

TEXAS TRANSPORTATION INSTITUTE THE TEXAS A&M UNIVERSITY SYSTEM

Project Summary Report 0-4015-S Project 0-4015: Streamlining the Environmental Approval Process

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Streamlining the Environmental Approval Process: Summary Report

Section 1309 of the Transportation Equity Act for the 21st Century (TEA-21) is intended to promote streamlining in the environmental review processes for transportation project development. Environmental streamlining refers to various processes, interagency coordination, technology, and communications tools used to improve transportation project development by reducing project delays, duplicated efforts, and increased costs associated with environmental reviews. This research project examined the environmental clearance process at the Texas Department of Transportation (TxDOT), its transportation development partners, and other state departments of transportation (DOTs) in order to identify opportunities and examples of streamlining. The research results were developed into a guidebook for use in streamlining the project development process at TxDOT.

What We Did...

Review of Streamlining at Other State DOTs

Researchers conducted a review of environmental streamlining efforts at various state DOTs including Florida, New York, Oregon, Pennsylvania, North Carolina, and Washington. Federal agency web sites were reviewed for reports on streamlining initiatives. The review was limited to information on web sites and published transportation literature.

Survey and Interviews of Environmental Coordinators, Project Managers, and Planners

An e-mail-based opinion survey of TxDOT division and district environmental coordinators, planners, project managers, and specialists was conducted. The responses to these surveys and interviews were used to identify streamlining obstacles and potential strategies used to overcome them. Of the 93 surveys distributed, results were compiled from 46 respondents. The responses also included more than 200 written comments on the various streamlining issues and examples.

A limited opinion survey of TxDOT district planning directors was also conducted (13 of 25 districts responded). In-person and telephone interviews were conducted with the Houston, San Antonio, San Angelo, Pharr, and Tyler Districts. The results of the opinion surveys and interviews were compiled along with comments and suggestions.

Development of a Guidebook

Based on the review of streamlining efforts nationwide and the environmental clearance process within TxDOT, a guidebook was developed that highlights environmental streamlining issues and practices.

Stewardship of the natural and human environments is as essential as safe highways. We should protect our environmental resources as we seek safe and efficient means to move people and goods. (44 Responses)



Figure 1. Opinions on Environmental Stewardship.

What We Found...

Environmental Stewardship

In the opinion survey, environmental coordinators and planners were asked about the importance of environmental stewardship and transportation development. The responses indicate nearly everyone (98 percent of respondents) believes that environmental stewardship is important (see Figure 1).

Favored Streamlining Strategies

The survey sought opinions about many different streamlining strategies. For example, increased access to the Internet by environmental coordinators and practitioners allows them to obtain needed environmental information including resource agency guidance, demographic and community data, and maps for use in environmental analysis and documentation. Figure 2 shows the responses from TxDOT environmental coordinators and practitioners, and Figure 3 shows the response from district planning directors.

The importance of early and continuous involvement of environmental coordinators in the project development process also received favorable support from environmental coordinators and transportation planning directors (TPDs). See Figures 4 and 5.

Other streamlining strategies that received favorable rankings included:

- developing more programmatic agreements and programmatic permits;
- environmental education for design staff and construction inspectors;
- joint environmental education and cross-training with participation from design staff, construction inspectors, and environmental coordinators;
- funding more positions at TxDOT;
- earlier involvement of resource agencies on projects;
- establishing conflict resolution procedures with resource agencies;
- more interaction and cooperation between TxDOT and resource agency senior management;
- creating project working groups that include planners, designers,

environmental staff, and resources agencies; and

• more "on the ground" environmental monitoring and inspection at construction projects.

TxDOT Is Streamlining

The Environmental Affairs Division and many districts already have streamlining initiatives and practices in place. Also, many of the efforts go unrecognized as being streamlining. Through the daily execution of their duties, environmental coordinators use their skills to incorporate streamlining techniques into projects from their districts based on their knowledge of the regional environmental setting and relationships with resource agencies.

Examples of TxDOT streamlining efforts include:

- using fee in lieu of mitigation (newly amended Subchapter H, Chapter 201, Transportation Code),
- revised environmental assessment outline,
- revised scopes of work for environmental consulting services,
- availability of scientific services contracts for using environmental specialists,
- sharing document preparation tips such as importing Microstation ".emf" files into Microsoft Word[®] documents,
- inclusion of environmental commitments in general notes and plan sheets,
- improved environmental tracking system (ETS) and paperless pilot project, and





Figure 3. Opinions on Internet Access from District Transportation Planning Directors.

• using alternatives comparison matrix in environmental planning documents.

Common Streamlining Traits

Although incorporating streamlining strategies into practice requires a department-wide effort, streamlining success stories usually begin with efforts of individual practitioners. Based on the interviews and surveys of environmental professionals at TxDOT, the following are common traits among project development participants who are streamlining. According to the people in the environmental clearance trenches, this is what it really takes to streamline:

• Improve project communication and information exchange. This includes maintaining an open dialogue with resource agencies, consulting partners, and contractors. Effective written communication in environmental scopes of work, plans sheets and general notes, and concise environmental documents are also important. Stay connected to the process and keep information flowing.

- Build relationships and build trust with all of the stakeholders and participants in the project development and environmental clearance process.
- Use technology. It pays in the long run. The ETS, digital images for reports, using environmental databases from Internet resources, and visualization technology were all examples cited by practitioners.





Figure 4. Opinions on Early Involvement from Environmental Coordinators.

Figure 5. Opinions on Early Involvement of Environmental Coordinators from TPDs.

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- Be a project partner. Everyone should be on the same team including environmental specialists, consultants, designers, and construction personnel.
- TxDOT is already streamlining! Continue doing the job right!

The Researchers Recommend...

Based on the results of this research project, the researchers recommend the following:

- Continue to implement and monitor existing streamlining initiatives at both the division and district offices with a focus on strategies showing support from practitioners and planners.
- Improve environmental information sharing early in the project development process, particularly in the development of purpose and need statements, and the transition from project planning to preliminary design.
- Increase education and outreach to TxDOT design consultants on the environmental clearance process, and clearly communicate project requirements in scopes of work.
- Increase education and outreach to TxDOT construction contractors on keeping environmental commitments and provide critical environmental information on plan sheets and general notes.
- Publicize environmental successes in transportation development to the public and stakeholders to build trust.
- Embrace the use of information technology and document management software for communicating and exchanging project environmental information.
- Provide cross-training opportunities and professional development to environmental staff at the district and division levels to strengthen working partnerships and reduce turnover.

For More Details. . .

For more details about this research, see the following: Report 4015-1, *Environmental Streamlining Processes* Report 0-4015-P1, *Environmental Streamlining Guidebook*

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TxDOT Implementation Status April 2004

The research resulted in an Environmental Streamlining Guidebook for the transportation development process. The research demonstrated that Texas is already streamlining and expanding streamlining initiatives. The guidebook has been implemented to further encourage and facilitate the environmental streamlining process.

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YOUR INVOLVEMENT IS WELCOME!

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