successful Practices:

1. TxDOT's training program addresses environmental commitments as part of other training efforts with a continued reliance on delivering training by TxDOT staff supplemented by FHWA Resource Center staff or others.
2. Through an interview, the team learned that at least one District provides on-hands training and reference materials to contractors and others in all aspects of environmental commitments. This includes a field component to identify species (mussels, birds, etc.).
3. TxDOT informed the team through an interview that through an annual statewide EMS effort that TxDOT District staff gets an overview on all types of environmental commitments that they may encounter during the implementation of a project.
4. Informal training in the form of regular meetings with USACE, USFWS and other agencies offers an opportunity for appropriate TxDOT Districts and ENV SMEs to not only talk about projects but also get updated by those agencies on any changes. This could be considered informal training.

Section III. Overall FHWA RECOMMENDATIONS to TxDOT:

This report identifies many observations, including non-compliance observations, whose corrective action and any changes to current procedures would depend on meeting the overall TxDOT policies as described in the EMS manual and those set forth in TxDOT's Project Development Manual. While the usefulness of the TxDOT manuals lays out a conceptual goal of carrying out commitments, the procedures, and guides do not make the needed connections for environmental commitment identification, documentation, and implementation. The review team urges TxDOT to clarify its Environmental Commitments Policy is implemented, with particular focus on:

1. Clearly defining what constitutes an environmental commitment (i.e., public involvement comments that TxDOT agrees to implement); and
2. Providing clear expectations on how environmental commitments for projects classified as categorical exclusions that must be implemented after NEPA approval would be documented as part of the NEPA decision; and
3. Ensuring that a complete set of identified post-NEPA environmental commitments are assembled in one location; and
4. Developing a process that assures environmental staff communication among design and ROW staff to implement and document when satisfied post-NEPA commitments that must be fulfilled prior to letting and tracked throughout construction and beyond.

This policy should also identify the responsible parties for documenting and implementing post-NEPA environmental commitments. Also, having this overarching policy would provide the context for considering and perhaps implementing the 10 recommendations described below.

There could be some efficiency in standardizing specific environmental commitment actions in the following areas:

- 1. Recommendation #1 – Summarize all commitments in one record or document**

In the big picture view, must comply with FHWA regulations. Per 23 CFR 771.109(b)

(1) The project sponsor, in cooperation with the Administration, is responsible for implementing those mitigation measures stated as commitments in the environmental documents prepared pursuant to this part unless the Administration approves of their deletion or modification in writing. The FHWA will ensure that this is accomplished as a part of its stewardship and oversight responsibilities. The FRA and FTA will ensure implementation of committed mitigation measures through incorporation by reference in the grant agreement, followed by reviews of designs and construction inspections.

(2) When entering into Federal-aid project agreements pursuant to 23 U.S.C. 106, FHWA must ensure that the State highway agency constructs the project in accordance with and incorporates all committed environmental impact mitigation measures listed in approved environmental review documents.

The highlighted statement above “...stated as commitments in the TxDOT NEPA documentation...” applies to current assigned NEPA activities. Since FHWA observes that TxDOT does not provide a summary of all commitments, the only option the public or FHWA has to find the commitments is search through ECOS (not publicly available), the various tech reports and PI documents.

For transparency, FHWA recommends that TxDOT provide a publicly facing all-inclusive summary of commitments on all their projects. That way the commitments are easily identified, tracked, and implemented by both the public and FHWA.

2. Recommendation #2 – Commitment tracking should be memorialized in SOPs

Because commitments made during the environmental process are the responsibility of multiple TxDOT Divisions and Districts, FHWA recommends TxDOT develop a statewide tracking mechanism and a Standard Operating Procedure (SOP) that encompasses all commitments made during the environmental and public involvement processes and that the commitments and disposition are viewable in a single location. FHWA further recommends that to the extent practical the SOP for tracking such commitments include procedures that are consistent and easily repeatable with a minimum standard of documentation to assist in the successful completion of commitments that may otherwise get mis-handled, accidentally lost, forgotten or not be completed adequately and to ensure that each commitment from the environmental and public involvement process is tracked from “cradle to grave”.

3. Recommendation #3 – Staff roles and responsibilities for commitments and succession planning

At the time of the monitoring event, the team found that for the most part each of the nine Districts interviewed appeared to have adequate resources to address commitments for the number of projects processed. A couple of Districts interviewed mentioned that additional staffing to help handle workloads would be beneficial. The team observed variation in the methods used to carry out environmental commitments is wide and both flexible in addition to customized to different degrees.

FHWA recommends that should the number of projects or pace of project clearance increase, staffing levels be reassessed to confirm that an adequate number of resources are available to maintain substantial compliance with the MOU. If resources are not adequate or changes in procedures result in an increase of workload it is TxDOT's responsibility under the MOU to ensure that adequate resources are provided to the Districts and Division.

4. Recommendation #4 – SOP for TxDOT accountability for completed commitments and handling of additional commitments in design and construction

Ultimately FHWA under 23 CFR 635.309(a) & (j) states: § 635.309 Authorization. Authorization to advertise the physical construction for bids or to proceed with force account construction thereof shall normally be issued as soon as, but not until, all of the following conditions have been met:

- (a) The plans, specifications, and estimates (PS&E) have been approved.
- (j) The FHWA has determined that requirements of 23 CFR part 771 have been fulfilled and appropriate measures have been included in the PS&E to ensure that conditions and commitments made in the development of the project to mitigate environmental harm will be met.

As found in several project file reviews there were commitments that were not included in the 100% PS&E as required per regulation that were non-compliant (and will require corrective action). While TxDOT may exercise some flexibility through reasonable assurance the requirement that ties 635 to 771; does not allow TxDOT to proceed without finalization of environmental commitments on federal aid projects.

FHWA recommends that the SOP clearly define what commitments must be completed prior to project letting and prior to, during, and after construction and document reasonable assurance with regard to the timing of commitments should that deviate from the standard of the SOP. FHWA recommends TxDOT develop a statewide tracking mechanism and a SOP that encompasses all commitments made during the environmental and public involvement processes and that the commitments and disposition are viewable in a single location. The tracking mechanism should indicate the status of any given commitment during the process.

5. Recommendation #5 – Make expectations for implementation of noise barrier constructability analysis clear and consistent.

Noise Barrier Constructability Analysis consistency in approach. 2019 Noise guidelines improved some aspects of constructability analyses, but still left open a wide variation in approach and the team found Metro Districts where noise barriers are more prevalent were less sure of how to make Constructability Analysis determinations (using 2011 guidelines) and the timing when they are required to occur (may need to be revisited in 2019 guidelines).

FHWA recommends TxDOT develop a more ENV directed and consistent approach laid out by policy and use of template forms.

6. Recommendation #6 – Public Involvement comments can be commitments

Public involvement could trigger environmental commitments. The Team observed one District (HOU) did not respond in a “final” outcome leaving the public and one public official not aware of the final disposition of their inquiry comment. Stating “TxDOT will consider” during final design does not inform the public of the outcome. This is not compliant with regulation (23 CFR 771.109(b)). Any commitment made in the comment response matrix carries the same weight as those commitments made in the environmental document and, as such, responses to comments should be carefully crafted and seek to address the commentor's issue, to the extent practical, in the matrix itself. If design or other commitments are made in the matrix, the commentor should be made aware in TxDOT's response to comment, the timing of the resolution of such commitment, i.e., the process by which their particular concern would be addressed in the design process. Further the resolution of these commitments would need to be documented in the tracking mechanism including confirming, for example, if the commitments have been included in the Stage Gate Checklist or the PS&E, etc.

FHWA recommends that TxDOT develop an SOP that encompasses all commitments made during the environmental and public involvement processes including those commitments that are made as part of the comment response matrix and ensure that those commitments are included and tracked on a statewide tracking mechanism as noted in recommendations # 2 and #4.

7. Recommendation #7 – Tracking for project commitments run into problems with lack of funding

It was also noted that funding was an issue on projects that were already let, pushing commitments farther out in time to future projects and adding to the possibility that the same can get lost or forgotten. In order for federal projects to be NEPA approved (by TxDOT under NEPA Assignment) they are required to be fiscally constrained and in a 4-year Transportation Improvement Plan (TIP) and Statewide Transportation Plan (STIP). Any commitments made during the environmental process MUST be funded as part of the transportation project.

FHWA recommends TxDOT address this funding problem and improve commitment tracking related to project contracts and phasing.

8. Recommendation #8 – SOP to document implementation of phased construction

Projects with phased construction (or separately let projects over time; under one NEPA approval) can be challenging in relation to carrying out environmental commitments. The team found at least one Metro district that had difficulty explaining when and how noise walls that were found reasonable and prudent were not being built during a particular phase of project construction. FHWA was able to determine from our review that the Noise walls were not required to be built yet, as this particular phase of construction only included interim operational improvements and that new ROW and added capacity would occur later in time under additional construction contracts and that is when Noise wall construction will occur.

If phased construction is a normal practice, FHWA recommends TxDOT develop a statewide SOP explaining how to deal with challenging environmental commitments could help Districts manage them better.

9. Recommendation #9 – Enhance communication of 404 permit obligations by the contractor/contractor interaction and permit tracking status

Assumed and issued 404 NWP actions – statewide implementation (mentioned in Training Program Observation item one above) could help Districts hold contractors accountable and stay compliant and be uniformed in their KSAs of the same. The USACE and FHWA would hold TxDOT (as permittee) accountable and not necessarily the Contractor. Some minimum explanation of assumed permits should be offered to the Contractor whenever a 404 permit is used for a project, whether assumed or issued. This could help ensure 404 permit compliance statewide. TxDOT did have a tracking system for (reportable)

permits that were issued by the USACE and that was the extent that the tracking database was used by ENV (for permit issuance only).

FHWA recommends TxDOT consider making the tracking system more robust for District use in application for tracking modifications to both issued and assumed permits and close out of the same in a cradle to grave based effort.

10. Recommendation #10 – Update Environmental Guide and discuss updates with environmental staff

In general Districts could use further guidance and reminders on issues related to commitments. For example, the fact that mussel surveys are only “good” for two years and that if work will not be starting within two years additional surveys will be required. Another example relates to the notification letters regarding noise contours. There appeared to be some confusion on the purpose and timing of such notifications.

FHWA recommends ENV continue to make timely updates to its environmental guidance and to provide opportunities for sharing such information with appropriate departmental personnel.

CONCLUSION:

FHWA finds that TxDOT has an environmental commitment policy that works based on the team’s observations and it is credited to a strong sense of stewardship found at the Districts. TxDOT needs to make corrective actions (update policy and procedures) to remain substantially compliant in implementing all commitments (including environmental items), as evidenced by several non-compliance observations. TxDOT is either in the process of some corrective actions already and it is FHWA’s understanding that TxDOT soon will be or has already started implementing the needed changes to resolve the items in need of attention to be compliant with federal regulation. All of the above recommendations made by FHWA should be thoughtfully and carefully considered and further TxDOT improvements are expected.

Next Steps

The FHWA provided a preliminary draft monitoring report to TxDOT for a 14-day review and comment period. The team has considered TxDOT comments in developing this Monitoring #1 report. As the next step, FHWA will finalize the report and require TxDOT to post the Final FHWA Monitoring Report #1 on their website for public review. The team acknowledges that, by sharing the preliminary draft monitoring report with TxDOT, TxDOT can begin or continue the process of implementing actions to address these observations to improve its program prior to the publication of this report.

In an effort to continue our partnership FHWA would like to meet with TxDOT's ENV Division management to discuss next steps.

END of REPORT

FINAL