



Expediting Project Delivery Self-Assessment Workbook



U.S. Department of Transportation
Federal Highway Administration

Abbreviations

AMBAG

Association of Monterey Bay Area Governments

AASHTO

American Association of State Highway and Transportation Officials

DOTs

Departments of Transportation

FHWA

Federal Highway Administration

FDOT

Florida Department of Transportation

IAP

Implementation Assistance Program

MPO

Metropolitan Planning Organization

NEPA

National Environmental Policy Act

NGO

Non-Government Organization

SAFETEA-LU

Safe, Accountable, Flexible, Efficient
Transportation Equity Act: A Legacy for Users

SHPO

State Historic Preservation Officer

SHRP2

Second Strategic Highway Research Program

TRB

Transportation Research Board

Contents

2 Executive Summary

3 Background and Introduction

3 About SHRP2

3 About Expediting Project Delivery (C19)

3 Expediting Project Delivery Self-Assessment and Workshops

4 Expediting Project Delivery Assessment Workbook

5 Self-Assessment Process

5 Step 1: Define the Scope of the Assessment

6 Documenting the Scope of the Assessment

7 Process Kick-Off

7 Step 2: Apply the Expediting Project Delivery Assessment

7 Overview of the Expediting Project Delivery Assessment

8 Using the Expediting Project Delivery Assessment and Interpreting the Results

11 Step 3: Develop an Action Plan

11 Process for Developing an Action Plan

11 Best Practices to Apply the Expediting Project Delivery Assessment and Implement the Action Plan

13 The Path Forward

13 Case Studies

13 Florida Department of Transportation (FDOT) District 4

14 Association of Monterey Bay Area Governments (AMBAG)

14 Contact Information

15 Appendices

15 A: Common Constraints

21 B: Expediting Project Delivery (C19) Assessment Workshops

22 C: Expediting Project Delivery Assessment Statements

27 D: Expediting Project Delivery Group Brainstorming Form

28 E: Expediting Project Delivery Action Planning Worksheet

Figures

8 Figure 1:
Online Assessment – Assessment Web Page

9 Figure 2:
Online Assessment – View Results Web Page

Executive Summary

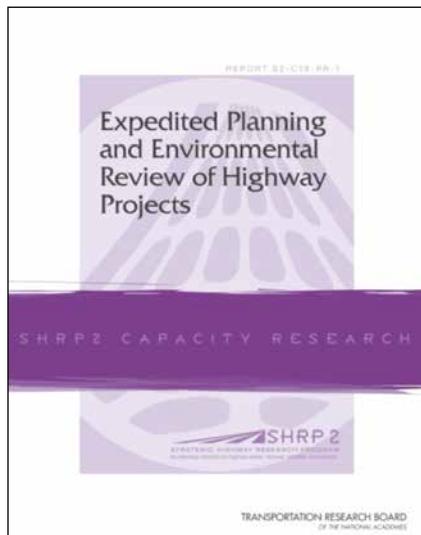
The goal of transportation agencies is to conduct an efficient planning and project development process without sacrificing broad-based support for the outcome. There are many obstacles to maximizing efficiencies in project development and delivery, but the use of innovative approaches and early coordination with partners and stakeholders can help transportation agencies overcome these obstacles and achieve improved project decisions and outcomes.

To address this challenge, the Second Strategic Highway Research Program (SHRP2) developed the solution Expediting Project Delivery. This product developed a series of tools to deploy 24 strategies for addressing, or avoiding, 16 common constraints to expediting project delivery.

This Expediting Project Delivery Self-Assessment Workbook serves as a companion to the Expediting Project Delivery Assessment located within the PlanWorks: Better Planning, Better Projects

website. This assessment helps transportation agencies (e.g., State Departments of Transportation (DOTs), metropolitan planning organizations (MPOs), non-governmental organizations (NGOs), resource and regulatory agencies, and local governments), identify obstacles to accelerating project delivery that are present or anticipated. Corresponding strategies are provided in the assessment to help overcome these obstacles. By following the three steps presented in the workbook (*Define the Scope of the Assessment, Apply the Expediting Project Delivery Assessment, and Develop an Action Plan*) transportation agencies will be able to fully leverage the value of the Expediting Project Delivery product.

The Expediting Project Delivery Assessment Workbook should be used by transportation agencies in collaboration with their partners. Participants should include agency representatives and additional stakeholders to establish a broad understanding of the strategies and goals for expediting project delivery.



Cover to the SHRP2 *Expediting Project Delivery Product*. www.nap.edu

Background and Introduction

About SHRP2

Authorized by U.S. Congress in 2005 under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU),

SHRP2 (2005)
Collaboration of FHWA,
AASHTO, and TRB

SHRP2 Product C19
Expediting Project Delivery

**Development of resource for
Transportation Agencies**
Expediting Project Delivery Assessment

Key concepts of the Expediting Project Delivery Assessment were used during **workshops** with six SHRP2 IAP recipients

Creation of the Expediting Project Delivery Self-Assessment **Workbook** to help transportation agencies conduct an assessment independently

the Second Strategic Highway Research Program (SHRP2) is a collaborative effort to develop products and processes that can be used by agencies to address key transportation challenges. Since the authorization of SHRP2, the Federal Highway Administration (FHWA), American Association of State Highway and Transportation Officials (AASHTO), and Transportation Research Board (TRB) have worked in partnership to conduct research and deploy products that help the transportation community improve the Nation's highway system. One such product within the SHRP2 "Capacity" focus area is *Expediting Project Delivery* (C19).

About Expediting Project Delivery (C19)

Expediting Project Delivery (C19) is a product aimed at accelerating planning and environmental review processes for transportation projects. This product identifies 24 strategies for addressing or avoiding 16 common constraints to accelerating project delivery, which are referenced in Appendix A of this Workbook. These strategies represent innovative approaches to improve transportation decision-making that result in better projects and environmental outcomes. Applying these proven strategies saves time by allowing agencies to anticipate and reduce project delays in a collaborative manner with key partners and stakeholders.

Expediting Project Delivery Self-Assessment and Workshops

As part of the SHRP2 Implementation Assistance Program (IAP), funds were provided to 12 agencies across the country (10 State DOTs and 2 MPOs) to apply Expediting Project Delivery (C19). Six of the



Volpe image

IAP funding recipients requested that FHWA provide technical assistance in the form of Assessment Workshops to help the recipients determine where to focus their efforts in accelerating project delivery. Through the Assessment Workshops, transportation agency staff and leadership, sometimes in collaboration with environmental/resource agency staffs, discussed the intent and elements of Expediting Project Delivery and the Self-Assessment and defined “what works well?” and “what needs work?” with regard to accelerating project delivery within their agency. The final product of each workshop was an Action Plan that described how each IAP recipient would incorporate selected Expediting Project Delivery strategies into their day-to-day processes and practices.

Expediting Project Delivery Assessment Workbook

The aim of this workbook is to allow agencies to lead their own assessment processes, similar to the FHWA-facilitated workshops. This workbook, to be used in coordination with the Expediting Project Delivery Assessment, can help agencies understand where they fall with regard to accelerating project delivery, and which targeted strategies could help them save time and resources without compromising environmental gains. The process outlined in the workbook is divided into three steps:

1. Define the Scope of the Assessment;
2. Apply the Expediting Project Delivery Assessment; and
3. Develop an Action Plan.

By using the Self-Assessment Workbook, transportation agencies can replicate the positive outcomes from the six workshops, and develop a path forward that will allow the agency to receive the full benefit of *Expediting Project Delivery*.



Vermont Agency of Transportation (VTrans) Accelerated Bridge Program.
Image courtesy of VTrans.

Self-Assessment Process

This section of the workbook describes in detail the three steps agencies can follow to perform a thorough self-assessment and develop an Action Plan for moving forward. Each step can be used in coordination with the Expediting Project Delivery product, and associated resources found on the FHWA Environmental Review Toolkit.

Step 1: Define the Scope of the Assessment

Prior to examining an agency's utilization of the Expediting Project Delivery Assessment, users must determine the scope and scale of the assessment. Because the strategies within Expediting Project Delivery can be applied on a project or program scale within a single agency or across various agencies within a region, it is critical to understand the intended scope of the assessment at the outset. It is

possible that throughout the process of performing the assessment an agency may want to adjust the scale of its effort. The self-assessment process is flexibly designed to allow for these changes.

During this initial step, the agency or agencies leading the effort should review and identify answers to the questions listed below. This step can be performed by an individual who can share and revise the results with his or her colleagues or it may be conducted via a meeting with the agency and/or representatives from partner agencies. It is critical that this step be collaboratively addressed at the outset and further refined/revised (as necessary and appropriate) throughout the course of the assessment.

The questions to be used during this initial assessment phase include but are not limited to:

- 1. At what scope or scale should the assessment be conducted?** Will this assessment be used on an individual project, corridor, suite of projects, certain types of projects, program, or agencywide?
- 2. At what point in the project delivery process is your agency performing this self-assessment?** Are you an agency using this assessment at the beginning of a project to identify potential challenges or during an active project to diagnose issues? It is important to note that although the assessment can be taken at any point in the transportation development or delivery processes, some strategies (e.g., programmatic permitting or regional environmental analysis frameworks) must be developed prior to beginning a project. Therefore, it is important to determine at what phase this assessment will be performed to narrow the list of relevant strategies.



Map of the Association of Monterey Bay Area Governments (AMBAG) Region.
Image courtesy of AMBAG.

3. Who should participate in the assessment?

Who within your agency should participate in this assessment? Additionally, what other agencies should participate in this assessment, and are there other external stakeholders that should be included? Moreover, multi-disciplinary and intra/interagency coordination are critical to the successful implementation of the Expediting Project Delivery product. Ideally, the assessment should include individuals from your agency (including both practitioners and managers/leaders), as well as partner agencies that participate in decision-making. Recommended participants include representatives from: (a) the respective divisions/bureaus within the State DOT; (b) FHWA Division Office; (c) Federal, State, and/or local environmental, natural resource, and regulatory agencies; (d) MPOs and/or regional planning organizations; and (e) local public agencies. Individual participants should have enough authority to make organizational commitments when developing the Action Plan.

4. What are the roles of individual team members? Assign each participant in the process as an advisor, observer, or deci-

sion-maker. By determining these roles up front, the level of commitment and participation required of all team members will be clear, avoiding miscommunication or misaligned expectations later in the process. Further, establishing roles early will ensure that the work needed to complete the assessment and follow-on activities will be completed in a timely fashion.

5. What are the existing interagency relationships, both positive and negative, surrounding transportation planning and project development and delivery?

What past experiences or preexisting relationships exist among or within agencies that may affect how team members and stakeholders engage? While further details of intra- and interagency relationships will be addressed via the Expediting Project Delivery Assessment, it is important to document both relationship challenges and assets up front. Having a clear understanding of these relationships can allow agencies to leverage positive relationships throughout the process and repair troubled relationships via the process.

Documenting the Scope of the Assessment

After the agency or agencies leading the Expediting Project Delivery Assessment answer the above questions, they should document the “Scope of the Assessment” in a foundational document for the process. This document could take the form of a process charter, and a draft should be circulated among all participants for feedback and comment. The process leader should incorporate the feedback and address any questions or concerns at this phase to avoid confusion or disagreement later in the process.



Duxbury Culvert Replacement that benefited from *Expediting Project Delivery*.
Image courtesy of VTrans.

Process Kick-Off

In the course of finalizing the “Scope of the Assessment,” it is recommended that participants hold a kick-off meeting. During this meeting, a mutual understanding of the scope and process should be established among all participants. A description of how to structure this first meeting and subsequent meetings can be found in *Appendix B* of this workbook.

Once the Scope of the Assessment step is complete, participants are ready to apply the Expediting Project Delivery Assessment.



Image: 123rf.com

Using a Neutral Facilitator

For some single agency assessments, as well as for assessments in regions with strong preexisting relationships, this process may be easily implemented by an agency representative. However, for situations where interagency relationships are more challenging, it may be valuable to leverage the skills of a neutral facilitator. Having a third-party lead, but not drive, the process can lead to a more inclusive process with increased buy-in and less contention. Resources on facilitation and environmental conflict resolution can be found at the U.S. Institute for Environmental Conflict Resolution.

Step 2: Apply the Expediting Project Delivery Assessment

After completing Step 1, users are ready to complete the Expediting Project Delivery Assessment. The Assessment can be found within PlanWorks¹ or as a “hard copy” in Appendix C of this workbook. The Expediting Project Delivery Assessment generates feedback allowing agencies to see the areas in which they are performing well and also those that need improvement. Once the assessment is complete, the online assessment also offers recommendations and strategies directly addressing any identified areas of concern.

Overview of the Expediting Project Delivery Assessment

When completing the Expediting Project Delivery Assessment, located on the PlanWorks website, the user(s) is/are presented with a series of statements relating to project development and delivery that they rank on a scale from “Disagree” to “Strongly Agree,” as seen in **Figure 1**. Once the user(s) ranks the statements, they can view the results of the assessment, as seen in **Figure 2**. The “Results” section lists the answered statements as categories, and scores each as “Strong,” “Average,” or “Weak.” A “Strong” score is assigned to a category that an agency or project excel at completing. An “Average” score indicates that the category is not currently problematic, but should be monitored. Finally, a “Weak” score signifies that the category has problem areas and, if addressed, could greatly improve a project’s or agency’s efficiency and effectiveness. Additional information and recommendations for accelerating project delivery are provided

¹ PlanWorks is a product of SHRP2 that provides a web resource supporting collaborative decision-making in transportation planning and project development.

in the results section for each category depending upon score (i.e., “Strong,” “Average,” or “Weak”).

For example, the first statement within the Expediting Project Delivery Assessment reads

“Project decisions are delayed or protracted due to unexpected requests for additional analysis or for more information.” If this statement is particularly true, the user(s) would select “Strongly Agree” for that statement. Once the user advances to the “Results” section, the category would be identified as “Weak.” Links for additional information and recommendations are then provided next to the results of the category.

Using the Expediting Project Delivery Assessment and Interpreting the Results

There are several different models for how to use the Online Self-Assessment Tool. Users may choose to take the assessment alone, later sharing the

results with partners, or use the tool as a mechanism to spur conversation between agencies. The selected model for taking the Online Self-Assessment will directly impact the approach that a user will take in interpreting the results.

Several models for how to use the assessment are outlined below:

Lead Agency Takes the Assessment: In this model, the individual or agency would use the Expediting Project Delivery Assessment, and later share the results with its partners and stakeholders. The individual or group conducting the assessment should then hold a meeting with relevant partners and stakeholders to share the results of the assessment. During this meeting, partners and stakeholders should discuss if they agree with this assessment, or if they have had a different experience(s). These conversations should be documented and feed directly into the Action Plan. If an in-person

Figure 1: Online Assessment – Assessment Web Page

Conflicting Resource Values <small>1</small>					
	Disagree	Mildly Agree	Moderately Agree	Strongly Agree	N/A
Conflicts between resource values and/or between the advocates for those resources delay project decision-making.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Difficulty Agreeing on Impacts/Mitigation <small>1</small>					
	Disagree	Mildly Agree	Moderately Agree	Strongly Agree	N/A
Stakeholders are critical of the project's adverse effects.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
There is considerable concern or controversy regarding the project's adverse effects (real or perceived).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
The following question will become active if it is applicable to you:					
What stakeholder group(s) were integral to the controversy, concern, or delay (select all that apply)?	Non-Federal Agencies	Local Jurisdiction	Environmental Stakeholders	Community Organizations	Other
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Figure 2: Online Assessment – View Results Web Page

Category	Score and Strategy
Avoiding Policy Decisions Through Continual Analysis	<p>Effectiveness Score: Weak</p> <p>Risks To Project Delivery Things You Can Do How PlanWorks Can Help</p>
Conflicting Resource Values	<p>Effectiveness Score: Average</p> <p>Risks To Project Delivery Things You Can Do How PlanWorks Can Help</p>
Difficulty Agreeing on Impacts/Mitigation	<p>Effectiveness Score: Strong</p> <p>Risks To Project Delivery Difficulty agreeing on impacts and mitigation is a constraint that arises when participating parties have a challenging time identifying and agreeing upon the nature and scope of environmental impacts and have trouble negotiating and designing mitigation.</p> <p>Risks To Project Delivery Inability to agree on impacts and mitigation is a frequent source of delay for projects. Continuous debates over mitigation decisions can delay overall project progress because these decisions are typically made late during the NEPA phase and are often on the critical path.</p> <p>Indicators of This Constraint</p>

meeting is not possible or feasible, the results can be shared via email and discussed over the phone or by virtual meeting. However, virtual sharing and discussion of the assessment results is a less-preferred option as it does not bring key partners face-to-face to work jointly toward solving problems.

This model is most appropriate in situations where partners have limited engagement or have expressed limited willingness in the past to participate in the process. By moving forward with the assessment and then informing partners of the outcome, a leading agency can use the assessment as an opportunity to engage partners who were not comfortable participating at the outset.

In general, this model is the least preferred as it does not capture the full view of the process, project, or program but rather captures the perceptions of just one agency.

Expediting Project Delivery Assessment Used Individually with Results Comparison:

In this model, each agency participating in the assessment process uses the Expediting Project Delivery Assessment individually, then meets to compare



Image: 123rf.com

their results. During the meeting, agencies identify the differences and similarities in their results. The similarities are first identified as the existing successes, followed by the challenges that should be carried forward into the Action Plan. The agencies should discuss the differences in greater detail in order to understand how to use these outcomes in the Action Plan moving forward.

This model is most appropriate in situations where agencies recognize that they may have different perspectives on existing challenges to accelerating project delivery, but want to diagnose those differences in a non-biased fashion. By using the Expediting Project Delivery Assessment separately and then comparing results, agencies can better understand how their differing views might be resulting in process delays.

Group Use of the Expediting Project Delivery Assessment:

In this model, all agencies and stakeholders meet as a group and use the Expediting Project Delivery Assessment together. During the course of the meeting, the group discusses how they will answer each question and why. Following completion of the assessment, the group reviews and discusses the results. During this discussion, it is important that the group address any surprises

presented in the results, the potential origin(s), and how to address them in the Action Plan.

This model is most appropriate for groups that already are planning to conduct some type of self-assessment, or for particularly large groups in which comparing individual results may not be feasible.

Engaging Agency Leadership in the Assessment

Oftentimes these types of assessments are driven by staff at the middle-management level rather than agency leadership. Before engaging partners, it is often critical to engage agency leadership in order to gain their buy-in and support. Staff leading the process can use the output of the Expediting Project Delivery Assessment to engage leadership and discuss the importance of the assessment process in establishing a path forward for accelerating project delivery. Staff can utilize information available via the FHWA Environmental Review Toolkit (e.g., case studies) to better inform agency leadership on the process and benefits of using Expediting Project Delivery.



Image: 123rf.com

Step 3: Develop an Action Plan

After agencies complete the Expediting Project Delivery Assessment, staff should use the results to develop an Action Plan to achieve progress toward accelerating project delivery.

Process for Developing an Action Plan

Ideally, the Action Plan should be developed jointly by all partners and key stakeholders. This can be done via an in-person meeting or can be developed virtually. The Action Plan should identify which strategies a group hopes to address, the mechanisms by which they plan to do so, the timeline in which they will complete this work, and the party or parties that will ultimately be responsible. Two resources that can be used in developing an Action Plan include the Group Brainstorming Worksheet (see Appendix D) and the Action Planning Worksheet (see Appendix E).

While developing the Action Plan, it is important for agencies and partners to have reasonable expectations and set accomplishable goals. Agencies should work to ensure that all relevant partners and stakeholders are engaged in developing the Action Plan, or at a minimum review and buy into the

Questions to Guide the Action Planning Meeting

During Action Plan development, agencies and partners should consider the following questions to ensure a stronger process:

- Who at your agency will be engaged in the process in the long term?
- How will you keep agency leadership aware of progress on this effort?
- How will you incorporate the activities you commit to within the day-to-day functions of your agency?
- How will you track progress toward the goals of this effort?
- How will you measure the successes of this effort?

Action Plan. In situations where an agency develops an Action Plan without direct participation by other agencies or stakeholders, it is important that the goals not be contingent upon partner and/or stakeholder participation.

When the Action Plan is finalized, agencies should decide how best to formalize the document. This can be done via a process agreement document, memorandum of understanding (MOU), or other formal agreement. Using one of these mechanisms does not ensure that the Action Plan will be completed, but does capture the commitment of all engaged parties.

Best Practices to Apply the Expediting Project Delivery Assessment and Implement the Action Plan

Agencies working to apply the strategies from Expediting Project Delivery may be concerned



Image: 123rf.com

about challenges in implementing the Self-Assessment and the Action Plan. Through the various Assessment Workshops conducted for the six IAP recipients, workshop participants identified best practices that improved their self-assessment and implementation processes, such as:

- **Establishing early, continuous, and effective communications (both internally and externally) is important to the implementation of Expediting Project Delivery.** Well-documented and clearly communicated processes and procedures are critical to establishing roles and responsibilities. Process documents should also define work that can be completed by subgroups that do not require the attention of the full group of partners and stakeholders.

Clear and timely communications between transportation agencies and resource/regulatory agencies can expedite decisions on matters such as defining resource values and agreeing upon resource impacts and mitigation. Convening regular status update meetings among partners and stakeholders can ensure that all members of the implementation team can prevent disagreements and misunderstandings.

- **Well-documented workflow processes and project management systems can reduce confusion and improve collaborative processes.** Documentation that shows how the processes related to the Expediting Project Delivery strategies flow through an organization, as well as the relationships among and between organizational sub-units and work groups, can be a valuable tool improving transparency and quality of communication. These flow processes and related tasks should be captured in a project management system to improve accountability. Once established, workflow processes should be periodically reviewed, evaluated, and revised/updated (as necessary) to ensure optimum efficiency and effectiveness.
- **The use of data-sharing systems can improve collaboration and improve project outcomes.** While each partner may have their own set of geospatial data and other data related to the same projects and programs, it is important to organize all relevant data in one central location that can be accessed by all members of the core implementation team. Centralizing the data ensures that all partners are working with the same understanding, creating more effective and focused discussions.

The Path Forward

The Action Plan should lay a path forward spanning months or years for the implementation of the strategies aimed at accelerating project delivery. Agencies should be prepared to form or strengthen longstanding partnerships that should yield savings of time, money, and effort. Additionally, the scope and scale of the organizational and/or process changes may be incremental and/or be longer-term in nature. Shifting away from traditional methods of transportation project/program development and delivery may require significant effort up front, but may yield savings in the long term.

The information in this workbook should help agencies begin their efforts to better accelerate project development and delivery. As they work through their processes, they are encouraged to continue to leverage the various resources developed through SHRP2 and seek technical assistance from FHWA (as necessary and appropriate).

Case Studies

The following examples briefly illustrate how two IAP recipients worked through the assessment process, and carried forward the implementation of

Expediting Project Delivery strategies. Additional information and examples can be found on the FHWA Environmental Review Toolkit.

Florida Department of Transportation (FDOT) District 4

As a SHRP2 Lead Adopter Incentive IAP funding recipient, FDOT District 4 launched an effort in January 2014 to evaluate its project delivery process using eight strategies from SHRP2 product C19 (Expediting Project Delivery). FDOT held two Expediting Project Delivery Assessment workshops (facilitated by FHWA) to identify potential accelerated opportunities and develop implementation action plans. FDOT District 4 successfully implemented its Action Plan over the course of two years, with additional process improvements planned.

Implementation challenges included communicating project delivery schedule changes and task timing and coordinating with project funding schedules. Benefits included reduced Categorical Exclusion (CE) processing times, staff having greater continuity on work assignments, a reduction of re-work, clearer scopes of services, and more efficient project programming. FDOT's next steps are to institutionalize the results from this effort by



Local road in Vermont that benefited from Expediting Project Delivery following Tropical Storm Irene. Images courtesy of VTRANS.



continuing to modify its Project Schedule Template and improve the tracking of pre-work in its project tracking system.

Association of Monterey Bay Area Governments (AMBAG)

As a SHRP2 User Incentive IAP funding recipient, AMBAG launched an effort in October 2013 to create the Transportation Finance Working Group (Transfi) in applying two strategies from SHRP2 product C19 (Expediting Project Delivery). Through interagency coordination under Transfi, AMBAG and its partner agencies were able to share information on potential grant opportunities, thereby saving time and staff resources. Implementation challenges included funding disparities among planning and construction and operations, staff limitations, and schedule conflicts. Benefits included \$32 million in funding for Transfi member agencies. AMBAG's next steps are to continue holding Transfi meetings to ensure continued information sharing.

Contact Information:

For additional information relating to Expediting Project Delivery or for technical assistance, please feel free to contact:



David T. Williams

Environmental Protection Specialist
FHWA Office of Project Development
and Environmental Review
david.williams@dot.gov
(202) 366-4074

Appendix A: Common Constraints

Expedited Planning and Environmental Review of Highway Projects (SHRP2 Report S2-C19-RR-1) identifies 16 common constraints to expediting project delivery. These 16 constraints and associated strategies are briefly described below. The list of strategies associated with each constraint can serve as the starting point during the brainstorming process while also giving agencies working through the process time to discuss other strategies unique to their context and needs. Language from this section is provided directly from the C19 project report Expediting Planning and Environmental Review for Highway Projects.

1. Avoiding Policy Decisions Through Continual Analysis

Continual analysis can indicate an unwillingness to support or agree on various project issues. Often these requests are seen as a way to settle decisions through an analytical route as opposed to a political one. Repeated requests for more detailed analysis, requests for outside experts or additional review of analysis, or requests for new models or data-sets are key indicators of this constraint. The following strategies may be used to address this constraint:

- Consolidated Decision Council
- Expedited Internal Review and Decision-Making
- Interagency Dispute Resolution Process
- Programmatic Permitting
- Regional Environmental Analysis Framework
- Up-Front Environmental Commitments

2. Conflicting Resource Values

As State DOTs work with resource agencies to evaluate potential effects on the environment, differing opinions and understandings about the value, extent, and location of natural and cultural resources can hamper progress. Such differences can occur if the agencies have each undertaken separate resource inventories at different times and using different techniques, or they can result from a simple perceived or real conflict in protecting the different resources under the jurisdictions of different agencies. These differences can cause misunderstandings, create debate, and require project-specific inventories rather than relying on more efficient regional surveys. Cumulative effects analyses can be especially challenging when assessing past impacts that were made with different assumptions and used different methodologies. The following strategies may be used to address this constraint:

- Coordinated and Responsive Agency Involvement
- Facilitation to Align Expectations Up Front
- Interagency Dispute Resolution Process
- Planning and Environmental Linkages
- Planning-Level Environmental Screening Criteria
- Regional Environmental Analysis Framework
- Up-Front Environmental Commitments

3. Difficulty Agreeing on Impacts and Mitigation

The process of identifying and developing agreement on the nature and scope of environmental impacts and negotiating and designing mitigation can be challenging and is a frequent source of delay for projects. Debate or disagreement over mitigation decisions can delay

overall project progress because it typically occurs late during the National Environmental Policy Act (NEPA) phase and is often on the critical path. The following strategies may be used to address this constraint:

- Coordinated and Responsive Agency Involvement
- State DOT-Funded Resource Agency Liaisons
- Facilitation to Align Expectations Up Front
- Interagency Dispute Resolution Process
- Planning and Environmental Linkages
- Planning-Level Environmental Screening Criteria
- Programmatic Permitting
- Regional Environmental Analysis Framework
- Up-Front Environmental Commitments

4. Inability to Maintain Agreement

Changing or reopening decisions lengthens schedules and delays progress. For project expediting, decisions should be maintained across parties and over time. While many decisions evolve and shift, sometimes agreements can deteriorate or not be reliable for reasons that could be actively managed and avoided. The most challenging situation occurs when a decision is revisited repeatedly, changed, ignored, or contested after agreement has been reached. The following strategies may be used to address this constraint:

- Consolidated Decision Council
- Coordinated and Responsive Agency Involvement
- State DOT-Funded Resource Agency Liaisons

- Early Commitment of Construction Funding
- Facilitation to Align Expectations Up Front
- Highly Responsive Public Involvement
- Interagency Dispute Resolution Process
- Planning and Environmental Linkages
- Programmatic Permitting
- Strategic Oversight and Readiness Assessment

5. Ineffective Internal Communication

Quick, easy communication within a project team is vital for rapid progress, but it is often difficult for project managers and agencies to define and achieve. As project teams grow in size and complexity, so does the need for strong internal communication. This ensures that everyone understands priorities, new decisions, and changing directions and that everyone is working with the latest data.

Hindrances to internal project communication can disrupt or delay discussions and decisions that are necessary to maintain project momentum. The following strategies may be used to address this constraint:

- Consolidated Decision Council
- Expedited Internal Review and Decision-Making
- Real-Time Collaborative Interagency Reviews
- Strategic Oversight and Readiness Assessment
- Team Co-Location

6. Inefficient Section 106 Consultation with the State Historic Preservation Officer

(SHPO) Most State DOT projects and activities have little or no potential to affect historic or archaeological resources, but they are

nonetheless often subject to project-by-project review from the State Historic Preservation Officer (SHPO). These reviews can add time and expense to these projects and sap resources that might otherwise be better spent on projects with more likelihood of affecting resources protected by Section 106. The traditional approach of individually submitting most State DOT projects and activities to SHPO for review and comment is generally inefficient. This approach may ultimately inhibit agencies from providing the appropriate resources on projects that do pose concern for historic and archaeological resources. The following strategies may be used to address this constraint:

- Coordinated and Responsive Agency Involvement
- State DOT-Funded Resource Agency Liaisons
- Planning-Level Environmental Screening Criteria
- Programmatic Agreement for Section 106

7. Inordinate Focus on Single Issue

Projects can become paralyzed if an inordinate amount of focus is placed on one resource or issue. This focus can be driven by an influential stakeholder with a particular interest or by an agency or stakeholder with a deep commitment to the resource. It is normal for resources to be divided up by groups and agencies; it is part of the structure within which planning occurs. However, sometimes an inordinate level of concern for a given resource seems to consume all the energy for a project. The following strategies may be used to address this constraint:

- Consolidated Decision Council

- Coordinated and Responsive Agency Involvement
- Facilitation to Align Expectations Up Front
- Interagency Dispute Resolution Process
- Planning and Environmental Linkages
- Planning-Level Environmental Screening Criteria
- Real-Time Collaborative Interagency Reviews
- Regional Environmental Analysis Framework
- Up-Front Environmental Commitments

8. Inefficient Public Engagement or Support

Obtaining meaningful public engagement can be difficult unless people understand how they could be directly affected by a project. Attracting public interest in long-range planning efforts is chronically difficult because activities 10 to 20 years or more in the future do not have the same potential to concern or appeal to a community as more imminent projects. Socioeconomic barriers, lack of transportation, or perceived disempowerment can make engagement even more difficult. Insufficient public participation can make transportation planning less effective at supporting subsequent project development. The following strategies may be used to address this constraint:

- Context-Sensitive Design
- Early Commitment of Construction Funding
- Highly Responsive Public Involvement
- Media Relations Manager

9. Issues Arising Late Cause Project Change

Late issues or seemingly new issues introduced late in the planning or review process can lead to project delay. Sometimes this con-

straint stems from new participants entering the process, or it is used as a tactic to stall the overall process by requiring consideration of new options that may not be relevant. The following strategies may be used to address this constraint:

- Change Control Practices
- Facilitation to Align Expectations Up Front
- Highly Responsive Public Involvement
- Interagency Dispute Resolution Process
- Planning and Environmental Linkages
- Planning-Level Environmental Screening Criteria
- Real-Time Collaborative Interagency Reviews
- Regional Environmental Analysis Framework
- Tiered NEPA Process

10. Lack of Dedicated Staff

Transportation agency resources are often stretched thin across many different projects and initiatives, which can result in insufficient staffing resources and delayed progress. Projects can suffer from insufficient staff resources because of programmatic or agencywide changes that compete with project staff time or because of new developments specific to the project that require additional staffing. The following strategies may be used to address this constraint:

- State DOT-Funded Resource Agency Liaisons
- Early Commitment of Construction Funding
- Strategic Oversight and Readiness Assessment
- Team Co-Location

11. Lengthy Review/Revision Cycles

Preparation and publication of planning studies and NEPA documentation can be delayed by protracted review and revision cycles. Delays can occur on projects with multiple reviewing agencies, particularly if their reviews occur sequentially (i.e., lead agency review first, then cooperating agencies, followed by resource agencies); if additional reviews are requested; if reviewers require more time than originally allotted; and/or if time is needed for reconciliation between conflicting reviewers. The following strategies may be used to address this constraint:

- Coordinated and Responsive Agency Involvement
- State DOT-Funded Resource Agency Liaisons
- Early Commitment of Construction Funding
- Expedited Internal Review and Decision-Making
- Facilitation to Align Expectations Up Front
- Planning and Environmental Linkages
- Planning-Level Environmental Screening Criteria
- Programmatic Permitting
- Real-Time Collaborative Interagency Reviews
- Team Co-Location

12. Negative or Critical Coverage from the Media

Projects often encounter challenges when media coverage highlights or stokes controversy and opposition. A variety of factors can create or contribute to these difficulties. Project leaders can fail to anticipate hot-button issues with local media outlets or stakeholder groups, or they may identify the issues but

not develop effective methods for addressing these issues or working with these groups. Transportation agencies often struggle to communicate information, either in meetings or via press releases, that both anticipates and clearly addresses topics of potential interest and concern to the press and their public audience. The following strategies may be used to address this constraint:

- Highly Responsive Public Involvement
- Media Relations Manager

13. Relocation Process Delays Construction

Property acquisition and the relocation of residents or businesses are often on the critical path to the start of construction, which adds pressure on the transportation agency to quickly negotiate replacement housing payments and other settlement issues that must be completed during the relocation process. This process can be stressful for tenants or business owners who generally have different motivations than the transportation agency, and can lead to protracted negotiations that delay relocation and subsequent project activities. With the relocation process frequently on the critical path to construction, and given the direct implications of delay to project cost, transportation agencies will often benefit from techniques that expedite relocations. The following strategies may be used to address this constraint:

- Highly Responsive Public Involvement
- Incentive Payments to Expedite Relocations
- Media Relations Manager

14. Slow Decision-Making

When decisions take longer than expected or anticipated, the decision-making process can feel unclear, as can the path to agreement. At times, it may seem that there is a low level of interest in committing to a decision and that indecision prolongs the process. The following strategies may be used to address this constraint:

- Consolidated Decision Council
- Early Commitment of Construction Funding
- Expedited Internal Review and Decision-Making
- Planning and Environmental Linkages
- Real-Time Collaborative Interagency Reviews
- Strategic Oversight and Readiness Assessment
- Team Co-Location

15. Stakeholder Controversy and Opposition

Obtaining stakeholder support for a given project is an important component of the initiative's success and timely progress. Stakeholders may oppose one or more particular elements for a project which can delay or cancel a project. Issues that are prone to stakeholder opposition include contradicting preexisting plans and significantly changing demographics or property ownership in an area. To avoid the issue of stakeholder opposition or to remedy it once it has begun, the following strategies can be applied:

- Context-Sensitive Design
- Facilitation to Align Expectations Up Front
- Highly Responsive Public Involvement

- Media Relations Manager
- Regional Environmental Analysis Framework
- Up-Front Environmental Commitments
- Consolidated Decision Council
- Coordinated and Responsive Agency Involvement
- State DOT-Funded Resource Agency Liaisons
- Early Commitment of Construction Funding
- Expedited Internal Review and Decision-Making
- Interagency Dispute Resolution Process
- Performance Standards
- Programmatic Permitting
- Real-Time Collaborative Interagency Reviews
- Strategic Oversight and Readiness Assessment
- Team Co-Location
- Tiered NEPA Process

16. Unusually Large Scale and Complex Project or Program

State DOTs are occasionally faced with a project or program of projects that is larger and more complex than what they are accustomed to. These projects or programs may entail many separate components that form a major infrastructure improvement or distinct projects of a similar nature that are being addressed programmatically. Typically, projects of unusually large scale and/or complexity cannot be pursued efficiently or effectively with a business as usual approach. Instead, decision-making, permitting, and designing will require new techniques to be accomplished efficiently. The following strategies may be used to address this constraint:

Appendix B:

Expediting Project Delivery (C19)

Assessment Workshops

The modules listed below can be covered in one or a series of workshops, depending on the needs and character of the implementation process and engaged partners.

1	Welcome, Introductions, Workshop Overview, and Logistics
2	Workshop Objectives
3	Introductory Remarks from the State DOT
4	Overview of the Second Strategic Highway Research Program (SHRP2)
5	Overview of the SHRP2 Product Expediting Project Delivery
6	Overview of the Expediting Project Delivery Assessment
7	Setting the Stage for the Rest of the Workshop: State DOT Overview on the “Current State” and “Desired State” of Project Development and Delivery Processes and Practices
8	Group Exercise Using the Expediting Project Delivery Assessment
9	Group Dialogue on the Results from the Expediting Project Delivery Assessment: Collaboration and Coordination Challenges and Opportunities: “What Works Well?” and “What Needs Work?”
10	Breakout Group Brainstorming on an Assigned Expediting Project Delivery Strategy (or Strategy Grouping/Category) to Generate Ideas on Future “Action Steps”
11	Break-Out Group Reports on Suggested Future “Action Steps”
12	Group Dialogue on the Framework and Components of the Action Plan
13	Next Steps for Developing and Implementing the Action Plan

Appendix C:

Expediting Project Delivery

Assessment Statements

Avoiding Policy Decisions Through Continual Analysis	Disagree	Mildly Agree	Moderately Agree	Strongly Agree	N/A
Project decisions are delayed or protracted due to unexpected requests for additional analysis or for more information.					
Conflicting Resource Values	Disagree	Mildly Agree	Moderately Agree	Strongly Agree	N/A
Conflicts between resource values and/or between the advocates for those resources delay project decision-making.					
Difficulty Agreeing on Impacts/Mitigation	Disagree	Mildly Agree	Moderately Agree	Strongly Agree	N/A
Stakeholders are critical of the project's adverse effects.					
There is considerable concern or controversy regarding the project's adverse effects (real or perceived).					

The following question will become active if it is applicable to you:

	Non-Federal Agencies	Local Jurisdiction	Environmental Stakeholders	Community Organizations	Other
Conflicts between resource values and/or between the advocates for those resources delay project decision-making.					

Inability to Maintain Agreement	Disagree	Mildly Agree	Moderately Agree	Strongly Agree	N/A
After the range of alternatives has been deliberately narrowed through analysis and decision-making, more alternatives are added to the process, causing delay.					
Decisions that have been previously made are re-opened, causing project delays.					

The following question will become active if it is applicable to you:

	Non-Federal Agencies	Local Jurisdiction	Environmental Stakeholders	Community Organizations	Other
What stakeholder group(s) were integral to the controversy, concern, or delay (select all that apply)?					
Ineffective Internal Communication	Disagree	Mildly Agree	Moderately Agree	Strongly Agree	N/A
Project staff doesn't feel adequately involved or informed about project direction.					
Even when design work or analysis has been completed, it needs to be redone because out-of-date information or assumptions were used.					
Communicating with other project team members is difficult or cumbersome.					
Communicating with other project team members does not happen in a timely manner.					

Inefficient Section 106 Consultation with SHPO	Disagree	Mildly Agree	Moderately Agree	Strongly Agree	N/A
Section 106 compliance is on the project critical path.					
Section 106 compliance is taking longer than scheduled.					

Inordinate Focus on Single Issue	Disagree	Mildly Agree	Moderately Agree	Strongly Agree	N/A
Stakeholder coordination is dominated by a single issue, while other important issues receive considerably less attention.					
A single issue dominates project decision-making, while other important issues receive much less consideration by decision-makers.					

The following question will become active if it is applicable to you:

	Non-Federal Agencies	Local Jurisdiction	Environmental Stakeholders	Community Organizations	Other
What stakeholder groups were integral to the delay or concern (select all that apply)?					

Inefficient Public Engagement or Support	Disagree	Mildly Agree	Moderately Agree	Strongly Agree	N/A
The project is having difficulty getting the public and/or other stakeholders interested and engaged in the project.					
There is little expressed public or stakeholder support for the project.					

Issues Arising Late Cause Project Change	Disagree	Mildly Agree	Moderately Agree	Strongly Agree	N/A
New stakeholders get involved late in the process, and they bring new issues or information that compels the project to reconsider issues or past decisions.					
Previously unknown information or studies emerge and compel the project to reconsider issues or past decisions.					

Lack of Dedicated Staff	Disagree	Mildly Agree	Moderately Agree	Strongly Agree	N/A
The number of projects, the complexity of projects, and/or responsibilities are increasing for the agency and staff resources are limited.					

Lengthy Review/Revision Cycles	Disagree	Mildly Agree	Moderately Agree	Strongly Agree	N/A
Reviews of draft reports or other products take too long, are repetitive, or have no clear way to resolution.					

The following question will become active if it is applicable to you:

	Non-Federal Agencies	Local Jurisdiction	Environmental Stakeholders	Community Organizations	Other
What kind of reviews were integral to the delay (select all that apply)?					

Negative or Critical Coverage from the Media	Disagree	Mildly Agree	Moderately Agree	Strongly Agree	N/A
Media coverage misinterprets issues or is oppositional toward the project. It is difficult to get the right message out.					

Relocation Process Delays Construction	Disagree	Mildly Agree	Moderately Agree	Strongly Agree	N/A
Property acquisition and relocation of residences and business are delaying the project.					

Slow Decision-Making	Disagree	Mildly Agree	Moderately Agree	Strongly Agree	N/A
Decisions are taking longer than expected and causing project delay.					
The path to arriving at a decision is unclear, with no clearly identified person or body having clear authority.					

The following question will become active if it is applicable to you:

	Non-Federal Agencies	Local Jurisdiction	Environmental Stakeholders	Community Organizations	Other
What kinds of decisions are taking longer than expected (select all that apply)?					

Stakeholder Controversy and Opposition	Disagree	Mildly Agree	Moderately Agree	Strongly Agree	N/A
Stakeholder opposition is creating delay or threatening project cancellation.					

Unusually Large Scale and Complex Project or Program	Disagree	Mildly Agree	Moderately Agree	Strongly Agree	N/A
The size or complexity of the project is creating uncertainty or concern about successful implementation or construction.					

Appendix D: Expediting Project Delivery Group Brainstorming Form

Expediting Project Delivery Strategy (or Bundle of Strategies) Being Addressed:

Coordination Teams:

Participants	Members Needed to Implement Strategy (All Agencies)

Key Issues and Concerns:

Proposed Next Steps and Strategies to Move Forward:

Item	Action Item Description	Lead	Complete By
1			
2			
3			
4			
5			
6			
7			

Appendix E: Expediting Project Delivery Action Planning Worksheet

1. Change-Control Practices

This strategy applies to programmatic change control practices. States can attempt to minimize the frequency and severity of changes to projects' design following preliminary design and environmental documentation.

Current Practice(s) in My State/Region	
Envisioned Practice(s) in My State/Region	
Step(s) to Advance	
Responsible Party(ies)	
Timing/Timeline	

2. Consolidated Decision Council

A consolidated decision council can create a clear organization, structure, and process for efficient decision-making. Councils identify the explicit scope of decision-making and allow for issues to be discussed and decided effectively and efficiently.

Current Practice(s) in My State/Region	
Envisioned Practice(s) in My State/Region	
Step(s) to Advance	
Responsible Party(ies)	
Timing/Timeline	

3. Context-Sensitive Design and Solutions

Context-sensitive solutions (CSS) are a collaborative, interdisciplinary approach that engages stakeholders in the development of a transportation facility that fits its physical setting and preserves local resources, while maintaining safety. CSS principles include early and continual input of the public and all stakeholders throughout the project development process.

Current Practice(s) in My State/Region	
Envisioned Practice(s) in My State/Region	
Step(s) to Advance	
Responsible Party(ies)	
Timing/Timeline	

4. Coordinated and Responsive Agency Involvement

Involving agencies early increases timely input and helps develop more effective interagency relationships. The strategy establishes direct communications, promotes a culture of collaboration, conveys project-related concerns, and implements the project in ways that are responsive to project and agency needs.

Current Practice(s) in My State/Region	
Envisioned Practice(s) in My State/Region	
Step(s) to Advance	
Responsible Party(ies)	
Timing/Timeline	

5. Dispute-Resolution Process

An effective dispute-resolution process is typically accomplished through an agreement among the agencies involved. Having a clear process and agreement for resolving disputes helps agencies avoid an impasse, and helps expedite the elevation and resolution of an impasse if and when it cannot be readily resolved at a staff level.

Current Practice(s) in My State/Region	
Envisioned Practice(s) in My State/Region	
Step(s) to Advance	
Responsible Party(ies)	
Timing/Timeline	

6. State DOT-Funded Resource Agency Liaisons

To increase efficiencies, State DOTs may establish partnerships with resource agencies and nongovernmental organizations, funding positions at these entities to perform environmental analysis and expedite project review. These positions improve project delivery and expedite many transportation projects.

Current Practice(s) in My State/Region	
Envisioned Practice(s) in My State/Region	
Step(s) to Advance	
Responsible Party(ies)	
Timing/Timeline	

7. Early Commitment of Construction Funding

The basic strategy is to secure funding early in the project development process (e.g., during planning or NEPA) in order to demonstrate the level of commitment and high priority of the project. This commitment helps to garner the attention, time, will, and other commitments necessary to expedite decisions and delivery.

Current Practice(s) in My State/Region	
Envisioned Practice(s) in My State/Region	
Step(s) to Advance	
Responsible Party(ies)	
Timing/Timeline	

8. Expedited Internal Review and Decision-Making

This strategy establishes and implements a process for efficient and timely internal reviews and decision-making. Obtaining formal commitments from each office/division/bureau/section to make decisions efficiently and quickly helps establish this strategy as an accepted routine.

Current Practice(s) in My State/Region	
Envisioned Practice(s) in My State/Region	
Step(s) to Advance	
Responsible Party(ies)	
Timing/Timeline	

9. Facilitation to Align Expectations Up Front

When initiating a project involving a diverse range of agencies and/or major stakeholder groups, early facilitation can help all parties to align expectations and reduce future delays from unanticipated issues of interest or concern. These facilitated discussions provide an early understanding of stakeholders' interests and align all parties' expectations at the beginning of the project.

Current Practice(s) in My State/Region	
Envisioned Practice(s) in My State/Region	
Step(s) to Advance	
Responsible Party(ies)	
Timing/Timeline	

10. Highly Responsive Public Engagement

Involving the public in long-range planning or project planning can garner support and enable expedited delivery rather than opposition and delay. Effective public engagement provides direct ways for participants to contribute to decisions and for them to see how the outcome was influenced by their input.

Current Practice(s) in My State/Region	
Envisioned Practice(s) in My State/Region	
Step(s) to Advance	
Responsible Party(ies)	
Timing/Timeline	

11. Incentive Payments to Expedite Relocations

Awarding payments beyond traditional relocation costs to tenants, property owners, and/or business owners who relocate within certain timeframes can expedite the relocation process. The payments can provide incentive for tenants or property owners to complete their move quickly.

Current Practice(s) in My State/Region	
Envisioned Practice(s) in My State/Region	
Step(s) to Advance	
Responsible Party(ies)	
Timing/Timeline	

12. Media Relations

This strategy employs a project-level staff person with career experience in journalism to effectively manage how the project communicates with the media, and to avoid the difficulties transportation agencies sometimes encounter when their projects are misrepresented by the press.

Current Practice(s) in My State/Region	
Envisioned Practice(s) in My State/Region	
Step(s) to Advance	
Responsible Party(ies)	
Timing/Timeline	

13. Performance Standards

An outcome-based performance standard is a term or condition inserted into a permit or approval that describes a measurable outcome from a project activity. Performance standard development requires two key components: a clear metric and review by appropriate representatives from DOT design, construction, and maintenance staff.

Current Practice(s) in My State/Region	
Envisioned Practice(s) in My State/Region	
Step(s) to Advance	
Responsible Party(ies)	
Timing/Timeline	

14. Planning and Environmental Linkages

The NEPA phase can be expedited by using work and decision-making completed during prior planning studies. Planning studies often produce valuable data, analysis, and decisions that can be leveraged during the NEPA process to reduce the time required to develop a range of alternatives, evaluate alternatives, and produce environmental documentation.

Current Practice(s) in My State/Region	
Envisioned Practice(s) in My State/Region	
Step(s) to Advance	
Responsible Party(ies)	
Timing/Timeline	

15. Planning-Level Environmental Screening Criteria

Early consultation on resources and mitigation provides an opportunity to identify criteria and develop tools and understandings for project delivery. By developing statewide or regional data, transportation agencies can evaluate and compare proposed projects, identify potential environmental hurdles, and make informed decisions about future projects.

Current Practice(s) in My State/Region	
Envisioned Practice(s) in My State/Region	
Step(s) to Advance	
Responsible Party(ies)	
Timing/Timeline	

16. Programmatic Agreement for Section 106

Section 106 compliance can be streamlined by developing a programmatic agreement among the applicable Federal lead agency (e.g., FHWA), the State Historic Preservation Office (SHPO), the State DOT, and the Advisory Council on Historic Preservation. The agreement can delegate some authority to the State DOT to conduct Section 106 reviews on behalf of FHWA and/or to identify certain projects or activities that do not need to go through the individual consultation process with SHPO.

Current Practice(s) in My State/Region	
Envisioned Practice(s) in My State/Region	
Step(s) to Advance	
Responsible Party(ies)	
Timing/Timeline	

17. Programmatic or Batched Permitting

By developing a single permit that can cover multiple, separate actions, it is possible to substantially expedite those projects' permitting and delivery. Two basic approaches include: (a) a batched permit or approval, which covers a set of specific actions identified in advance of the permit and (b) a programmatic agreement, which covers a collection of future actions that may be identified in advance of the permit.

Current Practice(s) in My State/Region	
Envisioned Practice(s) in My State/Region	
Step(s) to Advance	
Responsible Party(ies)	
Timing/Timeline	

18. Real-Time Collaborative Interagency Reviews

State DOTs, FHWA, and the Federal Transit Administration (FTA) have been using collaborative, concurrent reviews to expedite agreement on environmental documentation. Concurrent reviews can reduce the time spent working through a sequential review-revise process, and conflicting comments from different reviewers are more easily reconciled as these comments arrive together.

Current Practice(s) in My State/Region	
Envisioned Practice(s) in My State/Region	
Step(s) to Advance	
Responsible Party(ies)	
Timing/Timeline	

19. Regional Environmental Analysis Framework

A regional environmental analysis framework establishes a standardized approach for evaluating impacts to resource types and streamlines cumulative impact analyses and project-related mitigation agreements.

Current Practice(s) in My State/Region	
Envisioned Practice(s) in My State/Region	
Step(s) to Advance	
Responsible Party(ies)	
Timing/Timeline	

20. Risk Management

Risk management is the practice of planning for risk, assessing risk, developing risk-response strategies, and monitoring risk throughout the project life cycle. Risk management is more effective when started near the beginning of any process.

Current Practice(s) in My State/Region	
Envisioned Practice(s) in My State/Region	
Step(s) to Advance	
Responsible Party(ies)	
Timing/Timeline	

21. Strategic Oversight and Readiness Assessment

At the outset of a multi-agency endeavor, internal commitments and interagency agreements offer a mechanism for identifying parties' responsibilities, staffing, and other resource requirements, and a timeline for these provisions. The agreements provide a method for installing a common sense of protocols.

Current Practice(s) in My State/Region	
Envisioned Practice(s) in My State/Region	
Step(s) to Advance	
Responsible Party(ies)	
Timing/Timeline	

22. Team Co-Location

Co-located project teams help expedite internal communication, review, and decision-making. This approach increases the commitment and focus of team members on the project. With a co-located team, meetings are easier to arrange and spontaneous working sessions become frequent.

Current Practice(s) in My State/Region	
Envisioned Practice(s) in My State/Region	
Step(s) to Advance	
Responsible Party(ies)	
Timing/Timeline	

23. Tiered NEPA Process

A tiered NEPA process allows agencies to perform planning studies under NEPA via a Tier 1 EA or EIS. This first-tier study typically looks at a large problem programmatically, with the intent that project-level studies will follow in the second tier.

Current Practice(s) in My State/Region	
Envisioned Practice(s) in My State/Region	
Step(s) to Advance	
Responsible Party(ies)	
Timing/Timeline	

24. Up-Front Environmental Commitments

Making environmental commitments during planning or early project development can expedite what would otherwise be long and protracted analysis and negotiation. A DOT's willingness to invest in environmental enhancement commitments in the early phases of a project or during planning can streamline the environmental process by changing conversations to a positive track and saving participants from having to prove certain impacts and the necessity of mitigation.

Current Practice(s) in My State/Region	
Envisioned Practice(s) in My State/Region	
Step(s) to Advance	
Responsible Party(ies)	
Timing/Timeline	

