



Planning and Environmental Linkages (PEL) Guidebook



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Acronyms and Abbreviations

3-C	comprehensive, cooperative, and continuous
AMATS	Anchorage Metropolitan Area Transportation Solutions
CE	Categorical Exclusion
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CSI	corridor sketch initiative
DOT	Department of Transportation
DOT&PF	Alaska Department of Transportation and Public Facilities
EA	Environmental Assessment
EIS	Environmental Impact Statement
FAST Act	Fixing America's Surface Transportation Act
FAST Planning	Fairbanks Area Surface Transportation Planning
FHWA	Federal Highway Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
GIS	Geographic Information System
Guidebook	DOT&PF Planning and Environmental Linkages Guidebook
MAP-21	Moving Ahead for Progress in the 21st Century Act
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
NEPA	National Environmental Policy Act
NHI	National Highway Institute
NHS	National Highway System
NRHP	National Register of Historic Places
P&P	Policy and Procedure
PEL	Planning and Environmental Linkages
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SEO	Statewide Environmental Office
STIP	State Transportation Improvement Program
TIP	Transportation Improvement Program
U.S.C.	United States Code

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CHAPTER 1 INTRODUCTION

01



Key Points

- The Planning and Environmental Linkages (PEL) process allows certain planning analyses and products to be incorporated into the National Environmental Policy Act (NEPA) and other environmental review processes (Section 1.1).
- Benefits of the PEL process can include (Section 1.4):
 - Improved project delivery timeframes
 - Stronger agency, tribal government, and public relationships
 - Earlier identification of key environmental resources
 - Better funding and project development information to be used for incorporation into the State Transportation Improvement Program (STIP) or Transportation Improvement Program (TIP)
 - Better outcomes during design and construction of projects
 - More holistic development of transportation improvement strategies due to flexibility of approach
 - Enhanced grant opportunities
 - Clarified project definition
 - Cost and time savings
- Statutes and regulations containing provisions that apply to PEL studies (Section 1.2):
 - 23 United States Code (U.S.C.) 168
 - 23 U.S.C. 139(f)(4)(E)
 - 23 Code of Federal Regulations (CFR) 450.212 and 450.318

The PEL process may streamline the overall project delivery process by allowing the Alaska Department of Transportation and Public Facilities (DOT&PF) to engage with the public, develop or refine a purpose and need statement, and perform preliminary screening of alternatives during the planning process. A properly conducted PEL study allows work completed during the planning process to be carried forward into the NEPA or other environmental review processes. The PEL process reduces duplication, shortens the project delivery timeline, and refines the level of effort for the NEPA or other environmental review processes.

This Planning and Environmental Linkages Guidebook (Guidebook) will assist the DOT&PF, state and federal resource agencies, and local agency staff in understanding what a PEL study is, roles and responsibilities of various agencies, typical steps in a PEL process, and best practices. This Guidebook lays out the processes to be followed and documentation needed to enable PEL studies to expedite project delivery as much as possible in Alaska.



- **Chapter 1:** Background and summary of legal and regulatory requirements, national guidance for PEL studies, purpose of PEL studies, and benefits of a PEL study
- **Chapter 2:** Reasons for a PEL study, products and decisions developed during a PEL study, projects for which a PEL study is appropriate, when a PEL study is not recommended, Statewide Environmental Office (SEO) concurrence points, and PEL process flexibility
- **Chapter 3:** PEL study requirements, including roles and responsibilities of different groups, steps in a PEL study, requirements for public and agency involvement, and the alternatives development and evaluation process
- **Chapter 4:** Documentation needed for a PEL study and an annotated outline of a PEL study Final Report
- **Chapter 5:** Transition from a PEL study into project development and the NEPA process
- **Chapter 6:** PEL best practices, including consideration of planning factors, developing purpose and need, developing examples of alternatives development and evaluation, consideration of environmental issues, public and agency involvement, developing an implementation plan, and developing lessons learned
- **Appendix A:** Additional Information and References
- **Appendix B:** PEL Questionnaire
- **Appendix C:** Example PEL Study Table of Contents

1.1 PELs: Statutory and Regulatory Background

Starting in 2005, the Federal Highway Administration (FHWA) began offering written guidance and regulations intended to encourage stronger linkages between the transportation planning and NEPA processes. Benefits include:

- Minimizing duplication of effort,
- Streamlining project delivery,
- Promoting efficient and cost-effective solutions,
- Engaging partner agencies and the community earlier in the process, and,
- Encouraging environmental stewardship.

Two statutes reference PEL-type approaches: 23 U.S.C. 168 and 23 U.S.C. 139(f)(4)(E). These allow the FHWA, Federal Transit Administration (FTA), and Federal Railroad Administration (FRA) to use the results of decisions of state Departments of Transportation (DOTs), Metropolitan Planning Organizations (MPOs), or public transportation operator-led corridor and subarea planning studies in the environmental review process under NEPA when the results meet NEPA requirements. Statutory requirements and regulations are included in **Section 1.2**.



In 2016, the U.S. DOT adopted regulations for PEL studies in 23 CFR 450.212 and 450.318. Referred to as the 2016 Final Rule, these allow for certain planning analyses and products developed in a PEL process to be incorporated within the NEPA and project development processes. See details in **Section 2.4**.

1.2 Summary of Major Provisions in Statutes and Regulations

23 U.S.C. 327 allows state transportation agencies to assume NEPA responsibilities from certain federal agencies. Authorized under 23 U.S.C. 327, the DOT&PF has entered into the NEPA Assignment Program

through a Memorandum of Understanding (MOU) with FHWA to assume responsibilities under NEPA and all or part of FHWA's responsibilities for environmental review, consultation, or other actions required under any federal environmental law with respect to one or more federal highway projects within Alaska. The DOT&PF and FHWA executed this MOU on November 3, 2017. The 2017 NEPA Assignment MOU¹ specifically assigns FHWA's PEL responsibilities under 23 U.S.C. 139 and 23 U.S.C. 168 to the DOT&PF, as well as statutory provisions, regulations, policies, and guidance related to the implementation of NEPA for federal-aid highway projects.

FHWA retains non-NEPA-related oversight responsibilities for Projects of Division Interest on the National Highway System (NHS). FHWA also retains the non-NEPA-related oversight requirements established in 23 CFR 450 pertaining to planning and programming of federal-aid funds. The DOT&PF is a NEPA lead agency under this MOU.

The DOT&PF SEO administers the NEPA Assignment Program and is crucial in the development of PEL studies. The DOT&PF SEO has assumed the duties of FHWA with regards to adopting a PEL analysis into the NEPA process. See **Section 2.5** for additional information about the SEO's role in the process.

23 U.S.C. 168 allows a lead federal agency or cooperating agency with responsibility under federal law to adopt or incorporate by reference planning analyses or planning products developed during a planning study in a subsequent environmental review process (NEPA or other environmental permit, approval, review, or study required for a project under any federal law other than NEPA).

The law specifies the following types of planning decisions and products: if any tolling or financial measures are necessary, general travel corridor or modal choice, purpose and need, preliminary screening of alternatives and elimination of unreasonable alternatives, basic description of the environmental setting, decision with respect to methodologies for analysis, and a programmatic mitigation plan.

The law specifies the following planning analyses: travel demands, regional development and growth, local land use, growth management and development, population and employment, potential effects, and mitigation needs.

See **Section 2.3** for additional details on this law.

Ten conditions must be met for the relevant agency to adopt or incorporate planning products and analyses in an environmental review process (including NEPA, permit, review, or approval):

1. The planning product was developed through a planning process conducted pursuant to applicable federal law.
2. The planning product was developed in consultation with appropriate federal and state resource agencies and Indian tribes.²
3. The planning process included broad multidisciplinary consideration of systems-level or corridor-wide transportation needs and potential effects, including effects on the human and natural environment.
4. During the planning process, public notice was provided that the planning products produced may be adopted during a subsequent environmental review process.
5. After initiation of an environmental review process, but prior to determining whether to use planning products, the lead agency must have made documentation and the intent to adopt this documentation available for review by the general public, agencies, and tribal governments, and considered any comments.
6. There is no significant new information or new circumstances that have a reasonable likelihood of affecting the continued validity or appropriateness of the planning product.
7. The planning product has a rational basis and is based on reliable and reasonably current data and reasonable and scientifically acceptable methodologies.

¹ http://www.dot.state.ak.us/stwddes/desenviron/assets/pdf/nepa/nepa_mouapproved.pdf

² This term is used in the statutes. It is understood to include federally recognized Alaska Native groups.



8. The planning product is documented in sufficient detail to support the decision or results of the analysis and to meet requirements for use in the environmental review process.
9. The planning product is appropriate for adoption or incorporation by reference and use in the environmental review process.
10. The study was approved no later than 5 years prior to the date on which information is adopted in the NEPA review.

23 U.S.C. 139 (f)(4)(E) allows the federal DOT, state DOT, or local governmental entity to eliminate alternatives developed during a metropolitan or state planning process from detailed consideration in a subsequent Environmental Impact Statement (EIS) prepared under NEPA, as long as:

- The planning process followed guidance on the requirements of NEPA and any other federal law necessary for approval of the project. This includes any permit, approval, review, or study required for a project for any federal law.
- The planning process included an opportunity for public review and comment.
- The applicable planning agency rejected the alternative after considering public comments.
- The federal lead agency³ independently reviewed the alternatives evaluation.
- The federal lead agency determined that the alternative to be eliminated is not necessary for compliance with NEPA or determined, with the concurrence of federal agencies, that the alternative to be eliminated is not necessary for any permit or approval under any other federal law.

23 CFR 450.212 and **450.318** allow a state DOT, an MPO, or public transportation operator to undertake a planning study that produces:

- A purpose and need (or goals and objectives) statement,
- A general travel corridor or mode,
- Preliminary screening of alternatives and elimination of unreasonable alternatives,
- A basic description of the environmental setting, and/or
- Preliminary identification of environmental impacts and environmental mitigation.

For the purposes of the regulations, a “planning study” can be a corridor or subarea study, or it can be called a PEL study.

The regulations also allow publicly available documents or other source material to be incorporated directly or by reference into subsequent NEPA documents if:

- The NEPA lead agencies agree that such incorporation will aid in establishing or evaluating purpose and need, reasonable alternatives, cumulative or other impacts on the human and natural environment, or mitigation of these impacts;
- The planning study was conducted with the involvement of interested state, local, tribal, and federal agencies;
- The documents underwent public review with reasonable opportunity to comment;
- The documents were in a form that is identifiable and available for review during the NEPA scoping process and can be appended or referenced in the NEPA document; and
- The documents were reviewed by SEO or were reviewed by FTA or FRA.

³ Under the NEPA Assignment MOU, DOT&PF assumed FHWA’s responsibilities as lead agency for NEPA. The SEO fulfills the program oversight requirements described in the MOU and is responsible for compliance with applicable laws, statutes, and regulations, including those that apply to PELs.

1.3 National Guidance for PEL Studies

Development of guidance relevant to integration or linkages between planning and NEPA processes began in 2005 with issuance of a *Memorandum Regarding Integration of Planning and NEPA Processes* (2005 Memorandum; FHWA and FTA 2005). It clarified resource agencies' understanding of transportation planning processes and transportation agencies' understanding of environmental regulatory requirements:

https://environment.transportation.org/pdf/programs/1-Legal_Memo_re_Planning-NEPA_Linkage-Final.pdf.

In 2011, FHWA issued the *Guidance on Using Corridor and Subarea Planning to Inform NEPA* (2011 Guidance; FHWA 2011). This guidance details how corridor and subarea planning can be used to link transportation planning with NEPA processes. It formed the basis of Appendix A of 23 CFR 450:

https://www.environment.fhwa.dot.gov/env_initiatives/pel/corridor_nepa_guidance.aspx.

Figure 1 illustrates the PEL guidance timeline, showing key dates for statutes, regulations, and guidance.

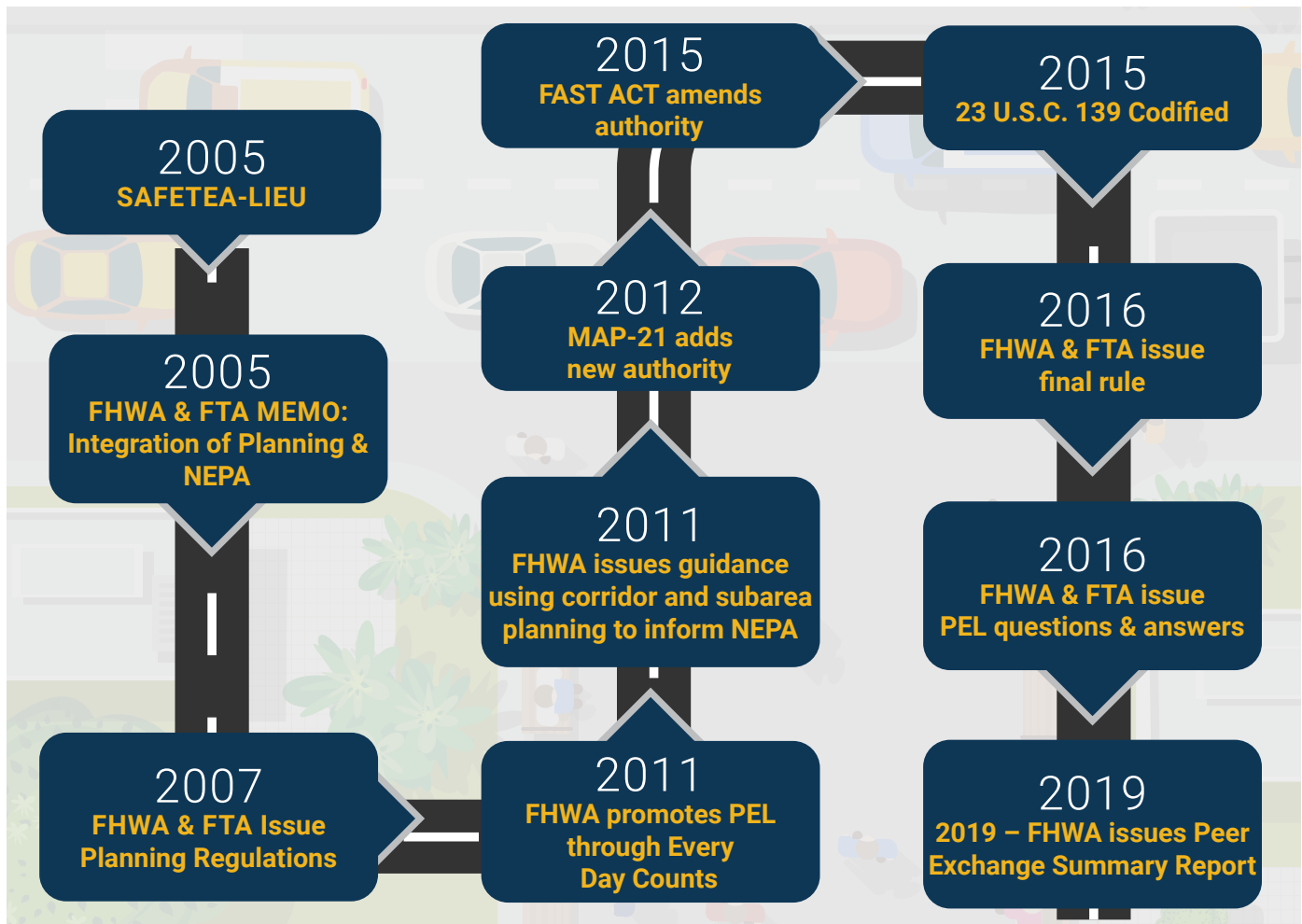


FIGURE 1. PEL TIMELINE: STATUTES, REGULATION AND GUIDANCE

Notes: FAST = Fixing America's Surface Transportation; MAP-21 = Moving Ahead for Progress in the 21st Century; NHI = National Highway Institute; SAFETEA-LU = Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users

The FHWA addresses PEL processes in its Every Day Counts initiative and in the online Environmental Review Toolkit. The Toolkit has links to the Planning and Environmental Linkages—Questions and Answers



document (FHWA 2016), which addresses 12 different questions related to the PEL approach and reflects the 2016 Final Rule:

<https://www.fhwa.dot.gov/innovation/everydaycounts/>

<https://www.environment.fhwa.dot.gov/>

https://www.environment.fhwa.dot.gov/env_initiatives/pel/pel_quest.aspx

The FHWA published online PEL Hypothetical Case Studies, covering: (1) Planning Studies, (2) Planning Analyses, (3) Purpose and Need, and (4) Alternatives. These can help practitioners implement a PEL to accelerate project delivery:

https://www.environment.fhwa.dot.gov/env_initiatives/pel/publications.aspx

1.4 Benefits of a PEL Study

The benefits of stronger linkages between the transportation planning and NEPA/project development processes can include:

Improved project delivery timeframes. Using a PEL process minimizes potential duplication of planning and NEPA processes, such as the development of purpose and need, description of the environmental setting, identification of a range of alternatives, and elimination of unreasonable alternatives. This benefit is particularly helpful if the project is likely to be an Environmental Assessment (EA) or EIS subject to the timeframes identified in 40 CFR 1501.10.

Stronger agency and public relationships. A PEL approach can improve relationships with local, state, and federal agencies and the public. Regulatory and local agencies have opportunities to help shape transportation projects by getting involved in the early stages of planning and raising concerns to the project team. During a PEL process, collaborative working relationships with the public can also set the stage for more supportive public attitudes during later phases of project development.

Earlier identification of key environmental resources. Knowing which environmental resources are present and which ones will influence alternative selection can save time and money in the overall DOT&PF program development process. This is because the PEL process can identify and move forward alternatives that avoid impacting key resources.

Better funding and project development information to be used for incorporation into the STIP or TIP. Engineering team involvement in the PEL process can produce more reliable cost estimates. In addition, more accurate environmental information leads to more appropriate determinations of NEPA Class of Action.

Build projects with better outcomes. When DOT&PF staff conduct planning activities equipped with information about resource considerations and agency and community concerns, they are better able to design transportation programs and projects that serve the community's needs. Addressing environmental issues during planning provides DOT&PF opportunities to deliver projects that better avoid and minimize impacts on natural and social resources.

Flexibility of approach allows more holistic development of transportation improvement strategies. Because the PEL approach allows consideration of different types of improvements over different timeframes, local goals can be better incorporated. In addition, since a PEL study recommendation does not need to be fiscally constrained, it is easier to look at a broader scale corridor and more holistically. Holistic solutions can be developed as a series of smaller independent, fiscally constrained projects that can be implemented over time while fitting within a larger or longer-term context.

Enhancing grant opportunities. PEL studies can set projects up to secure grants and other funding by providing a clearer definition of the project's main elements and benefits, and by generating the necessary agency and stakeholder support.

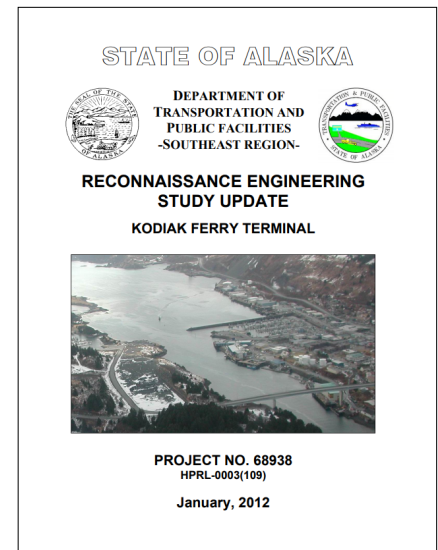
Clarifying project definition. PEL studies can be helpful at moving projects forward without the larger commitment of funds needed to initiate a NEPA process.

Cost and time savings. *PEL Benefits: Measuring the Benefits of Planning and Environmental Linkages* (FHWA 2015) noted substantial cost and time savings using the PEL approach. Time savings in the subsequent NEPA process on two PEL studies were estimated at more than 2 years each. Cost savings were estimated at \$2.5 million:

https://www.environment.fhwa.dot.gov/env_initiatives/pel/pel_benefits_report.aspx.

Enhanced reconnaissance engineering. Reconnaissance engineering studies have been done by DOT&PF for years. These studies, as described in Section 430.4 of the *Alaska Highway Preconstruction Manual*,⁴ focus on developing technically feasible solutions to a problem or deficiency in order to compare engineering alternatives. The PEL processes described in this Guidebook can provide the opportunity to enhance reconnaissance engineering studies to better link them with future NEPA processes. Specific opportunities include:

- More robust discussion and consideration of natural and socioeconomic factors.
- Early and continuous public involvement.
- A more holistic review of alternatives that includes all issues needed to decide whether an alternative is considered reasonable, including comparative environmental impacts.⁵
- Meaningful involvement of state and federal cooperating, regulatory, and permitting agencies.
- Thorough documentation of why alternatives were dropped or advanced.



Kodiak Ferry Terminal Reconnaissance Engineering Study

Figure 2 on the next page illustrates the decision-making process for selecting the appropriate study.

⁴ http://www.dot.state.ak.us/stwddes/dcsprecon/assets/pdf/preconhwy/preconstruction_all.pdf

⁵ <https://www.energy.gov/sites/prod/files/2018/06/f53/G-CEQ-40Questions.pdf>

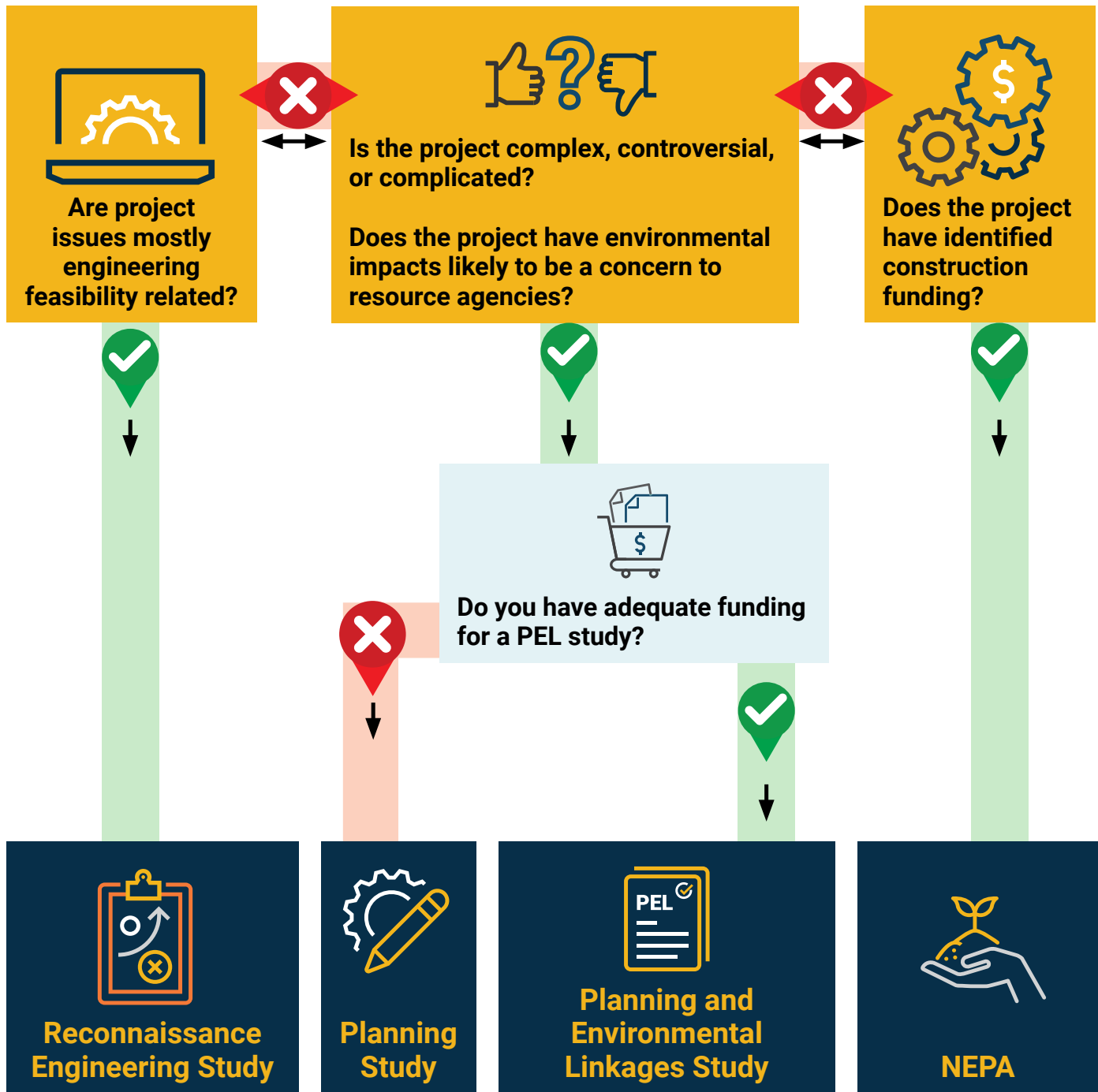


FIGURE 2. STUDY DECISION-MAKING PROCESS

CHAPTER 2 BEGINNING A PEL STUDY



Key Points

- The PEL process is appropriate for certain types of projects and desired outcomes (Section 2.1). Other types of projects may not warrant a PEL study (Section 2.2).
- All DOT&PF PEL studies must follow Policy and Procedure 09.03.070 (P&P), which describes the process for initiating a PEL study. Additionally, the reason for conducting the PEL study, including the desired planning products that will result from the study, must be documented per the P&P and included in the PEL Questionnaire for use during the study (Section 2.3).
- Specific results of the PEL study can be carried forward into NEPA. These are termed “planning products” and “planning analyses,” and are defined in law and regulations (Section 2.4).
 - Four standard SEO concurrence points are necessary to meet the statutory and regulatory requirements:
 - Purpose and Need Review
 - Alternatives Development and Screening Methodology Review
 - Alternatives Screening Results Review
 - Draft PEL Study Review
- Frequent involvement of the SEO in the PEL project can result in easier SEO review of and concurrence on the final PEL Study (Section 2.5).
- All PEL process information for use during subsequent project phases and the NEPA process (including the information developed in accordance with the P&P process) must be documented in project files.



2.1 Appropriate Types of Projects for PEL Studies

PEL studies can be used for a variety of transportation projects and can be used to make project or planning decisions. Project decisions can include developing purpose and need, recommending one or more alternatives to analyze further in the environmental review process, identifying stakeholders and issues of concern, identifying environmental and socioeconomic resources of concern, and prioritizing future projects. Planning decisions may include determining what the availability, source, and characteristics of project funding are; reaffirming the vision of a corridor or subarea; prioritizing projects within long corridors; or determining what mode might best meet transportation needs.








Projects for which a PEL study is appropriate could include:

- A corridor with unknown future capacity needs, unknown priorities for initial projects, or without identified construction funding.
- A project for which various land use, population growth, or climate change related scenarios might make sense to explore.
- A complex project that will likely require an EIS or EA and is subject to the schedule constraints of 40 CFR 1501.10.
- A controversial project that would benefit from consensus building and stakeholder involvement.
- A project that has an unknown construction cost and/or NEPA Class of Action and is therefore difficult to program in the MPO's STIP or TIP, or in Program Development's Annual Work Plan or the MPO's Unified Planning Work Program.

2.2 When is a PEL Study Not Recommended

There are various considerations to be weighed before determining that a possible project must go through a PEL process. These considerations are presented in **Figure 3**.

If a project has final design, right-of-way acquisition, and/or construction funding.		NO: It makes more sense for the NEPA process to be initiated rather than a PEL process.
If the transportation improvement solution is obvious.		NO: One of the primary reasons for a PEL study is to clarify the need for a transportation improvement and what appears to be the best solution. If the latter question has already been resolved, and if funding is available, it makes sense to proceed into the NEPA process.
If other types of studies can provide the information needed in a less expensive manner.		NO: It may be that a sub-area plan or access plan is a simpler way to develop information needed and can proceed with more efficient agency or public coordination.
If it will be more than 5 years between the end of the PEL study and the beginning of the NEPA process.		MAYBE: If this is the case, PEL authority 23 CFR 450 should be used – or PEL authority 23 U.S.C. 139 could be used.
If the sole reason for the PEL study is to obtain federal funding.		NO: Completion of a PEL study does not guarantee federal funding for a project.

NEPA = National Environmental Policy Act; PEL = Planning and Environmental Linkages

FIGURE 3. WHEN A PEL STUDY SHOULD NOT BE INITIATED

2.3 PEL Study Initiation

DOT&PF P&P 09.03.070 covers the initiation of PEL studies and the programming of projects recommended by PEL studies into the STIP. To initiate a PEL, follow the P&P which documents how to recommend when a PEL study should be conducted and the DOT&PF approval process used to authorize a PEL study. The considerations presented in this chapter may be used while developing the information required by the P&P⁶ or afterward, once a PEL study is initiated.



Methodology

The information gathered to support PEL study initiation must describe the reason for the PEL study, including which planning products have the potential to be incorporated into the NEPA process; stakeholder involvement plans, including appropriate public notices; the study area; available data; and other key elements defining the PEL study process and methodology. As part of the P&P PEL initiation process, the SEO provides concurrence on the scope and purpose of the PEL study, how the PEL process will be conducted, and how the public and stakeholders will be engaged during the process.

It is important to preserve all PEL process information for use during subsequent project phases and the NEPA process; therefore, the information developed during the P&P process must be documented in the project files. This information must also be documented in the PEL Questionnaire (Appendix B). The PEL Questionnaire should be filled out at the beginning of a PEL process and updated at the end of the PEL process.

The PEL Questionnaire (Appendix B) asks questions that frame the scope and extent of the PEL study related to background; methodology to be used; agency and public coordination; purpose and need for the PEL study; range of alternatives; planning assumptions and analytical methods; environmental, social, and cultural resources that will and will not be reviewed; cumulative impacts; mitigation strategies; dissemination of information; and issues a future project team must consider.

Once the PEL study has been initiated, the project team, in consultation with the SEO, must identify which PEL statute or regulation will be used. Items to consider are:

- 23 U.S.C. 168 requires initiating NEPA within 5 years of PEL study completion. No similar requirement is stated in the other statutes or regulations.
- The planning products and analyses identified in 23 U.S.C. 139(f)(4)(E) are restricted to only alternatives development and evaluation.

For most PEL processes, the likely approval authorities are 23 U.S.C. 168 and 23 CFR 450.212 and 450.318. The 23 U.S.C. 139 authority may be used if the planning is done well in advance of NEPA and if the PEL process plans to focus only on alternatives development and evaluation. Please contact the SEO if this approach seems appropriate for a particular project.

Each of the authorities of these approaches allow planning products to be used in subsequent NEPA and other environmental review processes.

2.4 Planning Decisions/Products and Analyses Developed During a PEL Study

The PEL process can be used to produce planning products and project decisions that can be used for future phases of project development and planning.

Planning products are defined in the statute (23 U.S.C. 168(c)(1)) as a decision, analysis, study, or other information that is the result of an evaluation or decision-making process



Results

⁶ The guidance provided in this Guidebook does not supersede any statements in the P&P.



carried out by an MPO, DOT&PF, or transit agency during metropolitan or statewide transportation planning.

Planning decisions (23 U.S.C. 168(c)(1)) include:

- Information on whether tolling, private financial assistance, or other special financial measures are necessary to implement the project.
- A decision with respect to general travel corridor or modal choice, including a decision to implement corridor or subarea study recommendations to advance different modal solutions as separate projects with independent utility.
- The purpose and need for the proposed action.
- Preliminary screening of alternatives and elimination of unreasonable alternatives.
- A basic description of the environmental setting.
- A decision with respect to methodologies for analysis.
- An identification of programmatic-level mitigation for potential impacts of a project, including measures to avoid, minimize, and mitigate impacts at a national or regional scale, as well as potential mitigation activities, locations, and investments.

Planning analyses (23 U.S.C. 168(c)(2)) can assess existing and/or future:

- Travel demands.
- Regional development and growth.
- Local land use, growth management, and development.
- Population and employment.
- Natural and built environmental conditions.
- Environmental resources and environmentally sensitive areas.
- Potential environmental effects in both the natural and human environment, including the identification of resources of concern and potential direct, indirect, and cumulative effects on those resources.
- Mitigation needs for a proposed project, or for programmatic-level mitigation, for potential effects that the DOT&PF determines are most effectively addressed at a regional or national program level.

All planning products and planning analyses are likely to be refined during the subsequent NEPA process.

Project decisions (23 U.S.C. 168(c)(1)) can also be made during the PEL study process and carried forward into future project design and NEPA phases, including:

- Developing the purpose and need statement.
- Recommending one or more alternatives to be evaluated in NEPA.
- Identifying stakeholders and issues of potential concern.
- Prioritizing future projects.
- Developing important information for future analysis.

Figure 5 on page 14 and 15 shows the desired outcomes of a PEL study, and the statutory and regulatory authorities used to produce those outcomes.

2.5 SEO Concurrence Points

There are five standard SEO concurrence points for PEL studies: the first concurrence point occurs at PEL study initiation, and four concurrence points occur during PEL study development.

During the PEL study initiation process, as described in **Section 2.3**, the SEO provides concurrence on the scope and purpose of the PEL study, how the PEL process will be conducted, and how the public

and stakeholders will be engaged during the process. This information must be documented in the PEL Questionnaire (Appendix B) at the beginning of the PEL process for SEO review. It is acceptable to have unanswered questions at the beginning of the process. This document can be used as a guide during the PEL process, prompting team members to develop content and answer questions during the process. The PEL Questionnaire should be updated and appended to the final PEL Study.

During the PEL study development process, SEO concurrence points are necessary to meet the statutory requirements of 23 U.S.C. 139, 23 U.S.C. 168, and the regulatory requirements of 23 CFR 450, Appendix A. Frequent involvement of the SEO in the PEL study can result in easier SEO review of and concurrence on the final PEL Study. In addition, regular involvement of the SEO as the PEL process progresses helps to ease the transition to the future NEPA process.

Written concurrence from the SEO is needed at each of the SEO concurrence points. The project team must submit the required documentation with a specific request for the SEO to review and concur in writing. The SEO should be coordinated with to determine the best way to provide this information and receive concurrence.

Figure 4 outlines the standard SEO concurrence points during PEL study development. Note that due to the flexibility of the PEL process, not every PEL study will produce the same products or outcomes. The PEL project team must consult with the SEO at the beginning of the process to determine whether each of the standard SEO PEL concurrence points shown in **Figure 4** apply to a particular PEL study.





SEO WRITTEN CONCURRENCE POINTS DURING PEL STUDY	
CONCURRENCE POINT	REVIEW
 Purpose and Need	<ul style="list-style-type: none"> - Purpose and need statement has a rational basis - Uses up-to-date data - Includes analytical methods - Uses modeling techniques that are reliable, defensible, reasonably current, and meet data quality requirements
 Alternatives Development and Screening Methodology	<ul style="list-style-type: none"> - Planned range of alternatives and the alternatives development process is reasonable, rational and logical - Appropriate methodologies are identified - Level of detail planned for alternatives development and evaluation is appropriate - Stakeholder involvement plan is appropriate - Planned screening process, including screening criteria, is rational and logical
 Alternatives Screening Results	<ul style="list-style-type: none"> - Results of alternatives development and screening - Conclusions are reasonable and logical - Sufficient documentation is provided to justify eliminating or advancing alternatives - No alternatives are eliminated that are necessary for compliance with future NEPA or for compliance with a permit or approval from another federal agency
 Draft PEL Study	<ul style="list-style-type: none"> - Public and agency involvement is adequately documented - The ten conditions identified in 23 U.S.C. 168 have been followed - Planning products and analyses are adequate for incorporation into future NEPA - Impacts and mitigation are appropriately documented - The basic description of the environmental setting is adequate - The implementation plan contains reasonable steps for the project to move forward into the NEPA process - The planning products are documented in such a form as to be easily identifiable and available for review during the NEPA scoping process and can be appended to or referenced into a NEPA document

FIGURE 4. SEO WRITTEN CONCURRENCE POINTS DURING PEL STUDY

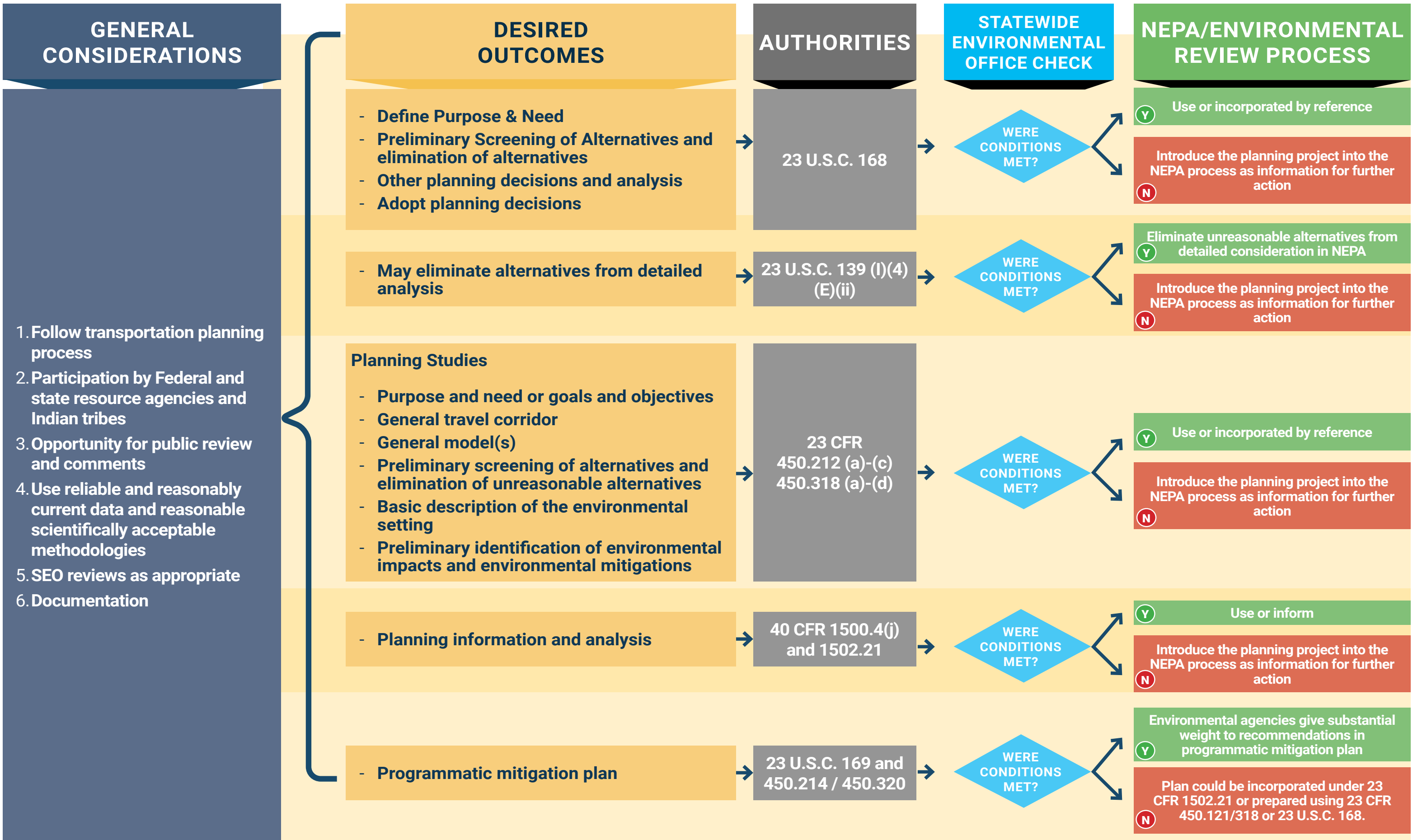


FIGURE 5. PEL DESIRED OUTCOMES AND AUTHORITIES FLOW CHART



2.6 PEL Process Flexibility

The PEL process generally allows for more flexibility than the subsequent NEPA process as various planning products are developed. Examples of this flexibility include:

- Corridor vision development can include goals and objectives. This may better serve local governments, allowing development of comprehensive plans that make connections between land use and transportation improvements.
- The 20-year planning horizon can be extended longer into the future to allow an ultimate corridor vision or alternate land use scenarios to be developed.
- Longer corridors can be analyzed more holistically, with recommendations that identify multiple discrete projects with logical termini, which can be defined in more detail during the NEPA process.
- Because built project recommendations are not required to be fiscally constrained as a part of a PEL process recommendation, a PEL process can look at larger projects and corridors that would be broken into smaller, fiscally-constrained ones during the NEPA process. The smaller, fiscally-constrained projects would then be programmed into a STIP or TIP, which is needed prior to final approval of a NEPA decision.

CHAPTER 3 CONDUCTING A PEL STUDY



Key Points

- PEL study project team membership can be flexible, depending on the focus of the PEL study. Generally, the team includes regional staff from Preliminary Engineering, Environmental, and Planning.
- The SEO has a review and concurrence role in PEL studies because of the NEPA Assignment Program MOU.
- Members of the public, agencies, tribal, and stakeholder groups have defined roles and responsibilities in the PEL process (Section 3.1).
- There are typically eight steps to conducting a PEL study (Section 3.2):
 1. Initiate a PEL study: define scope and desired products for study; publish a public notice
 2. Identify stakeholders and participation methods
 3. Define purpose and need
 4. Define methodologies for data collection and impacts assessment
 5. Develop and evaluate alternatives
 6. Identify affected environment, environmental consequences, and mitigation
 7. Create an implementation plan
 8. Document and obtain final concurrence of the PEL study
- The PEL process has specific public and agency involvement requirements (Section 3.3).
- Development and evaluation of alternatives can vary depending on the scope of the PEL study and may be an iterative process (Section 3.4).



3.1 Roles and Responsibilities

PEL Team Members. Composition of the PEL project team will vary depending on the scope and desired planning products resulting from the PEL process. Generally, the DOT&PF team will be comprised of regional staff from Preliminary Engineering, Environmental, and Planning; a member of the SEO should be included in an advisory role. The DOT&PF may choose to self-perform the PEL study work or contract a consultant to perform certain tasks or the majority of the work. Public, stakeholder, and agency engagement plays a central role in the PEL process, requiring DOT&PF staff to coordinate outreach efforts and remain engaged as the PEL progresses.



DOT&PF SEO. The SEO has a review and concurrence role in PEL processes because DOT&PF has assumed FHWA's NEPA project-level decision making under the NEPA Assignment Program MOU. PEL laws, regulations, and guidance all lay out specific roles for FHWA that, on DOT&PF projects, are assumed by the SEO. These responsibilities include:

- Deciding if a PEL study is the appropriate tool.
- Deciding if all ten 23 U.S.C. 168 conditions have been met (assuming 23 U.S.C. 168 is the PEL approval authority being used).
- Reviewing interim PEL study products, as described in the SEO Concurrence Points.
- Reviewing PEL study reports.
- Reviewing the PEL Questionnaire, which will occur at the beginning and end of the PEL process.
- Determining what planning products can be incorporated in future NEPA processes.

As described in **Section 2.5**, there are four standard SEO PEL concurrence points that must be confirmed to ensure that certain products and decisions made during the PEL process can be carried forward into a NEPA process. Note that if the anticipated outcome of the PEL study is a Project of Division Importance, the FHWA must be involved.

The Statewide Environmental Program Manager is responsible for reviewing and concurring with a PEL document.

DOT&PF Program Development and Planning. DOT&PF Program Development and Planning staff are responsible for ensuring state compliance with Title 23 planning and programming requirements. This includes federal planning factors, land use projections, travel demand forecasts, and other planning analyses. Program Development and Planning staff are also responsible for programming any PEL recommended projects into the STIP.

The Regional Planning Chief is responsible for reviewing and concurring with a PEL document.

DOT&PF Environmental. Involvement of environmental staff is appropriate because the products developed during the PEL study are intended to streamline future NEPA processes and, therefore, need to be done to NEPA standards as allowed by regulations and statutes. Environmental Impact Analysts and Regional Environmental Managers are the best staff resources to determine what NEPA standards are relevant. Much of the environmental and stakeholder coordination work completed during the PEL study process will typically be completed and/or reviewed by DOT&PF regional environmental staff.

The Regional Environmental Manager is responsible for reviewing and concurring with a PEL document.

DOT&PF Preliminary Engineering. Involvement of engineering staff is important because the alternatives examined during the evaluation and screening processes need to be practical and feasible. Engineering staff is also best able to develop realistic and defensible cost estimates.

The Regional Preconstruction Engineer is responsible for reviewing and concurring with a PEL document.

Tribal Governments. Tribal governments have a role specified in statute (23 U.S.C. 168) and regulation (23 CFR 450.212), and are to be invited to and, if desired, involved in the PEL process. Tribal governments must be involved because they may have expertise in environmental resource data collection, land use development, other plans for areas being studied, and development of the planning products during the PEL process. Tribal member involvement during the PEL process is not considered formal government-to-government consultation. If such a request is made by a tribe during the process, the SEO should be immediately contacted so they can coordinate the appropriate response to the request.

Federal Resource and Permitting Agencies. The roles of federal resource and permitting agencies are particularly important because decisions will be made in the PEL process that affect the future NEPA and permitting phases of a project. Planning products developed during a PEL process are intended to be adopted or refined for future environmental review processes. Federal agencies who have a statutory

role related to a particular resource are urged to stay involved in a PEL process to ensure that decisions made can be carried forward in compliance with a particular law or regulation that protects that resource. If a federal agency intends to use one of the planning products (e.g., purpose and need, elimination of alternatives, recommendation of alternatives, environmental resource data) to issue a permit, review, or approval for the project, the federal agency must concur that the ten conditions listed in 23 U.S.C. 168(d) have been met during the PEL process.

State Resource and Permitting Agencies. State resource and permitting agencies are critical to PEL studies, especially if any resources under their jurisdiction are likely to be impacted by a future project. Similar to federal agencies, if any state agencies have a statutory role related to a particular resource, they are urged to stay involved in a PEL process to enable decisions to be carried forward into NEPA (or other environmental review processes such as Section 106 of the National Historic Preservation Act) in compliance with a law or regulation that protects that resource.

Metropolitan Planning Organizations. MPOs have a specific role in the development of PEL studies: their data are critical to many of the planning analyses that are the framework for PEL studies. Under federal rules, an MPO is charged with preparing long-range transportation plans within its jurisdiction and implementing the plans through TIPs. An MPO is a federally designated transportation planning body for an urbanized area with a resident population over 50,000. The STIP incorporates the projects selected by the MPO TIPs by reference.

The PEL study itself must be in the Unified Planning Work Program (for MPOs) or State Annual Work Program (for the state) when funded with Metropolitan Planning or State Planning and Research funds.

Non-metropolitan Local Officials Responsible for Transportation Planning. These local officials must be invited to participate in a PEL study process that occurs in their geographic area. They often can contribute useful data and perspectives to the PEL process.

General Public. Members of the general public have a specific role in the PEL processes: products developed during the process must be made available to the general public for their input. See **Section 3.3** for more information on the public involvement requirement of PELs.

Stakeholder. This refers to any individual or group who may be affected by, or has interest in, the PEL decision-making process or outcome. Stakeholder is a general term that can include many of the groups listed above, like the general public, federal and state resource agencies, or local community groups.

3.2 Steps to Conduct a PEL Study

Figure 5 on the following page depicts an example PEL study timeline and the steps involved in a typical PEL process. PEL steps may be removed or expanded depending on the desired products of the PEL study. For example, PEL Step 6 “Develop and Evaluate Alternatives” may be divided into several tasks if the process will have multiple iterations or levels of alternatives evaluation and screening. Similarly, the PEL project team may choose to add additional stakeholder coordination meetings to the project schedule if more opportunities for community and agency feedback are desired. It is recommended to coordinate with the SEO when developing the PEL project schedule to identify the appropriate SEO concurrence points and durations.

The steps involved in a typical PEL process are described below. These steps assume the PEL approval authority being used is either 23 U.S.C. 168 or 23 CFR 450.212 and 450.318, unless otherwise noted.



PEL STEP 1. Initiate a PEL Study by publishing a public notice announcing the new PEL study and stating that the resulting planning products (see **Section 2.4** for a list) may be adopted during a subsequent environmental review process. This must be published in a similar manner to public notices used in the NEPA process, with announcements placed in the Alaska Online Public Notices and in local or regional newspapers. Consult with the SEO to ensure the correct NEPA Assignment language is included. An administrative record must be initiated at the beginning of a PEL study.

The PEL Questionnaire (Appendix B) requires the following information about purpose and need:

- *What was the scope of the PEL study and the reason for completing it?*
- *What is the purpose and need statement, or the corridor vision and transportation goals and objectives to realize that vision?*
- *What steps will need to be taken during the NEPA process to make this a project-level purpose and need statement?*

The information gathered during the PEL initiation process in P&P 09.03.070 (see **Section 2.3**) must be made available to the PEL project team and used to complete a draft PEL Questionnaire. This information includes the reason for the PEL study, including which planning products will be used during NEPA; stakeholder involvement plans, including appropriate public notices; the study area; available data; and other key elements defining the PEL study process and methodology. The PEL Questionnaire is a useful tool at the beginning of the process for the SEO to have input into methodologies as well as public and agency involvement plans, to make sure statutory and regulatory requirements are being followed.

Figure 6 outlines an example of how the PEL steps, SEO concurrence, and stakeholder engagement can be phased.

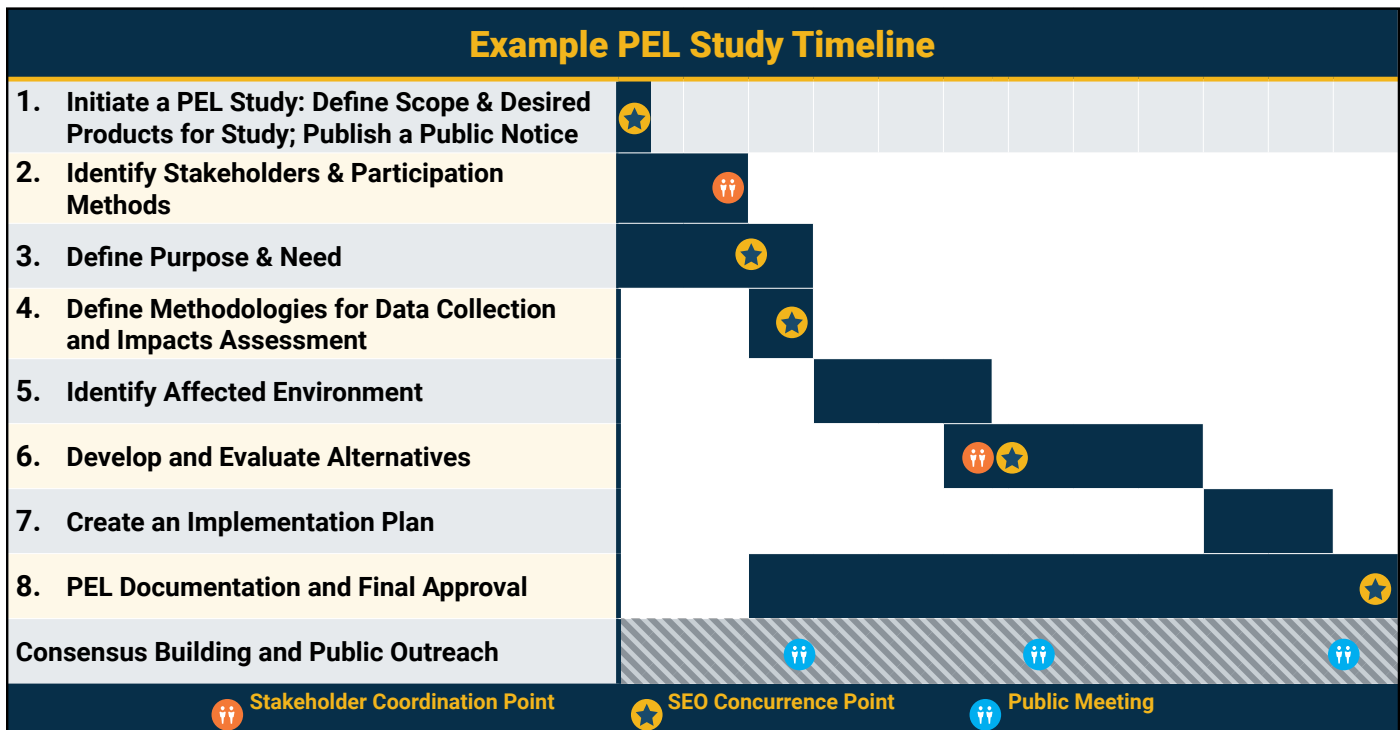


FIGURE 6. EXAMPLE PEL STUDY TIMELINE

PEL STEP 2. Identify PEL Study Stakeholders and Participation Methods. PEL study stakeholders and participation methods must be included in a public involvement and agency coordination plan with the following contents:

- Potentially affected populations, including groups to be included.
- Issues that may be important to the potentially affected populations and relevant agencies.
- Level of controversy anticipated to help develop the scope of an outreach program.

Section 3.3 contains more information about the ongoing public and agency involvement in a PEL process.

PEL STEP 3. Identify/Define Purpose and Need. Land use planning, economic development, and travel demand forecasting tasks need to be initiated to adequately define purpose and need. This work includes:

- Defining existing land use.
- Developing assumptions for future land use, population and employment, and economic development.
- Defining planned network assumptions for the future (with and without a project); this must include not only roadway but pedestrian, bicycle, transit, airport, and port improvements.
- Preparing future travel forecasts, with and without a project.

The purpose and need statement informs the alternatives developed and the PEL recommendations. Guidance relative to developing a purpose and need statement is found in Section 5.3.1 of the *Alaska Environmental Procedures Manual* and Section 430.3 of the *Alaska Highway Preconstruction Manual*. The purpose and need must be a statement of a transportation problem, not a specific solution. It must be specific enough to generate alternatives that may potentially yield real solutions to the problem at-hand.



As stated in Appendix A of 23 CFR 450, a purpose and need statement that yields only one build alternative may indicate that the purpose and need is too narrowly defined. However, if the likely Class of Action for subsequent NEPA is a Categorical Exclusion (CE), one build alternative may be appropriate if it is generated through the alternatives development and evaluation process. If the likely Class of Action is an EA, one build alternative may ultimately result from the PEL process, but the purpose and need should be defined broadly enough that more than one build alternative could be initially developed at the beginning of the alternatives development process.



The purpose and need statement developed during a PEL can often move forward intact into a NEPA process. The purpose and need statement should be modified if conditions (such as safety data or future travel demand) have changed since PEL completion.

Factors to consider when developing the purpose and need statement, as described in Section 5.3.1 of the *Alaska Environmental Procedures Manual*, include:

- System linkage: Is the proposed project a connecting link?
- Capacity: Is the present facility inadequate?
- Transportation demand: Is there a relationship to a statewide plan or other adopted transportation plan?
- Legislation: Is there a federal, state, or local governmental mandate?
- Social demands or economic development: What are the projected economic development or land use changes that indicate a need for improvements?
- Safety: Is the project necessary to correct an existing or potential safety hazard? What are existing accident rates?



- Roadway deficiencies: Are there existing roadway deficiencies?

A well-developed purpose and need statement is one of the planning products that can be used to reduce duplication and streamline future NEPA processes.

Concurrence must be obtained from SEO on the purpose and need statement.

PEL STEP 4. Define Methodologies. The methodologies should be identified for alternatives development and evaluation, baseline data collection and impacts and mitigation assessment. Examples of baseline data include existing and future transportation system, traffic and environmental data, and socioeconomic issues. "A decision with respect to methodologies for analysis" is a specific example of a planning decision that may be used in the subsequent NEPA process (23 U.S.C. 168). Involving the appropriate state and federal agencies is recommended.



Methodology

Questions that can be used to guide these decisions include:

- What travel demand model will be used to develop and analyze alternatives?
- What forecast future year will be used?
- What are future year land use, population and employment, and economic development assumptions, and how were they developed? Are there issues associated with socioeconomic characteristics (e.g., quality of life, demographics, income, and environmental justice)?
- Is there an adopted corridor plan, subarea plan, corridor strategy, or corridor study?
- What kinds of traffic and safety data will be collected?
- How will traffic operations be analyzed?
- What multimodal features are in the study area, and what plans for improvements are known? Transit, pedestrian, bicycle, freight accommodations, and air travel must be considered.
- What environmental resources are in the study area?
- Which of these environmental resources are potentially affected?
- What is the planned alternatives development and evaluation process including:
 - » How many screening steps will there be?
 - » To what level of detail will alternatives be developed at each step?
 - » How will evaluation criteria be developed and applied?
 - » Who will there be involved in the process at each step?



SEO Concurrence Point

Alternatives Development and Screening Methodology Review



The PEL Questionnaire asks the following relevant environmental resource/impacts questions/steps:

- *For each resource or group of resources, what level of detail was reviewed and what was the method of review; is the resource present, and what is the existing condition; what are the issues to be considered during NEPA (including potential impacts and mitigation requirements); and how will the data need to be supplemented during NEPA?*
- *List environmental resources the project team is aware of that were not reviewed in the PEL study and why; indicate if they will need to be reviewed in NEPA and explain why.*
- *Were cumulative impacts considered in the PEL study? If yes, provide the information or reference where the analysis can be found.*
- *Describe any mitigation strategies discussed in the PEL study that must be analyzed during NEPA.*

- Which of the potentially affected environmental resources in the study area require approvals or permits?
- What analysis methodology will be used for each of the environmental resources? Will that be sufficient to identify any “fatal flaws” associated with any of the alternatives?
- Can sufficient information be collected from secondary data sources, Geographic Information System (GIS) overlays, and environmental scans to reduce the effort and time of in-field survey work?
- What level of detail will be used to map environmental resources, analyze their impacts, and identify mitigation?
- What environmental resources will not be studied in the PEL process and why?
- What are the opinions of state and federal environmental resource agencies?

Prior to initiating the Alternatives Development and Evaluation process, concurrence from the SEO must be obtained on the planned methodologies, including the Alternatives Development and Screening Methodology.

PEL STEP 5. Identify Affected Environment. Environmental resource identification and analysis varies depending on the study area, concerns of state and federal resource agencies, and resources that could be impacted. In general, more attention must be paid to the environmental resources that could require avoidance or minimization of impacts or could result in lengthy environmental clearance processes or costly mitigation. Some of the environmental resources to be considered are included in Section 430.5.3 of the *Alaska Highway Preconstruction Manual*. PEL project teams must work with regional environmental staff to determine which of these resources must be given the most attention during a PEL study.

The Affected Environment section of a PEL study will typically be less detailed than that developed during a NEPA process. Information gathered for PEL Step 5 is intended to assist with future project-related NEPA analyses. It will be useful for developing alternatives that avoid impact to certain environmental resources, so this step should be initiated prior to Alternatives Development and Evaluation. This section can also be called an Environmental Overview.

The PEL study must specifically identify the resource agencies that have jurisdiction over each affected resource category, whether they were consulted during the PEL process, their input and comments submitted regarding the impact categories, and any further consultation or permitting needs that may be required as the project progresses into the NEPA process. This information may be presented in a table. See **Section 3.3** for public and agency involvement requirements.

PEL STEP 6. Develop and Evaluate Alternatives. Alternatives are defined as everything from major modal alternatives and corridor location alternatives to design changes to avoid or mitigate adverse impacts (23 CFR 450, Appendix A). A key part of the PEL process is to objectively identify and screen alternatives to recommend those that must be advanced to the NEPA process. See **Section 3.4** for details about this step in the process.

The following actions occur during this step:

- Define planned process for developing and analyzing alternatives, including a list of initial alternatives to consider.
- Identify evaluation criteria.
- Identify range of alternatives, including the No Build Alternative.
- Apply screening process.
- Develop remaining alternatives.
- Identify environmental consequences.
- Develop financial and staging strategy.
- Identify recommended alternative(s).



**SEO
Concurrence
Point**

*Alternatives
Screening
Results Review*



This step in the PEL process applies to all PEL authorities. Concurrence from the SEO must be obtained on the alternatives screening results.

PEL STEP 7. Create an Implementation Plan. A PEL study is intended to provide the framework for implementing future transportation improvements. This includes possible funding, priority setting, staged implementation (if needed), roles and responsibilities, and issues to be resolved in a future environmental review process. For long corridors, consideration must be given to defining projects that have independent utility and logical termini, address the purpose and need, and are likely to receive funding. The outcome of a PEL process does not need to be fiscally constrained but should be coordinated with other transportation plans.

An implementation plan must be developed that:

- Prioritizes transportation needs for inclusion into the transportation planning process.
- Identifies anticipated capital costs and funding that can be reasonably expected within the planning horizon.
- Identifies issues that are likely to cause delays in the project schedule; this information can help with project phasing (e.g., design, right-of-way acquisition, permitting, construction) and staged implementation along with development of overall project schedules.
- Defines responsibilities of local, state, and federal agencies in the implementation process; this must include commitments to future involvement of these agencies.
- Identifies logical project stages that can be implemented as individual projects with independent utility and logical termini.
- Identifies future project issues with timeframes and responsibilities for resolution.
- Identifies the anticipated NEPA Class of Action for each of the project stages.
- Considers TIP or STIP scoring criteria to determine which stage of the project might be most appropriate to advance; this could include a financing strategy.

PEL STEP 8. PEL Study Review and Approval. The final PEL Study will summarize each of the PEL process steps in a reader-friendly format, relying on appended reports and studies for in-depth, technical supporting information.



The following DOT&PF staff (or their designees) are required to review, provide comments on, and provide their written concurrence on the final PEL Study:

- PEL Project Manager
- Regional Environmental Manager
- Regional Preconstruction Engineer
- Regional Planning Chief
- Statewide Environmental Program Manager
- Project Sponsor (if applicable)

3.3 Public and Agency Involvement Requirements

General planning-related public involvement requirements. Planning regulations (23 CFR 450.210 and 450.316) relevant to public and agency involvement must be followed for PEL studies. These include:



- Having a documented Public Involvement Plan (PIP); Section 430.3.2 of the *Alaska Highway Preconstruction Manual* discusses suggested contents of a PIP; however, other PIP contents may be developed under a PEL study.
- Establishing early and continuous public involvement opportunities.

- Detailing explicit procedures, strategies, and outcomes such as time for public review and comment at key decision points and making public information available in electronically accessible formats and means.⁷
- Holding public meetings at convenient and accessible locations and times.
- Providing timely notice and reasonable access to information.
- Using visualizations techniques if appropriate.
- Providing reasonable public access to technical and policy information.
- Demonstrating consideration of and response to input received.
- Seeking out and considering the needs of those traditionally underserved (including low-income and minority households).
- Periodically reviewing the effectiveness of procedures and strategies to ensure a full and open participation process.
- Consideration means taking into account the opinions, actions, and relevant information from other parties.
- Cooperation means the parties involved work together to achieve a common goal.
- Consultation means conferring with other parties and considering their views before taking action.
- Coordination means the cooperative development of plans and programs and adjustments necessary to achieve general consistency.



In addition, the public and agency involvement program must follow a systematic approach to involvement that increases the type and extent of involvement if an interested party has substantial concerns about the PEL study. Appendix A of the regulation (23 CFR 450.212 and 450.318) discusses the need for a PEL study to be comprehensive, cooperative, and continuous (3-C). The public and agency involvement conducted during a PEL process does not substitute for public and agency involvement needed during a NEPA process or other environmental review process, such as Section 106 of the National Historic Preservation Act. Information obtained during a PEL process can be used to inform these future processes.

Stakeholders. When considering the project area and the possible transportation improvement, groups who must be involved include elected officials, tribes, Alaska Native corporations and associations, user groups (e.g., bus operators, employer-based community programs, shuttle programs, public ports, airlines, or trucking firms), other interest groups, environmental organizations, the public, property owners and businesses, and community groups or organizations. Some of these potentially affected populations have specifically identified roles through PEL laws, regulations, or guidance.

Federal and state resource agencies. Cooperating agencies (identified for an EIS) and/or other federal permitting agencies must concur that all 23 U.S.C. 168 conditions have been met if a PEL study is to be relied upon as the basis for the issuance of a project permit or approval (see **Section 1.1** for more detail). This is needed because products and analyses developed during the PEL process are intended to be used not only in future NEPA processes but in other environmental review processes such as Section 106 of the National Historic Preservation Act, Section 404 of the Clean Water Act, the Clean Air Act, and the Endangered Species Act.

- *Consideration means taking into account the opinions, actions, and relevant information from other parties*
- *Cooperation means the parties involved work together to achieve a common goal*
- *Consultation means conferring with other parties and considering their views before taking action*
- *Coordination means the cooperative development of plans and programs and adjustments necessary to achieve general consistency*

⁷ Refer to the DOT&PF Civil Rights Office for specific accessibility requirements (<http://www.dot.state.ak.us/cvlrts/index.shtml>).



A PEL study must be developed in consultation with federal and state resource agencies. This would include the state and federal agencies who have approval, clearance, consultation, or permitting authority, such as those listed in Section 430.5.6 of the *Alaska Highway Preconstruction Manual* and below. Not all are required in every project/PEL study:

- United States Army Corps of Engineers
- Alaska Department of Environmental Conservation
- Alaska Department of Natural Resources
- Alaska Department of Fish and Game
- United States Fish and Wildlife Service
- National Marine Fisheries Service
- United States Coast Guard

Tribal governments. Tribal governments are specifically called out as a point of contact for PEL studies, per 23 CFR 450.212. FHWA is responsible for formal government-to-government consultation with tribes. The DOT&PF SEO and FHWA must be notified if any tribal government requests government-to-government consultation. A notice from DOT&PF to a tribe advising them of a proposed activity is not considered “government-to-government consultation” within the meaning of the NEPA Assignment Program MOU.

Regional and local agencies. Regional transportation agencies (e.g., MPOs) and local agencies (e.g., city and borough staff, elected officials) can have multiple roles in planning processes and provide unique expertise in reviewing planning assumptions and analytical methods.

General public and public groups. Groups to be involved could include interest groups, environmental organizations, property owners and business, community groups or organizations, and residents of the surrounding area.

Planned participation methods. These methods may vary by each of the different stakeholders and stakeholder groups listed above, as long as the 3-C process is followed (per Appendix A of 23 CFR 450.212 and 450.318). Outreach techniques may also vary by project location and purpose. A variety of participation methods can be considered, including:

- News releases and websites
- Face-to-face meetings (e.g., small group meetings, larger public meetings and open houses, technical committees, one-on-one meetings)
- Radio, television, and other media
- Surveys (for data gathering)
- Online meetings



The plan for public and agency involvement is a required part of the PEL Questionnaire, which requires:

- *Synopsis of coordination with federal, tribal, state, and local environmental, regulatory, and resource agencies*
- *What transportation agencies were coordinated with?*
- *What steps will be taken with each agency during NEPA scoping?*
- *Synopsis of coordination efforts with the public and stakeholders*

3.4 Alternatives Development and Evaluation Process

Define process. A key requirement from 23 CFR 450 is that the alternatives development and evaluation process is rational and thoroughly documented, and includes public involvement (e.g., general, non-MPO, MPO, tribes) and agency (e.g., environmental, regulatory, and resource). If these characteristics are met, the information can be used to limit alternatives that need to be considered during the subsequent NEPA process.



Methodology

If the PEL process is using 23 U.S.C. 139 as the approval authority, key requirements are:

- The SEO provide guidance to the PEL project team about analysis of alternatives,
- An opportunity is provided for public review and comment,
- Alternatives dismissed are done so after considering public comment, and
- The SEO independently reviews the alternatives evaluation and determines that the alternative(s) to be eliminated is not necessary for compliance with NEPA or (with the concurrence of federal agencies with jurisdiction over a permit or approval) is not necessary for any permit or approval under any other federal law.

Alternatives are typically developed and screened in a multi-step process that includes development of more detail at each step of alternatives development and screening. Section 430.6.3 of the *Alaska Highway Preconstruction Manual* provides more information about this process, which is similar for PEL and NEPA processes. One example of an alternatives development and screening process is shown in **Figure 7** on page 28.

Identify evaluation criteria. Evaluation criteria are used to compare alternatives against each other and to screen alternatives at specific points in the process and can be derived from several sources. These include the purpose and need statement developed in PEL Step 3, community and public concerns developed from the public and agency involvement program, and data collected regarding existing conditions in the study area.

Evaluation criteria are similar to those used in a NEPA alternatives evaluation process and must be chosen to identify differences in performance and impacts among alternatives developed. Evaluation criteria can be assessed on a qualitative level, or specific performance measures can be developed to provide quantitative data. Examples of evaluation criteria include evaluating whether the alternative:

- Improves safety.
- Improves mobility/reduces traffic congestion.
- Improves multimodal connections and multimodal safety.
- Supports future land use plans.
- Avoids or minimizes impacts to environmental resources (e.g., historic properties, parks, wetlands, fish streams, critical wildlife habitat).
- Reduces crash frequency or severity.
- Has unusually large or complicated construction or maintenance issues or costs.
- Responds to community concerns.

Identify range of alternatives, including the No Build Alternative. The purpose and need developed in PEL Step 3 must shape the range of alternatives to be considered in a PEL process. How alternatives are defined can vary, depending on the circumstances of the particular PEL process.

The range of alternatives that are developed could include:

- The No Build Alternative, which typically includes only programmed improvements to the existing transportation system. Defining and evaluating this alternative is important as a baseline to clearly identify what conditions would occur in the future if no major transportation improvements were made in the study area.



The PEL Questionnaire asks for the following questions to be answered:

- *What types of alternatives were looked at? Provide a one or two sentence summary and reference documentation.*
- *How were the screening criteria and screening process selected?*
- *For alternatives that were screened out, briefly summarize the reasons for eliminating the alternative(s). During initial screenings, this generally will focus on fatal flaws.*
- *Which alternatives must be brought forward into NEPA and why?*
- *Did the public, stakeholders, and agencies have an opportunity to comment during this process?*
- *Were there unresolved issues with the public, stakeholders, and/or agencies?*

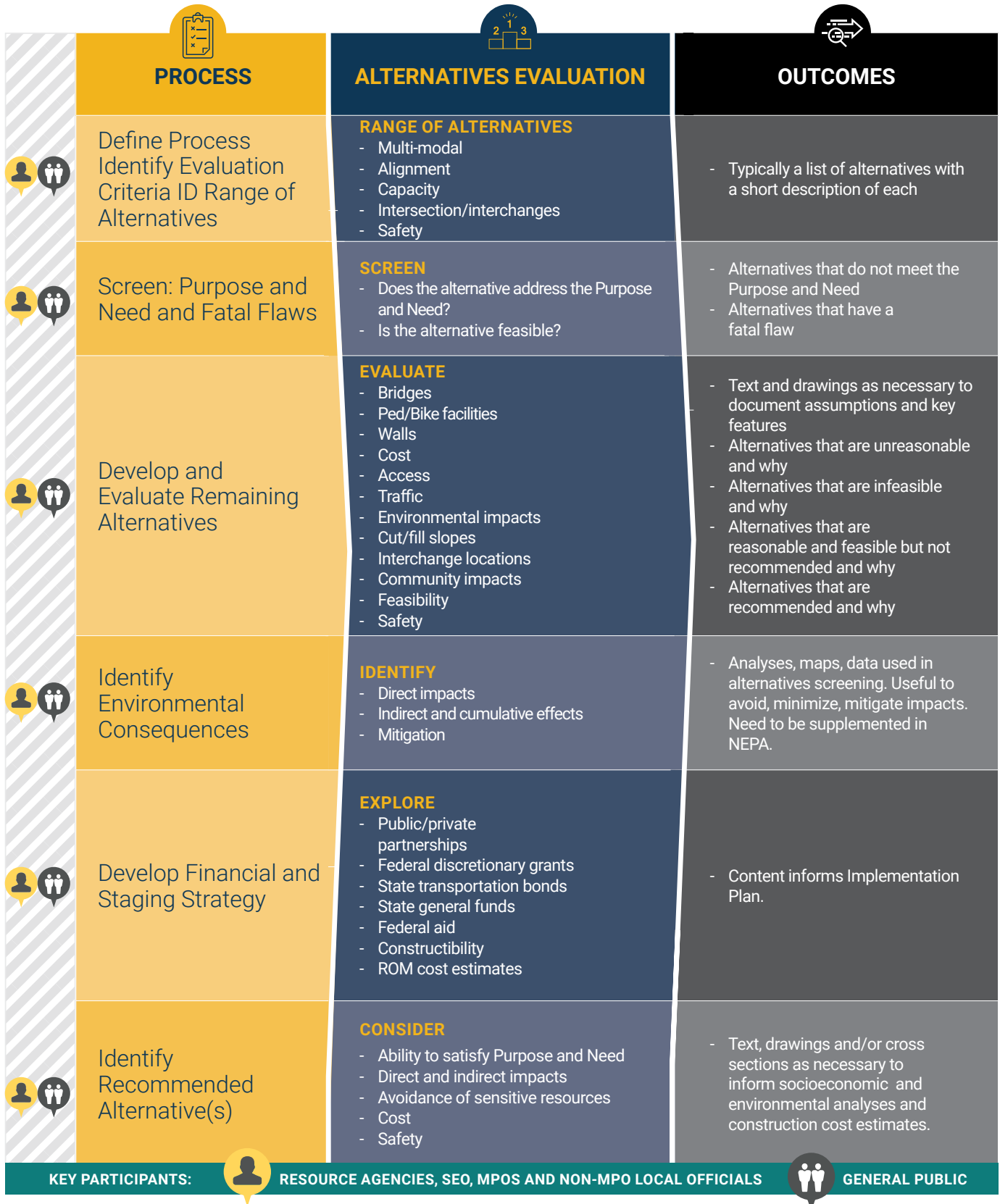


FIGURE 7. EXAMPLE ALTERNATIVES DEVELOPMENT AND EVALUATION PROCESS

- Modal alternatives, such as pedestrian and bicycle improvements or transit, in addition to roadway or highway alternatives.
- Corridor location, including bypass or alternate corridors.
- Alignment options.
- Transportation Management System options.
- Access management.
- Intersection or interchange improvements.

Apply screening process. The screening process must utilize the evaluation criteria described above to narrow the range of alternatives, and then evaluate the alternatives that remain in more detail. An increasingly detailed process must be used to both develop the alternatives, then evaluate and screen them. Terms used for screening purposes must be defined initially, including:

- Fatal flaws: costs or impacts that prohibit the alternative from being built.
- Feasible/infeasible: if the alternative is physically unbuildable or has other technical issues that are so challenging that they result in unusually difficult construction requirements, ongoing maintenance difficulties, or other unacceptable environmental or social impacts.

Develop remaining alternatives. The alternatives' designs must be of sufficient detail to:

- Develop adequate and defensible construction cost estimates (i.e., so they could fit into a fiscally constrained state or metropolitan area TIP),
- Identify comparative environmental impacts among alternatives,
- Develop performance measures to determine how well the alternatives meet the purpose and need, and
- Respond to community and agency concerns.

The level of design may be similar to or less detailed than a reconnaissance engineering study.

Identify environmental consequences. Environmental consequences can be analyzed and documented in a PEL process. As with the affected environment information, environmental consequences (for direct impacts) will most likely not be detailed or current enough to meet NEPA standards (and other laws under its umbrella, such as Section 106 of the National Historic Preservation Act and Section 4(f) of the U.S. DOT Act). Therefore, the PEL environmental analysis will need to be supplemented with more refined analysis during the subsequent NEPA process. The information provided during a PEL process (as described in Appendix A of 23 CFR 450, Question 13) can include:

- GIS data of past, present, or predicted future conditions of the natural and built environment
- Environmental scans, including GIS overlays, environmental resources and environmentally sensitive areas, airsheds, watersheds, demographic trends and forecasts, future land use, and natural resource planning efforts.
- Descriptions of airshed and watersheds.
- Demographic trends and forecasts.
- Projections of future land use, natural resource conservation areas, and development.
- Outputs of natural resource planning efforts (e.g., wildlife conservation plans, special area management plans, multiple species habitat conservation plans).

Although the information developed during a PEL process is typically not sufficient to establish the following, a PEL process may determine if these issues are likely to occur:

- Is a Section 4(f) (of the U.S. DOT Act) use of parks, historic properties, or wildlife refuges involved?
- Is a Section 7 (of the Endangered Species Act) endangered species consultation needed?



- Are cultural resources eligible for the National Register of Historic Places (NRHP) present (Section 106 of the National Historic Preservation Act)? What kind of cultural resource identification efforts have been conducted in the PEL area? (Keep in mind that additional identification may be needed before drawing conclusions about the presence or boundaries of NRHP-eligible cultural resources.)
- Is a Section 404 (of the Clean Water Act) wetlands permit needed and, if so, what kind?

If any Section 4(f), Section 7, Section 106, or Section 404 issues are used to eliminate alternatives, these issues must be fairly well established and coordinated with the agency with regulatory authority over that resource.

Indirect and Cumulative Effects. Depending on the issues of a specific PEL study, indirect and cumulative effects can be documented in the PEL study. The analysis must:

- Be sufficiently detailed such that differences in consequences of alternatives can be readily identified.
- Be based on current data (e.g., census data) or be updated by additional information.
- Be based on reasonable assumptions that are clearly stated.
- Rely on analytical methods and modeling techniques (e.g., future land use and travel demand data) that are reliable, defensible, and reasonably current.

Mitigation. The focus of PEL studies related to mitigation of anticipated environmental impacts is twofold:

- 1) Identification of planning-level, programmatic mitigation efforts such as advance mitigation, mitigation banking, and setting priorities for mitigation investments. These could include regional ecosystem and water resource type mitigation. These are strategies that DOT&PF, together with resource agencies, may determine are most effectively addressed on a national or regional scale. Some mitigation strategies are dependent on early discussions and actions and may optimize development of strategies that are economical and more effective from an environmental stewardship perspective.
- 2) Measures to avoid, minimize, and mitigate project-level impacts such that their cost can be included in project programming, and other needs (e.g., right-of-way) can be flagged prior to the beginning of the NEPA process.

Develop financial and staging strategy. This will inform the Implementation Plan described in PEL Step 7 and can inform the identification of a recommended alternative(s). The strategy must include analysis of federal aid, federal discretionary grants, state transportation bonds, state general funds, and public/private partnerships. It must also include a discussion of constructability. Rough order of magnitude cost estimates can be created to inform this discussion.

Identify recommended alternative(s). The process of identifying one or more recommended alternatives in a PEL study is similar to the process used during the NEPA phase of a project. As described in Section 430.6.6 of the *Alaska Highway Preconstruction Manual*, factors to consider include ability to satisfy purpose and need (which includes safety), direct and indirect impacts, avoidance of sensitive resources, and cost.



Results

The Council on Environmental Quality (CEQ) defines reasonable alternatives as those which are practical and feasible from a technical and economic standpoint using common sense. As stated in 23 CFR 771, reasonable alternatives are to be evaluated and decisions made in the overall public interest, taking into consideration the need for safe and efficient transportation; social, economic, and environmental impacts of the proposed transportation improvements; and national, state, and local environmental protection goals.

The outcome from the PEL process, however, is not to select one preferred alternative; that can only be done at the conclusion of the NEPA process. Alternatives passed over during the transportation planning process because they are infeasible or do not meet the purpose and need can be omitted from the detailed analysis of alternatives in the NEPA document as long as the rationale for elimination is explained in the PEL document.

The PEL process must focus on:

- Identifying what alternatives are infeasible (have fatal flaws) or unreasonable and why.
- Identifying what alternatives are reasonable and recommended to be advanced to a NEPA process and why.
- Identifying what alternatives are reasonable but not recommended and why.

Documentation. Clear and concise documentation of each step in the alternatives development and evaluation process is critical to its ultimate usefulness in the project development process. The documentation must include sufficient detail to support the decision or the results of the analysis. The documentation must make it clear that the planning products have a rational basis, are based on reasonably current data, and use reasonable and scientifically acceptable methodologies.

Documentation also needs to include who was involved in the alternatives development and evaluation process and indicate that the key players described above have been appropriately involved.

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CHAPTER 4 PEL STUDY DOCUMENTATION REQUIREMENTS



Key Points

- There are regulatory requirements for the contents of PEL study report (Section 4.1).
- An annotated outline of a PEL study report describes typical contents of each section in a study (Section 4.2).



4.1 Content Requirements for PEL Study Report

The regulatory requirements (from 23 U.S.C. 168 and Appendix A of 23 CFR 450) related to documentation of a PEL process must be followed as the final PEL Study Report is prepared:

- Documentation of relevant decisions must be in a form that is identifiable and available for review during the NEPA scoping process and can be appended to or referenced in the NEPA document.
- Any document incorporated by reference must be reasonably available for inspection by potentially interested parties.
- Incorporated materials must be cited in the NEPA document and their contents briefly described.
- PEL products and decisions (as described in 23 U.S.C. 168) should:
 - » Use the 3-C transportation planning process,
 - » Reflect a credible and articulated planning rationale,
 - » Be founded on reliable data, be developed through transportation planning processes, and
 - » Meet FHWA and FTA statutory and regulatory requirements.
- Assumptions must have a rational basis and be up to date.
- Data, analytical methods, and modeling techniques must be reliable, defensible, reasonably current, and meet data quality requirements.

Specific planning products (23 CFR 450.212 and 450.318) that must be documented in a Final PEL Study include the following:

Purpose and need (or goals and objectives). This must include the overall context for development of transportation infrastructure; how mobility is maintained; what National Transportation Goals are advanced; what state LRTP planning goals are advanced; if any area plans are applicable; and what the strategic vision is for the corridor, subarea, or project.

- **General travel corridor** and/or **general mode definition** (e.g. highway, transit, pedestrian, bicycle or a combination).

Alternatives development and evaluation. This must include the process used to develop and evaluate alternatives.

Alternatives eliminated and why. It is critical to document assumptions made in the development of alternatives or used to evaluate alternatives. The Final PEL Study must summarize and include any analyses or studies used to eliminate alternatives, along with a reference to where this information can be easily viewed.



Alternatives recommended to be advanced into NEPA and why. Alternatives that remain reasonable after the PEL study must be advanced into an EIS (an EA or CE do not require consideration of all reasonable alternatives). EAs require at least two alternatives: Build and No Build. The final PEL Study Report must describe the features of the alternatives that are recommended to be advanced and any assumptions made in their development.

Results of transportation analyses. This should include land use and transportation forecasts, regional development and growth, growth management, population and employment, and multi-modal analyses as appropriate. This can also include scenario analysis, performance gap analysis, planning life cycle analysis, risk analysis, and financial analysis.

Basic description of the environmental setting. This includes both text and mapping, showing key environmental issues. The level of detail can vary, depending on project context. As appropriate, GIS or other similar mapping tools are recommended to produce enhanced visualizations of quantified data. As mapping is prepared, be aware of constraints associated with mapping of any confidential resources such as cultural resources.

Preliminary identification of environmental impacts and environmental mitigation. Documentation includes issues that need to be considered during NEPA and how the data provided will be supplemented during NEPA. It should also include a list of resources that were not reviewed in the PEL study and if they must be considered during the NEPA process.

Summary of agency coordination and public involvement. To document compliance with 23 U.S.C. 168, the coordination and public involvement summary must describe what was done and a summary of input received. The summary should state:

- That a public notice was provided;
- The intention of DOT&PF to incorporate by reference various planning products into a subsequent environmental review process; and
- That relevant cooperating, permitting, or approval agencies (if they need a planning product to issue their permit or approval) were involved and agreed that the ten 23 U.S.C. 168 conditions (described in **Section 1.2** of this Guidebook) were met during the PEL process.

NEPA Assignment Disclaimer Language. The following language must be included as part of the PEL document and should also be included on most public and agency coordination materials during PEL development:

“The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by DOT&PF pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated November 3, 2017, and executed by FHWA and DOT&PF.”

Issues for further consideration. If any issues were raised by the project team, agencies, or public that were not sufficiently addressed during the PEL study, those issues must be identified so they can be addressed during subsequent NEPA analyses.

Implementation plan or action plan. Text and drawings are recommended for showing staging and funding plans as well as roles and responsibilities for future project development phases. For projects where cost estimates are greater than or equal to \$100 million, a project phasing and financing analysis is recommended. This analysis will detail how to program the PEL recommendations into a fiscally constrained statewide or metropolitan TIP.

PEL Questionnaire. This is typically appended to the PEL study. This is initially prepared at the beginning of the PEL study and finalized at the end of the PEL study. Optional interim updates may be completed during the PEL study process.

Technical reports. These are prepared to supplement the PEL study and may include such reports as an environmental overview, roadway existing conditions, alternatives development and evaluation, and public and agency coordination.

It is critical that all written products are subject to a thorough and complete quality assurance and quality control process. The purpose is to confirm the adequacy and accuracy of the documentation; ensure appropriate coordination and regulatory requirements are met; ensure DOT&PF standards are met; and verify clarity, grammar, and internal consistency.

4.2 Annotated Outline of a PEL Study

The following is an example of an annotated outline of a PEL study with suggested contents for each chapter. The outline and contents may be adapted to accurately represent the specific PEL process that was followed for the project.

A) Front Matter

After the cover page, table of contents, and abbreviations, the document must include a final concurrence letter from the SEO indicating they have been involved in the PEL process, reviewed the draft Final Report, and concur with its findings. The letter must also reference the ten conditions identified in 23 U.S.C. 168 and indicate they have been followed (see **Section 1.2**).

B) Chapter One: Introduction and Summary

11. Project background/history: Discuss past transportation planning efforts, community land use plans, and other documentation of the transportation issue needing to be resolved by the PEL study. This section must discuss the context of transportation use, development of the area, and other issues. It must discuss the primary purpose of the PEL study and include a study area map.
12. Public Notice of Intent: Reference the public notice that stated that DOT&PF is conducting a study that will produce planning products that may be adopted during a subsequent environmental review process. The notice must be included in an appendix.
13. General process: Describe how the PEL process followed the basic steps identified in 23 U.S.C. 168, identifying/describing the reason for the PEL, purpose and need, screening of alternatives, environmental setting, and recommended alternative(s). Planning analyses may include travel demand forecasting, local and regional growth, and population and employment forecasts. The process description should include a flow chart showing major steps and timelines. It should describe how public and agency input informed each step of the process. This section could provide a chart showing the required SEO concurrence points and when each was accomplished.
14. Summary of recommendations: Describe the recommended alternative(s) or results of the PEL study process. This should be a high-level overview of the results and refer to subsequent chapters for more details.
15. Summary of next steps: This section should include a description of the project development and implementation process, including funding, NEPA, design, right-of-way acquisition, and construction.

C) Chapter Two: Purpose and Need

1. Process followed to develop purpose and need: The purpose and need statement is one of the official planning products identified in 23 U.S.C. 168 and 23 CFR 450. Discuss importance of purpose and need to the PEL process and subsequent NEPA process. Describe the history of needs identification and development of the purpose and need statement in the PEL study process. Include public, tribal, and agency input (give dates for each).
2. Key data used: Summarize all data used to develop purpose and need, including existing and future traffic volumes, methodology used to forecast future traffic, safety, land use, analysis of comprehensive plans, access points, transit, and pedestrian and bicycle information.



3. Primary and secondary purpose: Clearly identify the problems a transportation solution is intended to address. Factors to consider include safety issues, existing and future traffic volumes and level of service, any system linkage issues, existing facility deficiencies, land use and development patterns, population and employment data, consistency with land use planning, issues with pedestrian or bicycle transportation, and issues with transit. List the additional project goals (if applicable).
4. SEO concurrence: Discuss the process used to consult with the SEO, whether they had comments, and how the project team responded to them. Cite the date when official concurrence with purpose and need was received.

D) Chapter Three: Alternatives Considered

1. Process followed: Summarize what process was conducted for the alternatives development and evaluation process, including what was presented to the SEO for concurrence. Note the date that SEO concurrence was received, listing any conditions.
2. Public and agency input: Include a description or chart that lists the major steps in the alternatives development and evaluation process, and what type of public/agency involvement was included at which step (with dates).
3. Range of alternatives considered: Summarize the work that was conducted to identify and define the range of alternatives and the development of alternatives. Cite technical reports and include them as appendices.
4. Development of evaluation criteria: Describe the process used to develop evaluation criteria (e.g., data collection, received input from public and agencies, developed draft criteria, finalized criteria based on input from public and agencies). Discuss how evaluation criteria varied between multiple screening levels (if applicable).
5. Screening process results: List and describe the alternatives that were evaluated, evaluation criteria used, and which alternatives were recommended to move forward. If multiple levels of screening were used, describe each iteration independently, taking care to describe the step-wise process used to identify which alternatives were carried forward and which were eliminated. Indicate the date when the SEO concurred with the screening results.
6. Alternatives eliminated and why: Describe alternatives that were eliminated and reasons why. Provide enough information to clearly explain each alternative and why it was eliminated.
7. Alternatives recommended and why: This can be a combination of text and maps, cross sections, and other graphics that describe each of the recommended alternatives. Explain each recommended alternative and state the reason it was recommended.

E) Chapter Four: Environmental Setting and Consequences

1. Process followed: Provide general description of data collection (primary/field work and/or secondary/desktop analysis). Discuss what data was used to inform the evaluation criteria and alternatives. Provide high-level analyses of affected environment and potential impacts evaluated for all alternatives. Discuss whether mitigation was considered and discussed with agencies.
2. Public and agency input: Provide a summary or chart that indicates what public, tribal, or agency input was received by resource. If input came from a tribe or agency, note which agency provided input.
3. Resources Affected: Describe setting or baseline, impacts, issues, and mitigation. Provide any resource-specific review provided by the SEO (such as Section 4(f) resource identification). Provide date of SEO agreement, if appropriate. This section often includes maps and other graphics.

4. Additional data or gaps to be supplemented in NEPA: Include additional data needs, regulatory requirements (e.g., documentation of practicable alternative, or feasible and prudent alternative), or future agency coordination that may be required. Also describe any environmental resources that were not considered during the PEL process that will need to be considered during NEPA.
5. Outstanding issues: Describe any outstanding issues that must be resolved after the PEL study. For example, obtaining United States Army Corps of Engineers agreement that the Preferred Alternative in the NEPA process is also the Least Environmentally Damaging Practicable Alternative, or whether noise studies are needed.

F) Chapter Five: Public and Agency Involvement

1. Goals of public and agency involvement efforts: Describe why and how different stakeholder groups and agencies were identified for inclusion. Make sure to mention regulatory roles for specific agencies identified in 23 CFR 450. Examples could include the United States Army Corps of Engineers if the project is located in an area with wetlands, the State Historic Preservation Officer if the project may affect historic properties, or the United States Fish and Wildlife Service if the project may affect threatened or endangered species.
2. Specific techniques used: Describe how these groups were engaged. Tables are appropriate for documenting the chronology of engagement efforts.
3. Membership in groups: Discuss how membership in groups was chosen and the role/aim of the different groups. Include a chart showing agencies or other groups represented in each group.
4. Outcomes: Include a summary of each meeting. Reference appendices that include public involvement reports. For each event, provide the date, primary purpose, information presented, number of attendees, and input received. Provide a chart or other text discussing tribal and agency input.
5. Unresolved issues and recommendations for future involvement: List unresolved issues with the public, special interest groups, or agencies. Identify any future recommendations, such as outreach to transit users, specialized outreach to low-income or minority populations, or outreach to agencies or groups that serve low-income populations.

G) Chapter Six: Implementation Plan

1. Subsequent stages/NEPA Class of Action: Discuss whether it makes sense to seek funding for the entire project identified in the PEL study or if the next stage should be a subset (i.e., an individual project that has independent utility). If the project is planned to be staged, these should be identified, and a graphic included. The likely NEPA Class(es) of Action must be identified, noting that these are preliminary determinations. Include a graphic showing key decision factors related to what goes next (e.g., public benefit, costs, funding availability, potential for public/private partnerships). Also discuss the ten conditions identified in 23 U.S.C. 168(d) that allow the use of planning products in future NEPA phases.
2. Cost estimates/funding/STIP: Discuss cost estimates for subsequent stages, how funding is identified, and how the STIP process will be carried out.
3. Schedule: Describe potential schedules for the project(s) and any staged implementation. If possible, show schedules for design, right-of-way acquisition, and construction of all stages.
4. Unresolved issues: List any issues that were not resolved in the PEL process and will need to be resolved in subsequent project development phases.
5. Next steps: Summarize what work would need to come next in progressing the results of the PEL study. What are the major next steps? This can be a graphic. Address all planning products developed during the PEL process and any action necessary for them to be used during NEPA.



H) Appendices

1. PEL Questionnaire: Include a complete final version of the questionnaire that was started at the beginning of the process.
2. Public and agency involvement: This must include the Public Involvement Plan, all meeting minutes, summaries of comments and responses, and any emails or other correspondence with agencies or other stakeholders.
3. Technical memoranda: Any relevant technical memoranda or white papers that were used to support the PEL study must be appended to the study. These could include a Purpose and Need Development Memorandum, Range of Alternatives White Paper, and Screening Process Technical Memorandum.

CHAPTER 5 TRANSITIONING FROM A PEL STUDY TO PROJECT DEVELOPMENT AND NEPA



Key Points

- When beginning a project-level NEPA process based on a PEL study, it is necessary to identify whether any conditions have changed since the study was completed (Section 5.1).
- NEPA scoping provides an opportunity to present the PEL study information and make needed updates (Section 5.2).
- The purpose and need from the PEL study may be directly incorporated into the NEPA document. If there are changes, the purpose and need must be re-vetted with agencies during NEPA (Section 5.3).
- The Class of Action for the project plays an important role in how the alternatives analysis is incorporated from the PEL study into the NEPA process (Section 5.5).
- The SEO helps in determining what information from a PEL study may be incorporated into a NEPA document (Section 5.8).



5.1 Considerations Moving into NEPA

The following checklist (from 23 CFR 450, Appendix A, Question 7) helps determine what must be considered in transitioning from a PEL to NEPA:

- How much time has passed since the planning studies or technical analysis and corresponding decisions were made?
- Were the future year policy assumptions used in the transportation planning process related to land use, economic development, transportation costs, and network expansion consistent with those to be used in the NEPA process?
- Is the information still relevant and valid?
- What changes have occurred in the area since the PEL study was completed?
- Is the information in a format that can be appended to an environmental document or reformatted to do so?
- Are the analyses in the PEL study or document based on data, analytical methods, and modeling techniques that are reliable, defensible, and consistent with those used in other transportation studies and project development activities? Are they available for review?
- Were the DOT&PF, SEO, tribes, other agencies, and public involved in the relevant planning analysis and corresponding planning decisions? Is this involvement adequately documented?



Another option for timing the development of a PEL study is to initiate it in conjunction with the NEPA process. This is described in 23 CFR 450, Appendix A, Question 9.

One way this can be done is through a “Tiered EIS” in which the first tier EIS serves in a similar role to a PEL study—to establish general travel corridors, modes, and/or packages of projects.



- Were the planning products made available to other agencies and the public during NEPA scoping?
- During NEPA scoping, was a clear connection between the decisions made in planning and those to be made during the project development stage explained to and acknowledged by the public and other stakeholders?
- Are natural resource and land use plans being informed by transportation planning products and vice versa?

5.2 NEPA Scoping

A robust NEPA scoping process is required that includes:



Methodology

- Making the PEL study and any other analysis or products developed during the PEL process available for public review and comment by members of the general public and federal, state, local, and tribal governments.
- Providing notice of the intention of the lead agency to adopt or incorporate by reference the analysis and products developed during the PEL process.
- Describing how the PEL methodologies must be presented in NEPA.
- Identifying steps that must be taken with each federal, state, and local agency and tribal governments during NEPA scoping.
- Determining if any unresolved issues exist and planning to resolve them during NEPA.
- Compiling critical issues identified in the PEL study that need to be considered in the NEPA process.
- Compiling issues identified during the PEL process that are important in making a NEPA Class of Action determination.

Procedures for Class of Action determinations and completing a NEPA document are detailed in the *Alaska Environmental Procedures Manual*.

5.3 Purpose and Need

The purpose and need statement developed during a PEL process is similar to the one used during a NEPA process, and should be developed following CEQ regulations and FHWA regulations and guidance.⁸ However, the purpose and need statement prepared during the PEL study must be updated and re-vetted with state and federal resource agencies when:

- The NEPA study area is different than the PEL study area,
- Area conditions have changed, or
- The NEPA process is being initiated more than 5 years after the PEL study was adopted.

Even within the 5-year timeframe, review of data such as land use, safety, economic development, and travel demand must be undertaken to determine if any conditions have changed since the PEL study was adopted.

5.4 Transportation System Data

Travel demand forecasting, regional development and growth, land use, growth management and development, and population and employment are all types of planning analyses that can be incorporated into a subsequent environmental review process. For this information to be acceptable in a NEPA process, it needs to have been developed using the ten 23 U.S.C. 168 conditions that are described in **Section 1.2** of this Guidebook.

⁸ 23 CFR 771.111(f); FHWA, Technical Advisory T 6640.8A, "Guidance for Preparing and Processing Environmental and Section 4(f) Documents" (Oct. 30, 1987) accessed Feb. 18, 2021 at https://www.environment.fhwa.dot.gov/legislation/nepa/guidance_preparing_env_documents.aspx

5.5 Alternatives Analysis

The alternatives evaluated and recommended in a PEL study provide the framework for alternatives development in the NEPA process. The decisions related to which PEL study alternatives advance into NEPA depend on the timing and Class of Action for the NEPA process, and whether there have been regulatory changes or changes in physical conditions in the project study area since the PEL study concluded.

Assuming that the transition from the PEL study to the NEPA analysis occurs within a 5-year timeframe:

- If the NEPA Class of Action is a **categorical exclusion (CE)**, it is acceptable to carry one recommended alternative from the PEL study to be fully analyzed in the NEPA process.
- If the NEPA Class of Action is an **Environmental Assessment (EA)**, at least one recommended build alternative from the PEL study plus the No Build Alternative must be advanced. However, EAs can evaluate more than one build alternative. If the PEL study identified multiple reasonable alternatives, multiple alternatives may be advanced for detailed analysis in the NEPA process. If new reasonable alternatives that were not previously examined are brought up during NEPA scoping, they must be included in the NEPA alternatives evaluation process.
- If the NEPA Class of Action is an **Environmental Impact Statement (EIS)**, all reasonable alternatives must be evaluated in the EIS. If alternatives were eliminated from consideration in the PEL study, they must be incorporated by reference and the reasons for elimination summarized (and re-confirmed) in the NEPA document. If new reasonable alternatives that were not previously examined are brought up during NEPA scoping, they must be included in the NEPA alternatives evaluation process.
- A PEL study may also recommend **no action** or multiple projects with **various Classes of Action**.

In all circumstances, consultation with the SEO is recommended before submitting a **Class of Action Consultation Form**.

The PEL study alternatives analysis must be re-vetted with state and federal resource agencies during the NEPA process. If any regulatory or physical conditions have changed since completion of the PEL study, it may be necessary to update the analysis with new data. While this may result in the same outcomes as the PEL study, an alternative that was not recommended by the PEL study may need to be examined during the NEPA process.

5.6 Environmental Analysis and Mitigation

Environmental resource identification, analysis, and mitigation developed during a PEL study provides useful context to the subsequent NEPA process. It must be structured to identify:

- Key environmental resources in the study area.
- Potential resource impacts.
- Resources that may require avoidance or minimization of impacts during the refinement of alternatives.
- Supplemental data needed for the NEPA process.
- Resources reviewed in the PEL study, resources not reviewed, and why.
- Mitigation measures to more fully explore during the NEPA process.

This information provides critical input to NEPA scoping, the likely NEPA Class of Action determination, and budget and schedule needed for the NEPA process.

5.7 Public and Agency Involvement

Information obtained from the PEL process about public and agency issues can help focus efforts during the NEPA process. During NEPA scoping, the PEL Questionnaire can help determine what steps to take



with agencies during the NEPA process, critical issues identified by each agency, and agency input on environmental issues and mitigation. Issues obtained during the PEL process from the general public can focus NEPA public involvement activities.

5.8 SEO Role in Transition to NEPA

The SEO takes the information presented above into consideration to inform the decision on which planning products produced in a PEL process can be carried forward to the NEPA process(es). Updates may be required before a planning product can be used if there have been changes to regulations or the affected environment in the period between completion of the PEL study and initiation of the NEPA process. The completed PEL Questionnaire can inform whether PEL contents remains valid.

Figure 8 illustrates some planning products and components of a PEL study that can be used in a subsequent NEPA process. These include transportation system analyses, purpose and need, data collection, and alternatives.

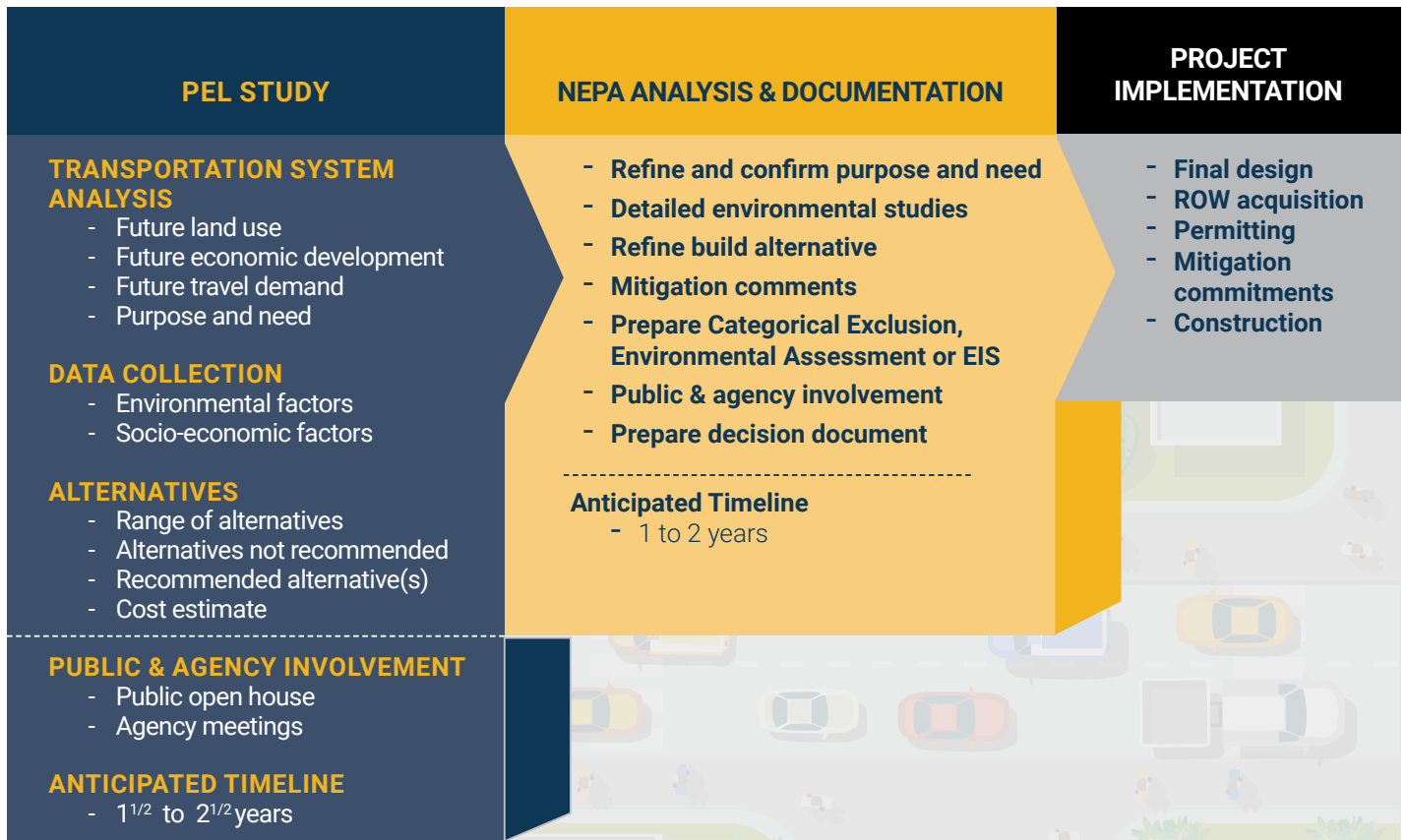


FIGURE 8. TRANSITION FROM PEL STUDY TO NEPA TO IMPLEMENTATION

CHAPTER 6 PEL BEST PRACTICES



Key Points

- Over the past 10 years or more, PEL studies have been developed in multiple states.
- FHWA has compiled lessons learned and best practices from these experiences.
- PEL studies conducted across the country offer best practices for specific steps in the PEL process (Sections 6.1 through 6.5).
- Lessons learned from PEL projects nationwide can inform PEL projects in Alaska (Section 6).



The following five sections provide examples from different PEL projects, describing how each of these treated different components of the PEL process. Each of these examples describes approaches that could be considered on PEL projects in Alaska.

6.1 Developing Purpose and Need Examples

The Wheat Ridge, Colorado, Wadsworth Boulevard Widening project team saved 4 to 6 months in the subsequent EA process by using the exact same language from the purpose and need statement from the 2015 *Wadsworth Final PEL Study*. FHWA was closely involved in developing the language used in the original PEL study purpose and need. Data were updated from the original PEL study to reflect the latest regional transportation plan travel demand forecasting volumes. Crash data used in the PEL study were based on the most recent Colorado DOT dataset. <http://www.ci.wheatridge.co.us/DocumentCenter/View/30879/Appendix-B1-Wadsworth-PEL-to-EA-Transition-Report>.

In Idaho Falls, Idaho, the purpose and need statement for the *I-15/US 20 Connector Planning and Environmental Linkages (PEL) Study Report* (HDR 2020) was carefully developed together with FHWA. Since future related projects may be smaller in size, the purpose and need from the *I-15 and US 20 Connector PEL Study* was crafted to serve as a framework for project-level NEPA purpose and need statements intended for smaller projects. In this case, only some elements of the *I-15/US 20 Connector PEL Study Report* purpose and need would be used. It was also written broadly enough to allow the transportation agencies to investigate an off-alignment alternative that was better able to address regional travel needs.

6.2 Alternatives Development and Evaluation Examples

The Trunk Highway 65 PEL Study in Minneapolis, Minnesota (Minnesota DOT 2021), carefully selected measures of effectiveness to be used in the different screening levels for alternatives. The participating agencies (including FHWA) were highly involved in selecting performance measures to be used at each level of screening.

An example of a project that analyzed a wide range of alternatives is the *I-25 Central PEL Study* in downtown Denver, Colorado (Colorado Department of Transportation, FHWA, and Denver Department of



Transportation and Infrastructure 2020), which initially considered a breadth of engineering and access minimization alternatives.

- The alternatives included eliminating the interstate (I-25), converting the current interstate to an expressway by burying or elevating some lanes, changing the alignment of the interstate, exploring various geometric options (e.g., reconfiguring interchanges), adding managed lanes, replacing ramps with collector/distributor roads, and adding braided ramps.
- Access minimization alternatives, such as closing some interchanges or ramps, were explored.
- Transportation Demand Management and Intelligent Transportation System solutions were developed, including tolling ramps or lanes, adding rail or bus solutions, providing remote parking with a transit circulator into downtown, and more.
- Operations and maintenance alternatives were examined, including incident management, freight management, and implementation of a distracted driving zone:

<https://www.codot.gov/projects/i-25-santa-fe-20th-street-pel>.

On the *I-25 Central PEL Study*, the alternatives analysis was also customized to allow for accelerated design and environmental review to replace two bridges with critical structural deficiencies. This project is encompassed within the PEL study area but is proceeding on a faster timeframe because of the structural deficiencies.

6.3 Environmental Issues Consideration Examples

A best practice demonstrated in the *SH 66 PEL Study Report* (Colorado) (FHU 2017) succinctly summarizes “Next Steps for Implementation” for each resource, such as agency and stakeholder involvement, resource findings and locations, schedule considerations, regulatory setting, NEPA scoping and funding, design, construction, and mitigation considerations. The report also provides a high-level map of each environmental resource:

https://www.codot.gov/library/studies/co-66-pel/Assets/sh66_pel_report_final.pdf.

When creating a PEL, it is acceptable to use information that is less detailed than required for a NEPA process. The information and sources must be described so it is clear to the project team what will need to be updated in the NEPA process. In the SH 66 example, the content for the environmental resource map was less detailed than that required for a NEPA process:

- Wetlands were mapped showing aerial photo interpretation and high-level field review rather than delineations, which would be required for NEPA.
- Already available critical habitat mapping was used for threatened and endangered species rather than field review as required by NEPA.
- Secondary sources were used for mapping of parks and trails.

Existing noise conditions shown were noise sensitive land uses rather than monitored levels, which would be needed for NEPA. **Figures 9 and 10** are examples (taken from the SH 66 PEL Study Report) that show noise sensitive land uses and Next Steps for Implementation, respectively.

- Secondary source data were used to map known hazardous materials rather than field review and research, which would be required for NEPA.
- Existing historic properties that were displayed included structures already on the State Historic Preservation Officer’s list plus properties that are 45 years or older rather than properties that were surveyed and determined eligible, which would be needed for NEPA.

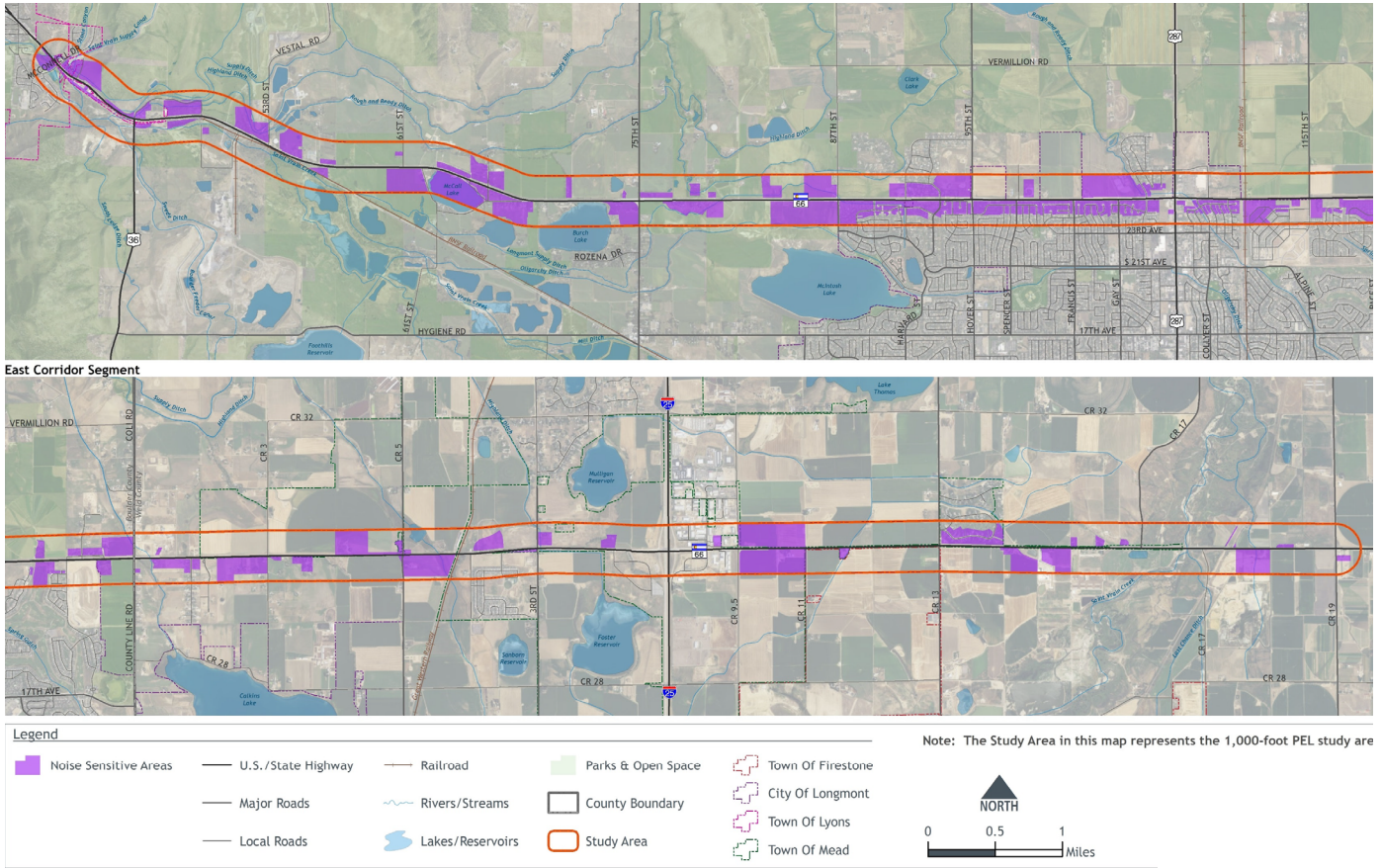


FIGURE 9. NOISE SENSITIVE AREAS EXAMPLE (SH 66 PEL STUDY)



Traffic Noise

Consideration of traffic noise along this corridor is important because many properties have noise-sensitive activities. Noise is generally defined as unwanted or excessive sound. FHWA established a regulation, and both FHWA and CDOT have established related guidelines for evaluating noise levels, potential impacts, and potential abatement measures.

Next Steps for Implementation

WHO?	Potential agency and stakeholder involvement	<ul style="list-style-type: none"> ▶ FHWA ▶ CDOT ▶ Local Agencies ▶ Local property owners and tenants
WHAT?	Resource findings	Noise analyses must be performed on Type I projects if noise-sensitive receptors are present within the project study zone. Type I projects include increasing the number of through traffic lanes or significantly changing the horizontal or vertical alignment of an existing highway. Table 4.6 summarizes existing noise-sensitive areas in the PEL study area.
WHERE?	Resource locations	Figure 4.6 highlights noise sensitive areas within the 1,000-foot PEL study area, which is more expansive than the noise study zone would be during subsequent NEPA evaluations. During NEPA analysis, the minimal noise study zone would include a 500-foot study zone in all directions from the proposed edge of travelled lanes throughout the extent of the project. For noise evaluations, the study zone may be expanded if warranted.
WHEN?	Critical schedule considerations	Noise evaluations should be performed once: <ul style="list-style-type: none"> ▶ proposed alignments for project alternatives have been identified ▶ traffic projections are available
WHY?	Regulatory setting and general context	<p>23 CFR Part 772: Procedures for Abatement of Highway Traffic Noise and Construction Noise identifies the federal highway noise standards that must be followed in evaluating and abating highway traffic noise pertaining to FHWA projects. This regulation required states to prepare and adopt state-specific guidelines.</p> <p>CDOT Noise Analysis and Abatement Guidelines provide the Colorado procedural and technical requirements for evaluating highway project traffic noise and considering noise mitigation alternatives where noise impacts are identified. The goal of these guidelines is to develop highway projects in a compatible relationship with noise-sensitive land uses.</p>
HOW?	NEPA pre-scoping considerations	<p>Noise evaluation is conducted for Type I projects to determine if traffic noise would have an impact on any receptors (e.g., homes, schools, parks, offices; either existing or permitted for development). "Impact" is defined as meeting or exceeding Noise Abatement Criteria or an increase in noise of at least 10 decibels. Receptors are typically identified as exterior areas of frequent human use at individual properties.</p> <p>The evaluation includes identifying land uses and receptors, measuring and modeling existing traffic noise levels, modeling future traffic noise levels, determining future traffic noise impacts, and (if needed) identifying/evaluating abatement measures. For CDOT to recommend noise abatement, the mitigation must be shown to be feasible and reasonable.</p>
NEXT STEPS?	Funding, design, construction, and mitigation implications	A traffic noise impact and abatement analysis will be conducted for NEPA. If noise abatement appears likely, the Benefited Receptor Preferences Survey can be solicited after the Final Office Review but during the NEPA process (for projects anticipated to meet Categorical Exclusion criteria) or during final design for Environmental Assessment or Environmental Impact Statements. If a simple majority of benefitting receptors favors abatement, then the project becomes committed to constructing and funding the abatement measure(s). Noise walls may cost about \$2 million per mile. The likelihood for abatement to be feasible and reasonable increases with a higher density of impacted receptors.

FIGURE 10. NEXT STEPS FOR IMPLEMENTATION EXAMPLE (SH 66 PEL STUDY)

6.4 Public and Agency Involvement Examples

The *Anchorage, Alaska, Midtown Congestion Relief PEL Study* website included an interactive map as a tool to gather geographic issues input from members of the public. The online map allowed community members to place their comments on areas of concern, and also allowed users to “like” or “dislike” other comments:

www.midtowncongestionrelief.com.

An online public meeting and extensive social media outreach were used for the *Egan-Yandukin PEL Study* in Juneau, Alaska. Online public meetings are more useful at reaching a broader audience than a public open house. They can be less expensive to implement compared to a public open house. The *Egan-Yandukin PEL Study* online public meeting had 168 visitors, as compared to 118 people who attended the in-person open house.

<http://dot.alaska.gov/sereg/projects/egan-yandukin/index.shtml>.

6.5 Implementation Plan Examples

The *US 50 West PEL Study* (Colorado Department of Transportation 2012) identified a recommended plan for the entire 12-mile rural corridor. The preliminary alternatives screening in the *US 50 West PEL Study* was so exhaustive that a future NEPA analysis only needs to focus on a build and no-build scenario. The study also identified initial improvements that would have independent utility and fit within immediately available funding. This is a good example of a PEL process that focuses on developing a vision for a long corridor but also initial staged improvements to be made in the short term. Most of these shorter-term improvements can qualify for categorical exclusions:

<https://www.codot.gov/library/studies/us-50-west-pel-study>.

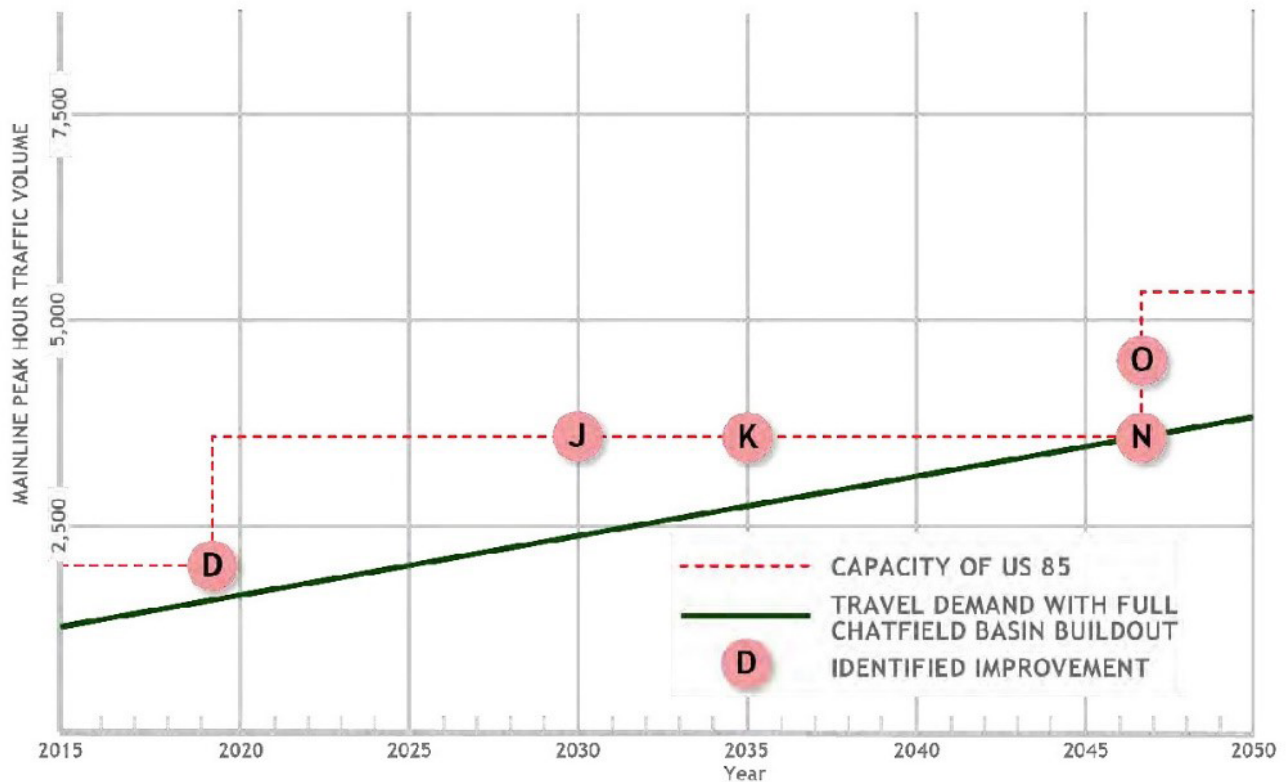
The *US 85 Douglas County PEL Study* (Colorado) (HDR and WSP Parsons Brinckerhoff 2016) included a conceptual staging plan and action plan. These identified build-out travel volumes using both MPO forecast and beyond the MPO forecasts, assuming full development of the corridor. Long-term projects were linked to future traffic demand triggers so that funding responsibilities could be identified by timeframe. **Figure 11** on page 48 shows an example of travel demand scenarios taken from the US 85 PEL Study:

<http://us85douglascounty.com/pel-study>.

6.6 Summary of Lessons Learned

Presented below are PEL lessons learned collected as a part of development of this Guidebook from PEL studies conducted in numerous states. This information is documented in the *PEL Benefits: Measuring the Benefits of Planning and Environmental Linkages* (FHWA 2015) and in the *Planning and Environmental Linkages Peer Exchange Summary Report* (FHWA 2019):

https://www.environment.fhwa.dot.gov/env_initiatives/pel/pel_benefits_report.aspx.



Potential Triggers for SH 67 to Titan Parkway

FIGURE 11. TRIGGERS FOR INFRASTRUCTURE NEEDS RELATED TO TRAVEL DEMAND (US 85 PEL STUDY)

https://www.environment.fhwa.dot.gov/env_initiatives/pel/peer_exch_FHWA-CO_4-3-19.pdf

Public and Agency Involvement

- Take time to clearly describe what a PEL process is because it is a new term for many people. Included with this is communicating that there is no designated funding for construction.
- Make sure that state and federal resource agencies clearly understand that the PEL process intends to use analyses and products in a subsequent NEPA process so they will understand how important their involvement is in the PEL process.
- In rural areas, early 3-C involvement of non-metropolitan local transportation officials is important to make sure the recommended alternative is acceptable and included in subsequent plans.

Environmental Data Collection

- Input from state and federal resource agencies is important to determine what data to collect. Also consider what resources may be important to the alternatives evaluation process (note: resources protected by other federal statutes must be carefully considered).
- Carefully consider all environmental impacts. They may be substantial enough that the project should not advance into the NEPA stage.

Purpose and Need

- Adequate data collection (traffic, safety, connectivity) to inform the major elements of purpose and need is essential to show that the purpose and need is based on rational and defensible data.
- Consider using goals and objectives to adequately capture the input and concerns of local agencies.

Alternatives Development

- Carefully consider what level of detail is appropriate for the development of alternatives. A PEL study can become costly if too much detail is used for engineering tasks, including civil, drainage, and traffic. Detailed engineering work done during a PEL study may have to be redone during the NEPA phase.

Alternatives Screening/Evaluation

- Evaluation criteria need to be carefully selected to represent purpose and need factors as well as resources or issues that might be considered fatal flaws, such as substantial environmental or community impacts, or engineering infeasibility.
- Carefully document all alternatives considered. Documentation must describe what the alternative is, whether it is advanced or eliminated, and why. This documentation must be consistent with documentation typically needed for NEPA.

Involvement of Federal Transportation Agencies

- Involvement of FHWA (or the SEO in Alaska) or FTA is important to ensure the planning products may be incorporated in a subsequent environmental review process.

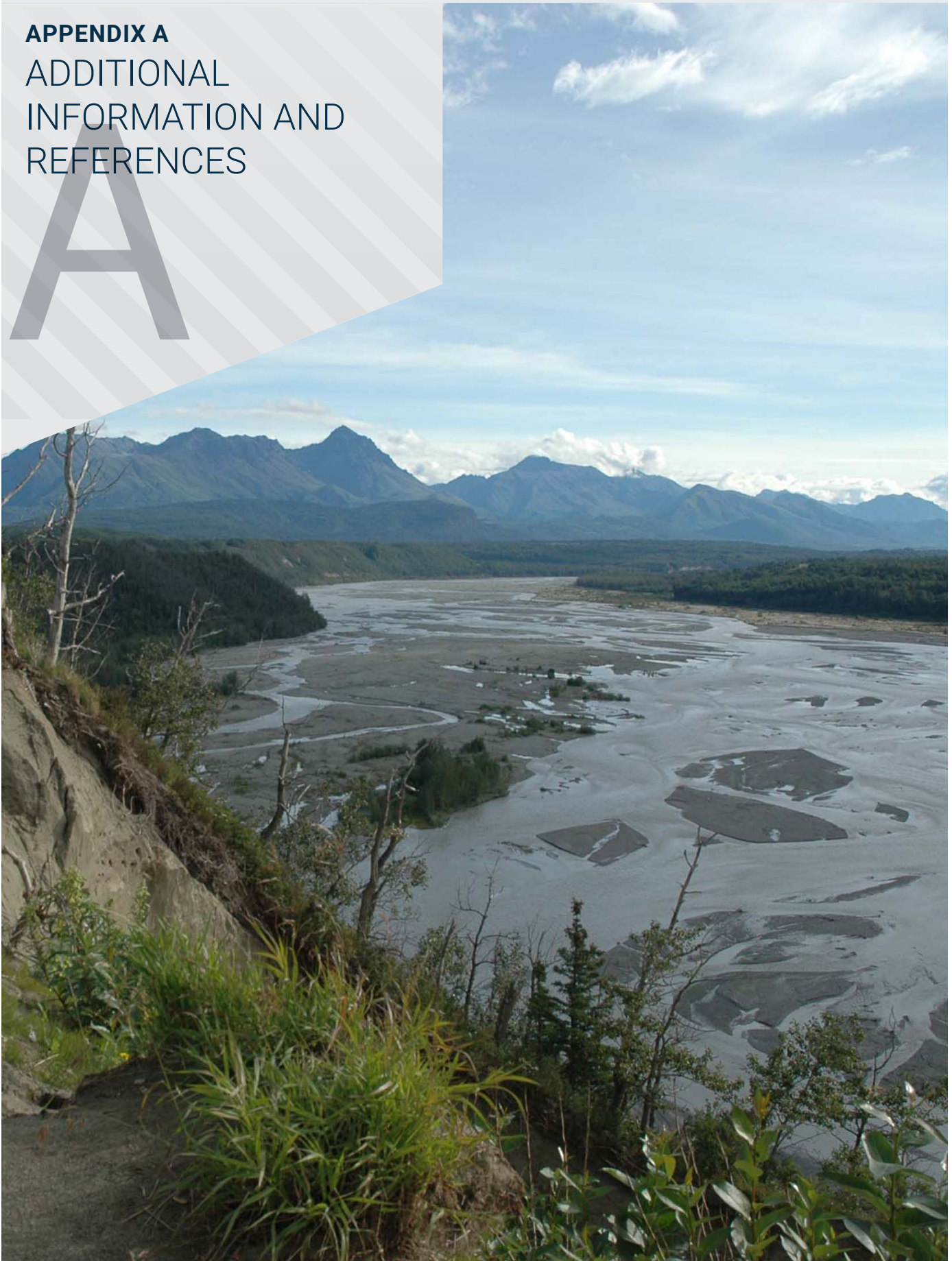
Documentation

- Develop a transition report or form after the PEL process has been completed to inform the project development/NEPA team of specific issues to be addressed in NEPA. This documentation can also be used to determine if the project is financially feasible.

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APPENDIX A
ADDITIONAL
INFORMATION AND
REFERENCES

A



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- FHU. 2017. SH 66 Planning and Environmental Linkages Study Report. Accessed February 2, 2021, at: https://www.codot.gov/library/studies/co-66-pel/Assets/sh66_pel_report_final.pdf.
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- HDR. 2017. Wadsworth Boulevard Widening: Transition from PEL to NEPA Summary Report. Accessed December 2, 2019, at: <http://www.ci.wheatridge.co.us/DocumentCenter/View/30879/Appendix-B1-Wadsworth-PEL-to-EA-Transition-Report>.
- HDR. 2020. I-15/US 20 Connector Planning and Environmental Linkages (PEL) Study Report. Available at: <https://i15us20connector.com>
- HDR and WSP Parsons Brinckerhoff. 2016. Planning and Environmental Linkages (PEL) Report for the Douglas County US 85 Corridor Improvements Study. December 2016. Available at: <http://us85douglascounty.com/pel-study/>
- Minnesota Department of Transportation. 2021. Highway 65 Safety and Mobility Corridor Study. Available at: <https://www.dot.state.mn.us/metro/projects/hwy65hamlake-slp/>



Web Sources/Links

2017 NEPA Assignment MOU: http://www.dot.state.ak.us/stwddes/desenviron/assets/pdf/nepa/nepa_mouapproved.pdf

Memorandum Regarding Integration of Planning and NEPA Processes: https://environment.transportation.org/pdf/programs/1-Legal_Memo_re_Planning-NEPA_Linkage-Final.pdf

Guidance on Using Corridor and Subarea Planning to Inform NEPA: https://www.environment.fhwa.dot.gov/env_initiatives/pel/corridor_nepa_guidance.aspx

Every Day Counts: <https://www.fhwa.dot.gov/innovation/everydaycounts/>

Environmental Review Toolkit: <https://www.environment.fhwa.dot.gov/>

Planning and Environmental Linkages—Questions and Answers: https://www.environment.fhwa.dot.gov/env_initiatives/pel/pel_quest.aspx

PEL Hypothetical Case Studies: https://www.environment.fhwa.dot.gov/env_initiatives/pel/publications.aspx

PEL Benefits: Measuring the Benefits of Planning and Environmental Linkages: https://www.environment.fhwa.dot.gov/env_initiatives/pel/pel_benefits_report.aspx

Alaska Highway Preconstruction Manual: http://www.dot.state.ak.us/stwddes/dcsprecon/assets/pdf/preconhwy/preconstruction_all.pdf

Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations: <https://www.energy.gov/sites/prod/files/2018/06/f53/G-CEQ-40Questions.pdf>

DOT&PF Civil Rights Office: <http://www.dot.state.ak.us/cvlrts/index.shtml>

Wadsworth Boulevard Widening Transition from PEL to NEPA Summary Report: <https://www.ci.wheatridge.co.us/DocumentCenter/View/30879/Appendix-B1-Wadsworth-PEL-to-EA-Transition-Report>

I-25 Central PEL Study: <https://www.codot.gov/projects/i-25-santa-fe-20th-street-pel>

SH 66 Planning and Environmental Linkages Study Report: https://www.codot.gov/library/studies/co-66-pel/Assets/sh66_pel_report_final.pdf

Midtown Congestion Relief PEL Study: <http://www.midtowncongestionrelief.com/>

Egan-Yandukin PEL Study: <http://dot.alaska.gov/sereg/projects/egan-yandukin/index.shtml>

US 50 West PEL Study: <https://www.codot.gov/library/studies/us-50-west-pel-study>

US 85 Douglas County PEL Study: <http://us85douglascounty.com/pel-study/>

PEL Benefits: Measuring the Benefits of Planning and Environmental Linkages: https://www.environment.fhwa.dot.gov/env_initiatives/pel/pel_benefits_report.aspx

Planning and Environmental Linkages Peer Exchange Summary Report: https://www.environment.fhwa.dot.gov/env_initiatives/pel/peer_exch_FHWA-CO_4-3-19.pdf

Regulations/Legislation Links

23 CFR 450.210: <https://www.govinfo.gov/content/pkg/CFR-2011-title23-vol1/pdf/CFR-2011-title23-vol1-sec450-210.pdf>

23 CFR 450.212: <https://www.govinfo.gov/content/pkg/CFR-2012-title23-vol1/pdf/CFR-2012-title23-vol1-sec450-212.pdf>

23 CFR 450.316 (April 2017): <https://www.govinfo.gov/content/pkg/CFR-2017-title23-vol1/pdf/CFR-2017-title23-vol1-sec450-316.pdf>

23 CFR 450.318: <https://www.govinfo.gov/content/pkg/CFR-2011-title23-vol1/pdf/CFR-2011-title23-vol1-sec450-318.pdf>

23 CFR 771: <https://www.govinfo.gov/content/pkg/CFR-2016-title23-vol1/pdf/CFR-2016-title23-vol1-part771.pdf>

40 CFR 1500.1: <https://www.govinfo.gov/content/pkg/CFR-2011-title40-vol33/pdf/CFR-2011-title40-vol33-sec1500-1.pdf>

40 CFR 1501.10: <https://www.law.cornell.edu/cfr/text/40/1501.10>

40 CFR 1502.13: <https://www.govinfo.gov/content/pkg/CFR-2012-title40-vol34/pdf/CFR-2012-title40-vol34-sec1502-13.pdf>

23 U.S.C. 139: <https://www.govinfo.gov/content/pkg/USCODE-2017-title23/pdf/USCODE-2017-title23-chap1-sec139.pdf>

23 U.S.C. 168: <https://www.govinfo.gov/content/pkg/USCODE-2015-title23/pdf/USCODE-2015-title23-chap1-sec168.pdf>

23 U.S.C. 327: <https://www.govinfo.gov/content/pkg/USCODE-2011-title23/pdf/USCODE-2011-title23-chap3-sec327.pdf>

DOT&PF Policy and Procedures: http://dot.alaska.gov/admsvc/pnp/policy_and_procedures.cfm

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APPENDIX B
PEL QUESTIONNAIRE

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**State of Alaska
Department of Transportation & Public Facilities**

PLANNING AND ENVIRONMENTAL LINKAGES QUESTIONNAIRE

Please note that this Questionnaire should be prepared at two points in the process: once in the beginning and a final time at the end of the PEL study. Project teams should complete what they can at the beginning and SEO review will focus on planned methodologies to make sure the PEL study is following the appropriate statute and regulation. Regular review of the Questionnaire may assist project teams as the study progresses. The finalized PEL Questionnaire will be appended to the Final PEL Report.

1. Background

- A. What is the name of the PEL document and other identifying project information?
- B. Provide a brief chronology of the planning activities (PEL study) including the year(s) the studies were conducted.
- C. Provide a description of the existing transportation corridor, including project limits, modes, number of lanes, muster, access control and surrounding environment (urban vs. rural, residential vs. commercial, etc.)
- D. Who is the sponsor of the PEL study? (Could be FHWA, DOT&PF or a local agency)
- E. Who is included on the study team (Name and title of agency representatives, consultants, etc.)?
- F. Are there recent, current, or near future planning studies or projects in the vicinity? What is the relationship of this project to those studies/projects?

2. Methodology planned (or used)

- A. What is/was the scope of the PEL Study and the reason for completing it?
- B. Did you use NEPA-like language? Why or why not?
- C. What were the actual terms used and how did you define them? (Provide examples or list)



- D. How do you see these terms being used in NEPA documents?
 - E. What were the key steps and coordination points in the PEL decision-making process? Who were the decision-makers and who else participated in those key steps?
 - F. How must the PEL information below be presented in NEPA?
3. Agency coordination
- A. Provide a synopsis of coordination with federal, tribal, state, and local environmental, regulatory and resource agencies. Describe their level of participation and how you coordinated with them.
 - B. What transportation agencies (e.g. for adjacent jurisdictions) did you coordinate with or were involved in the PEL study?
 - C. What steps will need to be taken with each agency during NEPA scoping?
4. Public coordination
- A. Provide a synopsis of your coordination efforts with the public and stakeholders.
 - B. Provide the corridor vision, objectives, or purpose and need statement.
5. Range of alternatives considered, screening criteria, and screening process
- A. What types of alternatives were looked at? (Provide a one or two sentence summary and reference document.)
 - B. How did you select the screening criteria and screening process?
 - C. For alternative(s) that were screened out, briefly summarize the reasons for eliminating the alternative(s). (During the initial screenings, this generally will focus on fatal flaws.)
 - D. Which alternatives must be brought forward into NEPA and why?
 - E. Did the public, stakeholders, and agencies have an opportunity to comment during this process?
 - F. Were there unresolved issues with the public, stakeholders and/or agencies?
6. Planning assumptions and analytical methods
- A. What is the forecast year used in the PEL study?
 - B. What method was used for forecasting traffic volumes?

- C. Are the planning assumptions and the corridor vision/purpose and need statement consistent with the long-range transportation plan?
 - D. What were the future year policy and/or data assumptions used in the transportation planning process related to land use, economic development, transportation costs and network expansion?
7. Resources (wetlands, cultural, etc.) reviewed; for each resource or group of resources reviewed, provide the following:
- A. In the PEL study, at what level of detail was the resource reviewed and what was the method of review?
 - B. Is this resource present in the area and what is the existing environmental condition for this resource?
 - C. What are the issues that need to be considered during NEPA, including potential resource impacts and potential mitigation requirements (if known)?
 - D. How will the data provided need to be supplemented during NEPA?
8. List resources that were not reviewed in the PEL study and why? Indicate whether or not they will need to be reviewed in NEPA and explain why.
9. Were cumulative impacts considered in the PEL study? If yes, provide the information or reference where it can be found.
10. Describe any mitigation strategies discussed at the planning level that must be analyzed during NEPA.
11. What needs to be done during NEPA to make information from the PEL study available to the agencies and the public? Are there PEL study products which can be used or provided to agencies or the public during the NEPA scoping process?

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APPENDIX C
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