TENNESSEE'S 2007 ENVIRONMENTAL PROCEDURES MANUAL PROVIDES A NEW RESOURCE FOR ENVIRONMENTAL ANALYSIS AND DOCUMENTATION UNDER SAFETEA-LU

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ABSTRACT
In 2002, the Tennessee Department of Transportation’s (TDOT) Environmental Division initiated a simple update of its written environmental procedures for projects evaluated under the National Environmental Policy Act (NEPA). In 2003, a new Governor and a new TDOT Commissioner ushered in changes to the planning, environmental, and public involvement responsibilities of TDOT. As a result of these leadership changes, the manual’s simple update was redirected to a more broadly-based assessment of the Department’s existing environmental procedures and the creation of a more streamlined environmental review process that is better integrated into TDOT’s project development process and more transparent to the public and other stakeholders. During this time, TDOT also created its first official policy for environmental reviews of state-funded transportation projects. The manual also incorporates the new environmental review processes required by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), and the pending Tennessee Environmental Streamlining Agreement (TESA).

This case study describes the manual’s development, highlights reforms in the Department’s philosophy and approach that have affected the contents of the manual, and shares lessons learned. The 2007 Tennessee Environmental Procedures Manual (TEPM), now available on TDOT’s website, will be useful to other states looking to update their own older manuals or create new manuals to meet the requirements of SAFETEA-LU. The TEPM provides a handy reference for navigating the NEPA process, implementing the SAFETEA-LU environmental review requirements, and standardizing technical analysis and documentation that should be of value to NEPA practitioners and transportation professionals in Tennessee and across the country.
INTRODUCTION
Guidance for conducting the environmental reviews of transportation projects under the National Environmental Policy Act (NEPA) and other federal environmental legislation abounds in the specific language of the acts and in the implementing regulations, policy papers, and advisories issued by the Federal Highway Administration (FHWA) and Federal Transit Administration. State Departments of Transportation have relied on the instructions contained in those federal policy papers, technical advisories and circulars in carrying out their responsibilities under NEPA. Some states have issued their own NEPA process manuals to guide their agencies’ staff and consultants in project-specific reviews and documentation.

In response to an administrative audit in 2001, the Tennessee Department of Transportation (TDOT) initiated in 2002 a simple update of its 20-year old NEPA procedures manual. In early 2003, a new governor and a new DOT commissioner ushered in major changes to the planning, environmental, and public involvement responsibilities of the Department. As part of this organizational change, the manual’s simple update was redirected to a more broadly based assessment of the Department’s existing procedures and the creation of a more streamlined environmental review process that is better integrated into TDOT’s project development process. The new TDOT environmental review process is designed to be more transparent to the public and other stakeholders who are involved in the transportation project development process.

This case study describes the manual’s development and format, summarizes changes in the Department’s philosophy and approach that have affected the manual, and shares lessons learned. The 2007 Tennessee Environmental Procedures Manual (TEPM), now available on TDOT’s website, will be useful to other states that are looking to update their own older manuals or create new manuals to meet the requirements of the 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). The manual provides a handy reference for navigating the NEPA process, implementing the SAFETEA-LU environmental review requirements, and standardizing technical analysis and documentation that should be of use for NEPA practitioners and transportation professionals in Tennessee and other states.

A MODEST BEGINNING
TDOT’s new environmental procedures manual had a modest beginning in 2002. TDOT, similar to many other state DOTs, was undergoing a fundamental change in how the environmental process was conducted. TDOT was faced with more projects coming on-line, a dwindling number of staff positions, and the need to keep up with the ever-increasing environmental regulations. TDOT was contracting out more work to engineering and environmental consultants, with DOT environmental staff primarily serving in project review and oversight roles. TDOT’s Environmental Planning and Permits Division (now known as the Environmental Division) recognized the need for a consistent direction for internal staff and consultants to ensure that those persons conducting the work were knowledgeable of the federal and state requirements, were proficient in analysis methodologies, and understood the appropriate level of effort required for the various types of projects. TDOT also wanted to ensure that its staff and consultants understood the need for quality and clarity in analysis and documentation. A new policies and procedures manual was seen as a tool to help standardize the work efforts and documents, raise the quality of the documents, and facilitate the review of documents by TDOT staff as well as by federal and state agencies.

TDOT brought on board a consultant to assist with the development of the procedures manual for technical studies and documentation required under NEPA and for the documentation for state and federal environmental permit applications. Recognizing that the preparation of the new manual was a major undertaking, the project was divided into two phases. Phase One included a review of TDOT’s existing technical studies guidelines and procedures and interviews with TDOT’s environmental staff to confirm the current processes and procedures and identify potential gaps. The first phase included a literature search of NEPA guidance material available on the Internet from FHWA and other agencies, as well as a
survey of other state DOTs to determine the existence and format of policies and procedures guidelines and whether those practices might be applicable to TDOT.

The Phase One survey identified several desired characteristics for TDOT’s proposed policies and procedures manual. The manual should:

- Serve as a tool for internal TDOT training and orientation, and for the consultants doing work with the Division;
- Be published primarily as an electronic document;
- Establish a process for updates;
- Define a policy and process for quality control;
- Describe the evaluation and documentation requirements for the three categories of NEPA documents, ensure a process for recording mitigation commitments, and define the process for environmental reevaluations; and
- Include checklist formats for Categorical Exclusions, for Minor Environmental Assessments, and for State-funded projects.

It was also determined that individual technical studies scopes should be updated and/or expanded to provide greater detail and instruction, either as separate guidances or as part of the overall manual.

By early 2003, an outline for an updated manual was finalized in anticipation of Phase Two, manual preparation. It was at that point that the new administration was taking office and reassessing TDOT’s old ways of doing business. These Department-wide changes would help to reshape the development of the environmental procedures manual and its content.

TDOT REFORM

The newly elected governor, Phil Bredesen, heard a number of complaints about TDOT as he campaigned across the state in 2002. The complaints primarily focused on the lack of meaningful opportunities for public input in TDOT’s decision-making process. Based on the extent and volume of comments he had heard, Governor Bredesen was determined to reform TDOT’s business practices.

A Commissioner from Outside the Industry

Following his election, Governor Bredesen announced the appointment of Gerald Nicely as the new Commissioner of Transportation. This was a radical departure from the tradition of appointing a transportation industry representative to head TDOT. Commissioner Nicely came to the position with little road building experience, but with more than 30 years of local government experience as Executive Director of Nashville’s Metropolitan Development and Housing Agency.

Elevating Environment and Planning Functions

Commissioner Nicely came to TDOT with a charge to reform the Department’s old way of doing business. Immediately he took several bold steps to jumpstart the reform. He created the Bureau of Environment and Planning to oversee the planning, environmental and multi-modal functions of the Department. For the first time in TDOT’s history, planning and environmental functions were on the same level as highway design. In another radical departure, the Commissioner appointed Ed Cole, a professional planner rather than a professional engineer, to be the Bureau Chief.
Public Involvement and Constituent Services
A third major immediate change in TDOT’s organizational chart was the creation of the Community Relations Division that reported directly to the Commissioner. The Community Relations Division was assigned the primary responsibility for mainstreaming the public involvement process throughout the Department, including the preparation of updated public involvement procedures. The new TDOT Public Involvement Plan recognizes the necessity and value of public participation and input both early and throughout the project development life cycle and is flexible enough to address the variability (length of time, size and complexity) of the Department’s numerous transportation projects. Five levels have been defined to establish minimum thresholds of required public involvement and to allow for the creation of public involvement plans tailored to individual projects. The Plan is available on TDOT’s website (http://www.tdot.state.tn.us/documents/pipsept07.pdf).

NEW INITIATIVES FOR ENVIRONMENTAL STEWARDSHIP AND STREAMLINING

15 Project Case Study
Within four months of assuming the reins of TDOT, Commissioner Nicely took the unprecedented step of halting 15 of the Department’s most controversial current projects. These projects, totaling over a $1 billion in cost, were the same projects referenced by the public during the listening sessions conducted by then Candidate Bredesen. Many of these projects were in the environmental review stage when they were stopped.

In May 2003, Commissioner Nicely requested an independent review of each of these 15 projects by the University of Tennessee’s Center for Transportation Research. This effort became known as the 15 Project Case Study, and its primary objective was to identify areas for improvement of TDOT’s highway project planning and business practices. The case study was intended to identify problem areas common to at least some or many of the projects evaluated, as well as to provide TDOT with impartial recommendations on whether or not specific projects should continue as presently scheduled or if additional action(s) should be undertaken.

For each project a series of public listening sessions were held and the evaluation team conducted interviews involving interest groups, local officials, and concerned individuals. The conclusions reached by the evaluation team ranged from changes to improve the project and public involvement process via a context sensitive solutions approach, to recommendations to return the project to the local community for additional study and development, to outright cancellation of a project because of the lack of purpose and need and/or local support. This effort not only affected the 15 projects that were studied as part of this case study, but set the Department on a course to change the approach and project development process for all projects undertaken by TDOT.

Context Sensitive Solutions (CSS)
Following the recommendations of the 15 Project Case Study, TDOT initiated a Context Sensitive Solutions (CSS) process for several of the projects that had been reviewed. TDOT chose this approach, as recommended by the study, to address past concerns about these specific projects and the Department’s overall public involvement and project development process.

CSS is a flexible process designed to involve a range of stakeholders, often with different interests and affiliations. Although the CSS concepts and approach are ideally undertaken starting at the earliest stages of project development, TDOT’s experience as a result of the 15 Project Case Study was in applying the CSS process and principles on projects that were already in the environmental or early design phase.

Following the initial experience of the Department with the 15 Project Case Study, TDOT has adopted CSS as a central philosophy to follow for all project development. In 2006, a leadership team drafted a “CSS Statement of Commitment” for TDOT, which outlined the Department’s philosophy:

“The Tennessee Department of Transportation (TDOT) uses “Context Sensitive Solutions” (CSS) as a process to plan, design, construct, maintain and operate its transportation system in order
to establish and achieve transportation, community, and environmental goals. Context Sensitive Solutions balances safety and mobility and the preservation of scenic, aesthetic, historic, environmental and other community values. CSS is a philosophy of doing business that impacts both the project development process and project outcomes.”

To ensure that a broad range of staff throughout the Department understand and recognize the importance of the CSS principles, in 2006 approximately 800 department staff, from the highest level of the organization to the staff performing the day to day activities, participated in a CSS Awareness Training Program. The Department is now working to implement a CSS Action Plan that addresses the costs and benefits of CSS; incorporates CSS principles into the Department’s manuals, policies and procedures; develops and implements a CSS training plan; and develops a system to track commitments throughout the project lifecycle.

**Tennessee Environmental Streamlining Agreement (TESA)**

Interagency coordination on environmental resource issues occurs in a complex administrative arena defined by many Federal, state and local laws, ordinances and regulations. This complexity has resulted in overlapping jurisdictions and some duplication of effort causing increased costs and time delays for transportation projects. To enhance the relationships with the various resource and regulatory partner agencies, TDOT, together with FHWA, has been working to develop an interagency agreement to aid in streamlining the environmental review process.

The 1998 Transportation Equity Act for the 21st Century (TEA-21), Section 1309, promoted the concept of a coordinated environmental review process to ensure, whenever practicable, that agency approvals are conducted concurrently and cooperatively.

Most recently, Section 6002 of the 2005 SAFETEA-LU legislation established a new environmental review process for major transportation projects, which is mandatory for Environmental Impact Statements initiated on or after August 10, 2005. Section 6002 introduced a new category of "participating agencies" to give more state, local and tribal agencies a formal role and rights in the environmental process. It also required that the public and agencies be afforded the opportunity to provide meaningful comments on purpose and need statements and on a range of alternatives to be considered for a project as early as practicable in the process and before final decisions are made.

Even before SAFETEA-LU was enacted, TDOT and FHWA held a series of workshops to discuss improved interagency coordination and better integration of the resource and regulatory agencies and Metropolitan Planning Organizations (MPOs) throughout the transportation project development process. These workshops, which were initiated in late 2004 and were attended by representatives of the involved agencies and MPOs, provided a forum to discuss opportunities for better coordination. The result of these meetings and discussions is the pending Tennessee Environmental Streamlining Agreement (TESA) for the Environmental and Regulatory Coordination of Transportation Projects.

The purpose of TESA is to establish a coordinated planning and project development process for transportation projects in Tennessee to ensure significant agency and MPO participation and involvement early and throughout the project development process. The coordination of planning and project development will better integrate the information and products developed in the highway and transit planning process into the NEPA process. In addition, the successful implementation of TESA will allow better use of TDOT and agency resources by reducing duplication of effort.

Ultimately, this streamlined environmental process will help achieve the timely and efficient identification, evaluation and resolution of environmental and regulatory issues. TESA establishes "one decision-making process" to identify and address agency issues at four key points, termed concurrence points, during the planning and NEPA process for transportation projects:

A concurrence point is a point within the environmental review process where the lead agency requests formal concurrence and the participating agencies provide concurrence or non-concurrence at that stage before proceeding to the next step. The intent of the concurrence points in the process is to achieve general agreement between agencies before a project moves forward and to preclude the routine revisiting of decisions that have been agreed to earlier in the process. The four concurrence points are:
1. Purpose and Need and Study Area;
2. Project Alternatives to be Evaluated in the Environmental Document;
3. Preliminary Draft Environmental Document; and

During early identification of agency issues, when the greatest flexibility exists to address these concerns, this process is intended to ensure that basic issues concerning project purpose and need, study area, and the definition of the range of alternatives can be resolved prior to the review of a draft environmental document. The utilization of this process will allow the draft document to be focused on addressing outstanding public and agency concerns regarding avoidance, minimization and mitigation.

The process outlined in the TESA applies to all transportation construction projects in Tennessee, regardless of project funding source, that are administered by TDOT and require an Environmental Assessment (EA) or an Environmental Impact Statement (EIS) under NEPA, or all major transportation construction projects requiring a Tennessee Environmental Evaluation Report (TEER).

The parties to the TESA are:
- Federal Highway Administration – Tennessee Division (FHWA)
- Tennessee Department of Transportation (TDOT)
- US Army Corps of Engineers (USACE)
- US Fish and Wildlife Service (USFWS)
- US Environmental Protection Agency, Region 4 (EPA)
- Tennessee Valley Authority (TVA)
- National Park Service (NPS)
- USDA Forest Service (USDA)
- US Coast Guard (CG)
- Tennessee Department of Environment and Conservation (TDEC)
- Tennessee State Historic Preservation Office (SHPO)
- Tennessee Wildlife Resources Agency (TWRA)
- The 11 Metropolitan Planning Organizations (MPO)

While the TESA is still being finalized, the principles of the agreement are now being implemented. The 2007 TEPM describes the TESA process, defines when each of the four concurrence points apply and incorporates the TESA process in the flow charts for EAs, EISs, and TEERs.

MANUAL DEVELOPMENT

Parallel with the numerous efforts underway in 2003 and 2004 to reform TDOT, the comprehensive assessment of project planning and the environmental review process was in full gear and Phase Two of the environmental procedures manual was well underway. At this point the draft manual was referred to as the “NEPA Procedures Manual” because it was focused on the process to evaluate those projects with federal funding or requiring federal permits. The development of the “NEPA” manual paralleled the reorganization of what is now the Environmental Division and the development of a greatly expanded Public Involvement Plan.

In addition to the three major department-wide initiatives described above (15 Projects Case Study, CSS, and TESA), the Environmental Division itself was changing. The Division, previously known as the Environmental Planning and Permits Division, was reorganized as the Environmental Division, with expanded responsibilities and functions. Six main offices comprise the Division: Environmental Planning, Social and Cultural Resources, Natural Resources, Beautification, Environmental Policy, and Environmental Compliance.

One initiative that was used during this time period was a FHWA sponsored Peer States Exchange to provide an outside perspective on the reorganization of the Environmental Division and the improvement and better integration of environmental procedures. Another initiative was the development of the new TDOT policy for the environmental evaluation of state-funded projects.
Peer States Environmental Exchange
By Spring 2004, the draft manual had been prepared, and was ready for a thorough review. During this review, the concept of a Peer States Exchange Session was conceived. TDOT applied for and received funding assistance through FHWA and the Federal Transit Administration’s Transportation Planning Capacity Building Program for the session.

The session took place over two and one-half days in Nashville (June 29 and 30 and July 1, 2004). Environmental managers from six other state DOTs (Washington, Ohio, Texas, Kentucky, North Carolina and Florida) participated in the session to share innovative ideas with TDOT management and Environmental Division staff. The session provided the opportunity for Department-wide staff to learn from the experiences of other states that had gone through or were in the process of revising their environmental and project planning procedures. The Peer State participants were asked to describe how the NEPA process had been integrated into their project development process and to share best practices, pitfalls, lessons learned and suggestions for improvement. Topics of the session included environmental streamlining efforts, context sensitive solutions, the evolution of the NEPA integration process, institutionalization (staff training and use of consultants), agency coordination, and performance measures.

At the conclusion of the two and one-half day session, TDOT and FHWA participants were asked to share the most important lessons learned that they would take away from the Peer States Exchange Session. Among the more notable quotes related to the value of revising and improving the Department’s approach to environmental and project planning were:

- Just start, even if you have to start small.
- There is security in the fact that environmental division leaders in other states have taken bold steps to change their organization and are still here to talk about it.
- First, establish the framework and infrastructure and continue with training and communication.
- Establish communication goals and work to implement them within the entire organization, at all levels.
- Keep an open mind about changes going on in the Department.
- It is a never-ending journey; much has been done and much more needs to be done.
- Communication and training benefit everyone.
- Ask the question, “Why are we doing this?” and ask it about everything you do to validate your processes.
- This session creates for the TDOT staff a better understanding of and respect for other states. There is value in sharing ideas.
- Don’t recreate the wheel – steal it.
- You are never finished.

Input from TDOT staff and the environmental representatives from the other six states was invaluable in further revisions to the manual and to the overall TDOT process improvements.

Tennessee Environmental Evaluation Report (TEER)
While the new manual was originally envisioned to guide NEPA-level evaluations, during the development of the manual, TDOT recognized the need for a policy guiding environmental reviews of state-funded transportation projects. Unlike some states, such as Florida and California, Tennessee has no state environmental policy act that requires state agencies to consider the environmental effects of projects funded with state dollars, and thus there had been no mechanism for TDOT to conduct such reviews.

In 2002, the State Comptroller of the Treasury issued its findings and recommendations as part of the TDOT Performance Audit. Item 6 noted that the Department did not have written guidelines addressing the environmental evaluation of state-funded highway projects. The report recommended that
written policies and procedures be developed for the Department to follow when deciding whether to prepare an environmental study for highway projects that receive only state funding.

On several past, high-profile state transportation projects, members of the public and some interest groups have charged that TDOT was ignoring environmental impacts, or that TDOT was intentionally forgoing federal funding to avoid conducting a detailed environmental review that would have been required under NEPA. Some environmental groups were pushing for a state version of NEPA in the Tennessee General Assembly. The new TDOT senior management under Commissioner Nicely determined that the time had come for a formal environmental review policy for state-funded transportation projects.

In late 2004 and 2005, TDOT developed its environmental review policy with NEPA in mind while intentionally not replicating NEPA. Once again, TDOT chose to look at the experiences of other states. Extensive discussions were held within the Environmental Division and the Environment and Planning Bureau, and drafts of the policy were vetted internally and with TDOT’s Environmental Advisory Council (a group of external stakeholders representing various environmental organizations). Comments received during that review were used to further refine the process. The concept proposed by TDOT received high marks from environmental leaders throughout the state.

The TDOT policy and approach described in the manual mandates a rigorous environmental review for state-funded transportation projects meeting certain criteria. Included in the policy are requirements for early identification and evaluation of potential environmental consequences, consultation with affected agencies and the public, and the development of measures to avoid, minimize and/or mitigate the adverse effects of state-funded projects on the natural and human environments. The environmental review is documented in a Tennessee Environmental Evaluation Report (referred to as a TEER) that will be made available for public review.

A TEER is prepared for a state-funded transportation project that meets both of the following criteria:

- Is a transportation route (including a bridge project); and
- Requires acquisition or disturbance of at least one acre of new or additional right-of-way, unless there are special circumstances that would necessitate the preparation of a TEER for a project with less than one acre of property acquisition.

Special circumstances that would result in the need to prepare a TEER under the second criterion listed above include, but are not limited to, the following:

1. Displacement of any commercial or residential occupants;
2. The use of land from a property or district that is listed on or eligible for listing on the National Register of Historic Places or a National Historic Landmark, which would cause an adverse effect to that resource;
3. The use of land from a public park or recreation area, designated forest, or wildlife management area;
4. Work that requires a US Coast Guard construction permit or an individual US Army Corps of Engineers Section 404 Permit;
5. Construction in, across, or adjacent to a river designated as a component of the National System of Wild and Scenic Rivers or high quality streams, including streams designated as Outstanding National Resource Waters (ONRW), as designated by Tennessee’s water quality standard;
6. Work encroaching on a regulatory floodway or work affecting the base floodplain (100-year flood) elevation of a watercourse or lake;
7. Work in wetlands;
8. Change in access control;
9. A known hazardous materials site within the proposed right-of-way;
10. An adverse effect to federal or state designated threatened or endangered species or their critical habitat; or
11. A formal request for the preparation of a TEER made by a local citizen, group or organization based on identified environmental concerns.

This policy became effective for all new state-funded transportation projects for which no funds have been authorized or obligated by TDOT as of the adoption date of the Environmental Procedures Manual, on April 16, 2007. TDOT began applying the policy even before the official effective date.

The Environmental Division is responsible for determining the need to prepare a TEER on a case-by-case basis. The project may be identified either by a local agency or by TDOT. The earliest steps in the evaluation of the project are identification of the purpose and transportation need of the project and identification and screening of preliminary alternatives.

Once it has been determined that a TEER is necessary, the process defines a series of steps to conduct the evaluation. The TEER process involves similar steps to those required by NEPA, including early coordination with agencies and the public, identification and analysis of impacts, and preparation of the TEER documentation. The process also contains provisions for reevaluations and supplements to the TEER.

The TEER documentation is prepared in two stages: a draft and a final document. The Draft TEER is developed, reviewed, approved, and circulated to the public and agencies for comment, much like a NEPA Environmental Assessment (EA) or Draft Environmental Impact Statement (DEIS). The Final TEER is prepared following the comment period for the Draft TEER and once TDOT has selected the alternative to be implemented. The Final TEER records TDOT’s decisions regarding the selected alternative and represents TDOT’s commitment to implement the agreed-upon mitigation strategies for the project.

While a public hearing is not required, TDOT will hold a public hearing if there is substantial public interest; when a hearing has been requested and it is unclear whether the request represents substantial public interest, TDOT will hold the hearing. Whether or not a hearing is held, comments on the Draft TEER and the project are accepted during the 60-day period following the circulation of the Draft TEER. The Draft and Final TEER documents are signed and approved by the Chief of Environment and Planning and by the Commissioner, respectively.

ORGANIZATION OF THE TEPM

After looking at the manuals written by other states, TDOT decided to use a step-by-step approach to the environmental review process, from project identification through impact assessment, document preparation, permitting and environmental commitments. The manual is presented in 10 main chapters, which are described briefly below.

Chapter 1, Environmental Regulations and the Environmental Evaluation Process
This introductory chapter explains the federal legislative basis for the required environmental evaluation of transportation projects that have federal funding and/or require a major federal action. The chapter explains how NEPA fits into TDOT’s project development process (Program, Project and Resource Management (PPRM) Plan), and it introduces the new TEER process for the environmental evaluation of state-funded projects.

Chapter 2, Project Identification and Development,
Chapter 2 explains TDOT’s project development process, including the concept of the Transportation Planning Report (TPR), and the early steps in project identification and development, prior to initiating the NEPA or TEER document process. Specific steps include drafting the project’s purpose and need statement, establishing logical termini and independent utility, defining the study area, assembling inventories of existing resources from available sources, and defining and refining alternatives.

Chapter 3, NEPA Process Options
Chapter 3 describes the three NEPA classes of action (Categorical Exclusion, Environmental Assessment, and Environmental Impact Statement) under which a project may be evaluated. The chapter then explains
how the class of action is determined and identifies the types of projects that would be addressed by each class of action.

Chapter 4, Early Coordination,
Chapter 4 describes the coordination requirements of the environmental review process mandated by SAFETEA-LU, as well as the NEPA-mandated Notice of Intent and scoping process, and the Environmental Division’s specific initial coordination process. The chapter introduces and explains the Tennessee Environmental Streamlining Agreement (TESA) for environmental regulatory coordination of transportation projects. The chapter also defines the concepts of lead agency, cooperating agency, and participating agency.

Chapter 5, Impact Analysis
Chapter 5 first defines the three types of impacts (direct, indirect and cumulative) that may result from a project and describes the process for the early records check to identify important environmental issues that warrant consideration in the location phase. The bulk of the chapter is devoted to discussion of the individual technical studies and analyses that are required, including analyses to meet the requirements of Section 106 of the National Historic Preservation Act, Section 4(f) of the Department of Transportation Act, and Section 6(f) of the Land and Water Conservation Fund Act. The chapter concludes with a discussion of how the results of the impact analyses may be used to further refine the alternatives that are presented in the EA or DEIS.

While the manual was designed to be a “how-to guide,” it was not intended to be the sole textbook for conducting detailed technical studies. Instead, TDOT determined that more detailed guidance for performing specific types of studies, such as ecological, historic architecture, hazardous materials, air quality, noise, and environmental permits, will be stand-alone resources and are incorporated by reference into the TEPM. These technical procedures are available from the Environmental Division’s Natural Resource Office and Social and Cultural Resources Office. As additional specific procedures are developed, they will be made available on the Environmental Division’s website.

Chapter 6, Prepare Environmental Documentation
Chapter 6 instructs the preparation, review, circulation and approval of each level of NEPA documentation (CE, EA, and EIS), and briefly describes reevaluations and supplemental NEPA documentation. It concludes with a discussion of the current emphasis by FHWA and by TDOT to improve the quality of environmental documents.

Chapter 7, Public Involvement Process
Chapter 7 describes the federal requirements for public involvement during the preparation of NEPA documentation for transportation projects. The chapter also discusses TDOT’s current public involvement guidelines and references the TDOT Public Involvement Plan.

Chapter 8, Environmental Permits
Chapter 8 describes how federal and state permits fit into the project development process and identifies the parties responsible for securing environmental permits and the type of permits that may be required. Readers are referred to a separate Permits Manual for more specific guidance on preparing permit applications.

Chapter 9, Environmental Commitments and Coordination with Design and Construction Activities
Chapter 9 describes how environmental commitments are carried forward from the NEPA process into project design, construction, maintenance and operation. The chapter first defines the basic types of commitments (avoidance, minimization, and mitigation), then identifies the responsibilities for
communicating the commitments to other TDOT divisions. It concludes with an explanation of some of the types of commitments made for impacts to cultural and ecological resources and noise sensitive sites, as well as hazardous material sites.

Chapter 10, Environmental Evaluation of State-Funded Projects
The final chapter details TDOT’s environmental policy governing the evaluation of state-funded projects. The chapter defines and describes the types of transportation projects that would be subjected to a state level environmental evaluation. The chapter describes the format and content for the Tennessee Environmental Evaluation Report (TEER) that is used to document the evaluation, and shows how the TESA process applies to major TEER projects. The chapter also describes the approval and distribution process for the TEER, as well as reevaluations and supplements to TEERs. References are made to earlier chapters and sections in TEPM to indicate when previously identified procedures may or may not be applicable to the environmental evaluation of state-funded transportation projects.

APPENDICES
Supplementing the main chapters, the manual contains a series of appendices. Appendix A provides a list of acronyms that are used in the manual. Appendix B reprints the applicable sections of the NEPA, Council on Environmental Quality (CEQ), SAFETEA-LU, and FHWA regulations. Appendix C provides a matrix identifying the federal laws under which environmental studies must be conducted. Appendix D contains the FHWA Technical Advisory (T 6640-8A). Helpful websites are listed in Appendix E. Appendix F contains TDOT-specific samples of forms, letters, checklists, and notices. Appendix G provides several sample CEIs and checklists for preparing and reviewing EAs and EISs.

Use of Web Hyperlinks
The manual incorporates numerous hyperlinks to websites that contain information on the federal regulatory process and requirements. As previously mentioned, Appendix E lists the websites that are referenced throughout the manual’s chapters.

Updates to Manual
Since the TEPM is intended to be a living document, TDOT recognized that updates and revisions will be necessary to incorporate changes in environmental laws and policies, as well as revisions to TDOT’s project development process. At least annually, the manual will be reviewed by the Environmental Division staff to determine whether the procedures presented in the manual are current. A list of revisions will be prepared and reviewed by a committee composed of the Environmental Division’s Director and Office Managers. The entire manual or individual chapters will be revised and notice of the updates will be posted on the Environmental Division’s website, along with the updated version of the manual.

The latest on-line version of the TEPM is available on TDOT’s website, at http://www.tdot.state.tn.us/environment/. CDs and hard copies of the manual are available for a small fee. Recipients of hard copies of the manual will be notified of any updates, and will be directed to the website to obtain the latest version. If important changes are needed in the interim, the Division will post an addendum on the website. TDOT is providing an electronic mailbox, TEPM.Environmental@state.tn.us for users to sign up to receive notices about updates to the manual.

HOW THE MANUAL IS BEING USED
TDOT is currently engaged in developing a Statewide Environmental Management System (SEMS). When implemented, the SEMS will improve collaboration and communication among TDOT and its partners across the project development process, including FHWA, federal and state resource agencies, metropolitan and rural planning organizations (MPOs and RPOs), contractors, and other interested stakeholders.

The TEPM is one of the building blocks of the SEMS planning process. One of the initiative in the SEMS planning study is improving the quality of environmental documents. The quality initiative
will implement the following: web-based forms for Categorical Exclusions; an extensive training program for TDOT staff, environmental consultants, and local governments that participate in TDOT’s Local Government program; Quality Assurance/Quality Control procedures; and performance criteria to measure improvements in quality. The manual will be revised to include updated checklists for NEPA and TEER documents and quality procedures, and will be an integral part of the NEPA and TEER training courses that are being developed.

The manual and its contents have proven to be an invaluable resource for TDOT staff and consultants and as an orientation for new staff. The manual and its step-by-step approach serves as a helpful guide to the new process outlined under TESA as well as the requirements of SAFETEA-LU. The process to update the manual, incorporate the TESA concurrence process, and establish the TEER process has been widely praised by the environmental and planning community throughout Tennessee.

In addition to the manual’s use by TDOT staff and consultants, the manual is being used to help guide local governments that are managing FHWA or TDOT-funded transportation projects. The TEPM is included by reference as a part of TDOT’s Local Government Guidelines.

Lessons Learned
Because the previous TDOT NEPA procedures manual was seriously out of date when the update began, it was necessary to start from scratch with the new manual. Added to that have been the enormous changes in TDOT since 2003. Thus, the development of the TEPM has been in influx for what has seemed to be an extended period of time. Had a more up-to-date manual been in place to begin with, the manual revisions could have been handled more incrementally, which may have reduced the overall development time. One lesson learned is the importance of creating an electronic manual that is structured to allow ease of updating and to establish a process for routine review and updating of the manual.

The development of the manual has proven to be a remarkable opportunity to involve long- and short-term staff members, consultants with experience within and outside Tennessee, other DOTs, FHWA, and representatives of the environmental community. This approach has provided an opportunity for collaboration and creativity that should prove to be of substantial benefit to TDOT and the citizens of Tennessee.

Application for other users
First and foremost, the Tennessee Environmental Procedures Manual is the guidebook for anyone who is preparing a NEPA or TEER evaluation for a transportation project in Tennessee. Those users may be TDOT staff and its consultants, or the staff and consultants of local governments. To citizens, organizations and agencies with a stake in Tennessee’s transportation decisions, the manual is an essential reference for understanding the process TDOT uses to conduct environmental evaluations and how that process relates to the overall project development process. Beyond the borders of Tennessee, this manual offers a handy resource to understanding the NEPA process. It also offers an example for other states to follow in reevaluating, updating, or creating their own environmental guidance materials. TDOT has already received several requests for information about the TEPM from other state DOTs that are considering revising or preparing their own manuals.

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