Planning and Environment Linkages Handbook
WHAT IS PLANNING AND ENVIRONMENT LINKAGES?

Planning and Environment Linkages (PEL) is a valuable tool for creating efficiencies in the transportation project development process that supports agencies’ efforts to accelerate project delivery. PEL represents a collaborative and integrated approach to transportation decision-making that considers benefits and impacts of proposed transportation system improvements to the environment, community, and economy during the transportation planning process to inform the environmental review process.

PEL FLEXIBILITIES

- PEL supports early agency coordination and efficient decision-making, aligning multiple Federal approvals to advance at the same time, rather than sequentially.
- Practitioners can use a variety of authorities\(^1\) to implement PEL in a way that meets their individual needs.
- Analysis or decisions developed during planning can be used to inform environmental reviews, if the standards of National Environmental Policy Act (NEPA) are met.\(^2\)

WHO MIGHT BE INVOLVED WHEN DOING PEL?\(^3\)

The parties that might be involved when doing PEL vary depending on the PEL authorities that you are following. Generally, the metropolitan planning organization (MPO) and/or regional transportation planning organization (RTPO), local government agencies, tribes, planning agencies and project sponsor, the NEPA lead agency, cooperating agencies, and/or participating agencies may be involved when doing PEL.

- Lead agency is the Department of Transportation and, if applicable, any State or local governmental entity serving as a joint lead agency.
- Project sponsor means the agency or other entity, including any private or public-private entity, that seeks approval of the Secretary of Transportation for a project.
- Cooperating agencies have responsibility under Federal law, with respect to the process for and completion of any environmental permit, approval, review, or study required for a project under any Federal law other than NEPA.
- Participating agencies include other Federal and non-Federal agencies that may have an interest in the project.

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The Council on Environmental Quality (CEQ) has proposed to modify certain aspects of its 2020 NEPA regulations found at 40 CFR parts 1500-1508 using a phased approach. See 86 FR 55757, 55759 (Oct 7, 2021). If CEQ issues a final rule that amends any provisions of the CEQ regulations cited in this document, FHWA will update the citations in this document and make any other necessary changes.
HOW HAS PEL BECOME MORE FLEXIBLE OVER TIME?

The table below (Table 1) shows a chronological outline of how PEL has become more flexible over time as Congress issued statutes that led to the associated regulatory and policy changes that support flexible PEL implementation.4

<table>
<thead>
<tr>
<th>Year</th>
<th>Legislation/Action</th>
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<tbody>
<tr>
<td>1969</td>
<td>National Environmental Policy Act (NEPA) establishes nation’s commitment to the environment</td>
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<td>• 1978: Council on Environmental Quality issues NEPA implementing procedures that encourage “adoption” and “incorporation by reference.” Updated in 2020.</td>
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<tr>
<td>1991</td>
<td>Intermodal Surface Transportation Efficiency Act (ISTEA) — Planning factors include “effects of transportation decisions on the environment”</td>
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<tr>
<td>2005</td>
<td>Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) requires increased consideration of environment in statewide and metropolitan planning</td>
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<td>• 2005: FHWA and FTA issue guidance encouraging stronger linkages between transportation planning and NEPA processes</td>
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<td></td>
<td>• 2007: FHWA and FTA issue PEL regulation sections titled “Transportation Planning Studies and Project Development” 23 CFR 450.212 and 450.318, together with implementing guidance in Appendix A</td>
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<tr>
<td>2005-2008</td>
<td>National Highway Institute Linking Planning and NEPA Workshops</td>
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<tr>
<td>2011</td>
<td>FHWA promotes PEL through Every Day Counts, PEL Questionnaire, and Guidance on Using Corridor and Subarea Planning to Inform NEPA</td>
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<tr>
<td></td>
<td>• 2016: FHWA and FTA issue joint final rule for 23 CFR Part 450 and PEL Q&amp;A</td>
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<tr>
<td></td>
<td>• 2018: FHWA, FRA, and FTA issue joint final rule for 23 CFR Part 771</td>
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Table 1: Timeline of statutory, regulatory and policy changes informing PEL implementation

Note: The Infrastructure Investment and Jobs Act (IIJA) (Public Law 117-58, also known as the “Bipartisan Infrastructure Law”) did not make any changes to the existing PEL statutes and provisions.

4 See CEQ guidance titled “Improving the Process for Preparing Efficient and Timely Environmental Reviews Under the National Environmental Policy Act,” 77 FR 14473, 14375 (March 12, 2012).
HOW DOES PEL ACCELERATE PROJECT DELIVERY TODAY?

The potential success of a project can be increased by both incorporating PEL principles as part of the transportation planning process and then using planning information in the environmental review and permitting processes, if it meets NEPA standards. Using PEL approaches, agencies are better equipped to determine project priorities and make more informed transportation choices that meet mobility, environmental, and community needs, and can ultimately accelerate project delivery.

The NEPA regulations encourage agencies to take appropriate advantage of existing documents and studies through adoption, use, and incorporation by reference. Some project sponsors conduct corridor and subarea planning studies while others choose to prepare a Tier 1 Environmental Impact Statement (EIS). Tier 1 EIS and corridor and subarea planning studies are similar in that they take a higher level perspective and may be prepared well in advance of actual project construction. However, publishing a Notice of Intent (NOI) to prepare a Tier 1 EIS starts the NEPA process, whereas a planning study does not. When transportation project delivery challenges are first identified and considered, the project sponsor should consider which approach better addresses their needs, either Tier 1 or planning studies (including PEL studies). This may require coordination with FHWA or FTA, as appropriate.

TIER 1

For major transportation actions, the tiering of EISs as discussed in the CEQ regulation6 may be appropriate. Agencies tier their EISs to eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for decision at each level of environmental review.7

A Tier 1 EIS would focus on broad issues such as general location, mode choice, and areawide air quality and land use implications of the major alternatives. In the second tier, the agencies prepare one or more additional NEPA documents within the broad area, which examine individual projects in greater details to address site-specific details.8

The subsequent NEPA document only needs to summarize or incorporate by reference discussions from the Tier 1 EIS and concentrate on the issues specific to the subsequent action.

CORRIDOR, REGION, OR SUBAREA STUDIES

Transportation agencies can initiate planning studies or PEL studies to identify subarea, region, or corridor needs and concerns. A planning or PEL study can take many forms such as statewide or regional transportation plans, mitigation planning, PEL studies, or subarea or feasibility studies that may be used to inform NEPA.

A corridor, subarea, or regional planning study is a conceptual-level planning study that covers broad issues such as general location, mode choice, project study area, project scope, or independent utility to determine transportation needs.

However, a PEL study is usually developed with the stated purpose of producing planning analyses and decisions that can be incorporated into subsequent project-level environmental reviews such as transportation needs, general travel corridor, general mode, identification of alternatives, preliminary screening of alternatives and elimination of unreasonable alternatives, the basic description of the environmental setting, the preliminary identification of environmental impacts, and/or environmental mitigation.

Regulatory provisions for the studies are included in 23 CFR 450.212 (a)-(c) for the statewide planning process and 450.318 (a)-(d) for the metropolitan planning process with Appendix A of 23 CFR Part 450 serving as guidance to these provisions for PEL implementation.
WHAT IS A PLANNING PRODUCT?

Since 1978, NEPA regulations have stated that “agencies shall integrate the NEPA process with other planning at the earliest possible time to insure that planning and decisions reflect environmental values, to avoid delays later in the process, and to head off potential conflicts.”

In 2012, 23 U.S.C. 168 was established by the MAP-21 legislation to facilitate the use of planning products in the environmental review process. In 2015, the FAST Act updated and refined the process, and a 2016 update of the transportation planning regulations incorporated 23 U.S.C. 168.

The term “planning product” means a decision, analysis, study, or other documented information resulting from the transportation planning process as further described in 23 U.S.C. 168. Regardless of statutory or regulatory authority, planning products coming from the metropolitan or statewide transportation planning processes can support subsequent decision-making in the NEPA process.

PLANNING ANALYSES

Planning data and analyses (at the State and local level) that are pertinent to the study area can also inform the development of a planning product and can be utilized in subsequent environmental reviews under NEPA:

- **Travel Demand Forecasting and Traffic Modeling:** These predictive statewide and metropolitan transportation planning methods are used to help make informed planning decisions.

- **Regional and Local Land Use and Growth Management:** These existing conditions and trends influence how transportation problems are defined and how alternatives are considered and compared against one another.

- **Population and Employment:** Understanding community needs is part of the transportation planning process and is a vital component of identifying project concepts to shape project decisions and outcomes under NEPA. This is also important when considering environmental justice.

- **Natural and Built Environment:** Geographic information systems (GIS) and other mapping tools can be used to identify existing environmental resources, environmentally-sensitive areas, and land use. This can identify existing conditions, potential community impacts, and effects on the natural and built environment (including climate and/or equity).

- **Mitigation:** A State DOT or MPO may develop programmatic mitigation plans as part of the transportation planning process to address the potential environmental impacts of future transportation projects.
PLANNING DATA AND DECISIONS

The transportation planning process is a continuous, cooperative, and comprehensive decision-making process that provides for implementation of projects, strategies, and services. Planning decisions may be used in subsequent environmental reviews under NEPA as long as the data that support them are accurate, current, and meet the requirements of NEPA or whichever PEL authority that applies:

- **Travel Corridor:** The travel corridor can be carried forward into project development to help narrow the range of alternatives studied in NEPA and promote more efficient decision-making.

- **Transportation Mode Choice:** Highway, transit, bicycle, pedestrian, rail, ferry, or other modal options are often a fundamental element of alternatives analysis during the environmental review process.

- **The Environmental Setting:** The State or metropolitan planning process reflects consideration and analysis based on the scale and complexity of many issues, including transportation system development, land use, employment, economic development, human and natural environment, and housing and community development.

- **Purpose and need may be a statement of the objectives that the proposed action is intended to achieve.** These may be identified in statewide or metropolitan transportation plans; supporting land use, economic development, or growth objectives established in applicable Federal, State, local, or tribal plans; and in Federal laws, plans, or policies serving national defense, national security, or other national objectives.\(^\text{14}\)

- **Preliminary screening of alternatives and elimination of unreasonable alternatives:** The planning level screening of alternatives is supported by the purpose and need of a project, which is essential in establishing a basis for the development of the range of reasonable alternatives for subsequent NEPA analysis.

DEVELOPMENT OF PURPOSE AND NEED DURING PLANNING

PEL allows practitioners to develop a statement of purpose and need for a project during planning that can be used in the environmental review process, as long as it meets NEPA requirements. The PEL approaches for establishing a purpose and need during the transportation planning process are:

- To incorporate by reference and use when the requirements of 23 CFR 450.212 and 450.318 are met;
- For the lead agency to adopt and/or incorporate by reference if the conditions in 23 U.S.C. 168 are met; or
- To use or incorporate planning information when the requirements of CEQ NEPA Regulations 40 CFR 1501.12 and 40 CFR 1500.4(l) are met.

The PEL project team should consult with FHWA or FTA early in planning to better prepare a purpose and need that is more likely to be able to be used in subsequent environmental review processes.

Because the responsibility for defining a project’s purpose and need is with the lead Federal agency or agencies preparing the NEPA document, once in NEPA, they decide whether they will use the purpose and need developed during planning.15

Using PEL procedures to establish a project’s purpose and need during the planning process may be similar to the process undertaken to develop a project-specific purpose and need statement under NEPA.

17 23 CFR 450.214(f) and 450.320(f).

PRELIMINARY SCREENING OF ALTERNATIVES AND ELIMINATION OF UNREASONABLE ALTERNATIVES

The FAST Act increased efficiencies with 23 U.S.C. 139(f)(4)(E)(ii) that requires transportation agencies to reduce duplication, to the maximum extent practicable, between the evaluation of alternatives under the planning process and evaluation of alternatives under NEPA or an environmental review carried out under State law. In 2018, FHWA, FRA, and FTA updated their NEPA implementing regulations, 23 CFR Part 771, which included addressing the provisions of 23 U.S.C. 139(f). PEL can be used to identify and screen alternatives and eliminate unreasonable alternatives during transportation planning, per 23 U.S.C. 139(f)(4)(E)(iii). As further described in 23 U.S.C. 139(f)(4)(E)(iii)(VI), the agencies can use this authority to eliminate an alternative if they decide the alternative is not needed for NEPA or another Federal approval.16

Although final decisions for alternatives are made during the NEPA process, PEL can help to reduce the range of alternatives by identifying those that are not feasible (i.e., those that have fatal flaws) or do not meet the purpose and need for the project. Alternatives may need additional screening or analysis during the NEPA process. The planning analysis should be thorough and objective, and the rationale for decision-making should be well documented.

PROGRAMMATIC MITIGATION PLANS

Programmatic mitigation plans may be developed on a regional, ecosystem, watershed, or statewide scale and address the potential environmental impacts of transportation projects. State DOTs and MPOs may develop programmatic mitigation plans as part of the statewide or metropolitan planning process pursuant to 23 U.S.C. 169 or under other authorities.17
WHAT ARE THE GENERAL CONSIDERATIONS FOR INCORPORATING PLANNING PRODUCTS INTO NEPA?

FHWA encourages practitioners to apply several general considerations early on. They should consider the intended outcome of a PEL approach and determine which authority best supports that goal. Knowing the requirements of each authority is critical to successfully leveraging PEL’s efficiencies. FHWA encourages developing a strategy for meeting the conditions early on so that practitioners consider how they will address the requirements for each authority before kicking-off the PEL process. Practitioners may need to supplement the work that was completed using these optional general considerations:

1. **Follow the transportation planning process.** The content of many transportation planning products can be carried forward into the environmental review for a project. Enhance the likelihood of directly adopting or incorporating a planning product into NEPA documentation by including it in the statewide nonmetropolitan or metropolitan transportation planning process.

2. **Solicit participation by Federal and State resource agencies and Indian Tribes.** Appropriately engage the Federal and State resource agencies and Indian Tribes that may have an interest in the transportation project is critical to successful use of PEL.

3. **Provide an opportunity for public review and comments.** A fundamental component of both the transportation planning process and NEPA is public engagement in the decision-making process.

4. **Use reliable and reasonably current data and reasonable scientifically-acceptable methodologies.** The methodology used to collect and analyze data for a planning product must be able to meet the same legal and scientific standards required by NEPA in order to inform the environmental study.

5. **Involve the FHWA Division and FTA Regional Office, as appropriate.** FHWA and FTA, as appropriate, should be consulted during the development of planning analyses or planning products intended for use in environmental review.

6. **Prepare appropriate documentation.** Try to ensure a comprehensive and well-documented record for subsequent project phases by documenting outreach, data collection, analysis, and decision-making.

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**EARLY ENGAGEMENT**

Effective stakeholder and public engagement is a key component of the planning and NEPA processes. PEL is most successful when agencies engage a broad set of stakeholders early and throughout the planning process.

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18 23 CFR 450.212(b)(2) and 23 CFR 450.318(b)(2).
22 In states that have entered into a NEPA Assignment MOU, the planning entity should consult with the appropriate State entity.
When in the planning process should it be determined whether to use PEL for a future project?

PEL can be useful as soon as it becomes apparent that the project is complex. Examples of complexities include if the project is regionally significant, has environmental constraints, incorporates analysis of housing and community development options, is costly or controversial, or has the potential for many alternatives that could be indistinct and confusing.24

Is the transportation project well defined?

An additional planning study may be needed if a project is not clearly defined during planning. Planning studies can help to establish the scope of the project, purpose and need, or inform the likely level of environmental analysis that may be required of a project.

Does mode choice need to be determined?

Using planning analyses to determine travel patterns and future needs can support identifying mode choice such as highway, transit, rail, pedestrian, bicycle, or ferry boat.

Are the existing conditions and environmental setting well known?

Understanding the environmental setting—whether they are natural features, critical habitat, built environment, disadvantaged communities, or population, employment, and land development projections—can inform planning decisions.25

Are there multiple alternatives to address the transportation problem?

PEL authorities allow project studies to screen and eliminate alternatives during planning. The identification of reasonable alternatives can support detailed analysis of alternatives during NEPA. The alternatives to be eliminated from consideration must not be necessary for compliance with NEPA or for other Federal permits or approvals.26

Are project stakeholders identified and do they understand and/or support the project?

The transportation planning and environmental review processes require substantial public engagement to support decision-making. Early and continuous outreach and coordination can enable agencies to engage stakeholders and build understanding and support of the project. This can contribute to more collaboration with the community on their needs, increased trust and reduced controversy.

Are resource/regulatory agencies going to be engaged during the planning process?

Early resource agency coordination may provide important information on resources and potential impacts that can be used to avoid and/or minimize environmental effects.27 This may also include discussions to support development of advance mitigation agreements or programmatic mitigation plans, creation of mitigation banks, or preparation for permits or approvals.

**WHAT IS THE DESIRED OUTCOME?**

PEL provides flexibilities so that an approach can be designed to achieve a specific purpose or desired outcome. The general considerations are tips for kicking-off PEL. The authorities are the statutes or regulations that provide direction on an approach and requirements to help ensure that the planning work can be adopted and/or incorporated by reference or used during NEPA.

<table>
<thead>
<tr>
<th>General Considerations</th>
<th>Desired Outcomes</th>
<th>Authorities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Follow the transportation planning process.</td>
<td>&gt; Define purpose and need</td>
<td>Integration of planning and environmental review statute 23 U.S.C. 168</td>
</tr>
<tr>
<td>3. Opportunity for public review and comments.</td>
<td>&gt; Other planning decisions and analysis</td>
<td>Planning regulations 23 CFR 450.212(a)-(c) &amp; 23 CFR 450.318(a)-(d)</td>
</tr>
<tr>
<td>4. Use reliable and reasonably current data and reasonable scientifically acceptable methodologies.</td>
<td>&gt; Adopt planning decisions under 168</td>
<td>CEQ NEPA regulations 40 CFR 1500.4(l) &amp; 1501.12</td>
</tr>
<tr>
<td>5. FHWA and FTA review as appropriate.</td>
<td>&gt; Reduction of duplication by elimination of alternatives from detailed analysis.</td>
<td>Programmatic mitigation planning statute 23 U.S.C. 169</td>
</tr>
<tr>
<td></td>
<td>&gt; Planning information and analysis</td>
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<td></td>
<td>&gt; Programmatic mitigation plan</td>
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**IMPORTANT NOTE ABOUT REQUIREMENTS**

Practitioners should:

- Familiarize themselves with requirements of the PEL authority they intend to use so that information gathered and decisions made during planning can have utility during NEPA.
- Document PEL decisions and analysis so if situations change and a different approach is taken they can still leverage planning to inform NEPA.
- Remember that pursuing PEL as authorized in statute or regulation is not required.
USING PEL

FHWA encourages the use of PEL under the provisions of both 23 U.S.C. 139(f)(4)(E) and 23 U.S.C. 168 together, to the extent practicable, to preserve the option to use the planning products and decisions (such as purpose and need and elimination of unreasonable alternatives) in the environmental review process. Using the two statutory provisions together may maximize the potential benefits of PEL. However, flexibilities in PEL also allow the use of either approach alone.

Regardless of NEPA class of action (EIS, environmental assessment, or categorical exclusion), the public should have the opportunity to review and comment on a planning product, if the goal is to be able to use the planning product in the environmental review process. Before using the planning product in NEPA, the lead agency must consider whether the information is reliable, reasonably current, and produced using accepted methodologies that meet NEPA requirements. The final decisions for using planning products are made during the NEPA process.

If a project was developed using a PEL approach in the planning process, the NOI can include language to notify the public of the intent to adopt the planning purpose and need or the identification and screening of alternatives into NEPA. The NOI can include the planning information along with information about the type of work, logical termini, length, and general location of the proposed project. However, an alternative eliminated during planning may still need to be considered during the NEPA process, if necessary for compliance with NEPA or any Federal permit or approval.28

INSTITUTIONAL CHANGES

By incorporating PEL as part of the normal transportation planning and environmental review processes, transportation planners and environmental practitioners can increase the potential for project success by using planning information in the environmental review and permitting processes.

Specifically, incorporating PEL principles into a variety of planning-related work can accelerate the environmental review process under NEPA and provide benefits addressing climate and/or equity efforts.

Formally adopting PEL into an agency’s planning procedures and policies can lead to better decision-making, improved transportation outcomes, and accelerated project delivery. The States that have reported some of the greatest project delivery efficiencies are those that have fully integrated PEL into their institutional or organizational standard operating procedures.

Programmatic policies and procedures can assist agencies in following a set path through the planning and environmental review processes. Cooperative development of processes by transportation and resource agencies can result in uniform implementation of PEL.29

The concept of linking planning and environmental review is not new. The CEQ’s 1978 NEPA implementing regulations encouraged the use of planning information in the environmental review process. Congress has enacted several laws promoting consideration of environmental issues during transportation planning.

Agencies can consider the best PEL approach for each situation using the various authorities and flexible approaches. PEL is more effective when the transportation objectives desired are known early in the process.

The successful integration of PEL is supported through identifying planning products that can be adopted, used or incorporated by reference into the environmental review process. PEL’s effectiveness involves considerations and review of the applicable statutory and regulatory requirements. Planning approaches may need to establish methods for:

- agencies’ coordination,
- public notice,
- adequate documentation,
- planning products:
  - purpose and need,
  - range of alternatives, eliminate unreasonable alternatives, and
  - baseline for the affected environment.
- developing information on these NEPA elements during

the planning process to optimize the environmental review process by focusing on detailed analysis on potential impacts important to the NEPA decision.

It is important that project stakeholders and decision makers regularly assess whether the planning work can meet the conditions throughout the PEL process, so that they can adjust their approach when necessary. If the planning entity determines it is unlikely to meet certain conditions, the various PEL authorities offer alternative approaches to inform environmental review and improve efficiency of the project development process.

The FHWA PEL website provides a detailed resource on PEL implementation with flow charts, case studies, and additional information

**PEL Best Practices**

- Plan before initiating project
- Outline schedule and budget
- Planning informs future environmental study
- Leverage tools such as GIS to help inform planning
- Agency sharing resources to provide data
- Comprehensive record of data, analysis, and decision-making
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