

ODOT Planning and Environmental Linkages Guidance

July 10, 2012

This document provides guidance for linking planning and environmental processes. Oregon has experience coordinating these processes and the concept is not new. This document represents the lessons the state has learned and references federal guidance related to Planning and Environmental Linkages (PEL) and is intended to provide consistency with best practices statewide. Oregon Department of Transportation (ODOT) planners and project managers should use this document before starting a planning effort or prior to project scoping to identify PEL opportunities. As ODOT continues to work through planning and environmental coordination and systematically integrates PEL principles, this guidance document will evolve.

I. What is meant by Planning and Environmental Linkages?

Planning and Environmental Linkages (PEL) is a coordinated approach between transportation planning and the environmental review process. The PEL approach concerns not only the improved linkage of these two somewhat independent processes, but also the systematic integration of environmental review elements into planning. The overarching goals of PEL include creating a seamless decision-making process that minimizes duplication of effort, promoting long-term environmental stewardship, and reducing cost and delay from planning through project delivery. The PEL approach is intended to establish coordination early - starting with transportation problem identification in planning and continuing through the rest of the project delivery process in such a way that environmental, community, and economic issues and concerns are appropriately considered and addressed. PEL lays the foundation for a broad consensus on goals and priorities when developing solutions for the complex issues surrounding the management and construction of the transportation system.

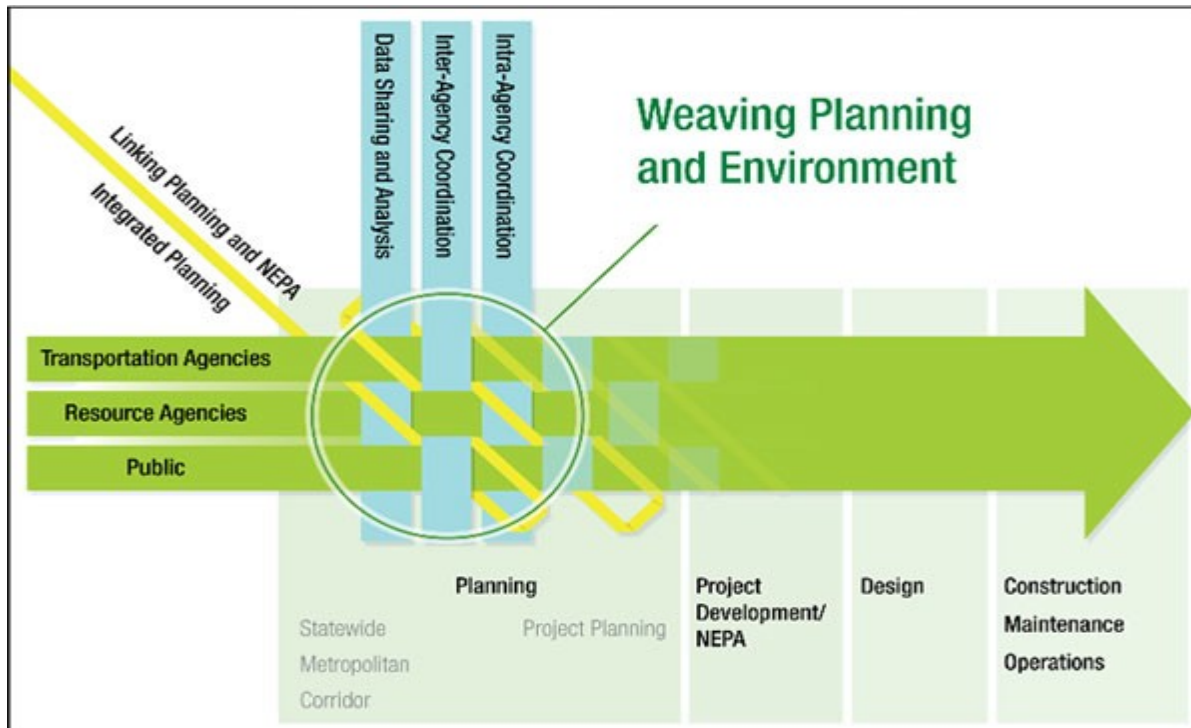
The concept of PEL is illustrated below in Figure 1, where the integrated process begins as a green arrow going from left to right. The planning process is shown including three general stakeholder types - transportation agencies, resource agencies, and the public. In blue, crossing vertically, are the elements of inter-agency coordination, intra-agency coordination, and data sharing and analysis. Two general categories of PEL - (1) linking planning and National Environmental Policy Act (NEPA) processes, and (2) integrated planning - cut diagonally in yellow, and the place where all of these elements intersect is highlighted as weaving planning and environment. The goal of linking planning and NEPA is that as planning transitions into project development, the previous analyses developed in planning, coordination efforts, and decisions are moved forward as well.

Linking Planning and NEPA

Linking planning and NEPA can be generally defined as a partial assimilation of systems and facility planning with project-level decisions that are subject to NEPA. In this context, the planning process is called upon to strategically assess the presence of sensitive natural and human resources as well as the potential impacts to such resources. At the same time, planning is infused with NEPA-like elements and processes (such as the development of a Public Involvement Plan, Problem Statement, etc.), thus potentially laying some of the groundwork for NEPA decision-making. Ideally, planning processes and decisions are based upon an adequate

amount of rigor, documentation, and coordination with resource agencies and potential lead Federal agencies to minimize repetition during the subsequent NEPA process.

Figure 1: PEL Approach to Transportation Decision-Making¹



Linking planning and NEPA is not specifically required by statute or regulation, though it is encouraged through FHWA policies, programs, and guidance. Whether (and how) to link planning with NEPA depends on the specific set of circumstances that are unique to each plan and project, thus each scenario must be strategically evaluated on a case-by-case basis. A successful application of PEL may save time and money.

Integrated Planning

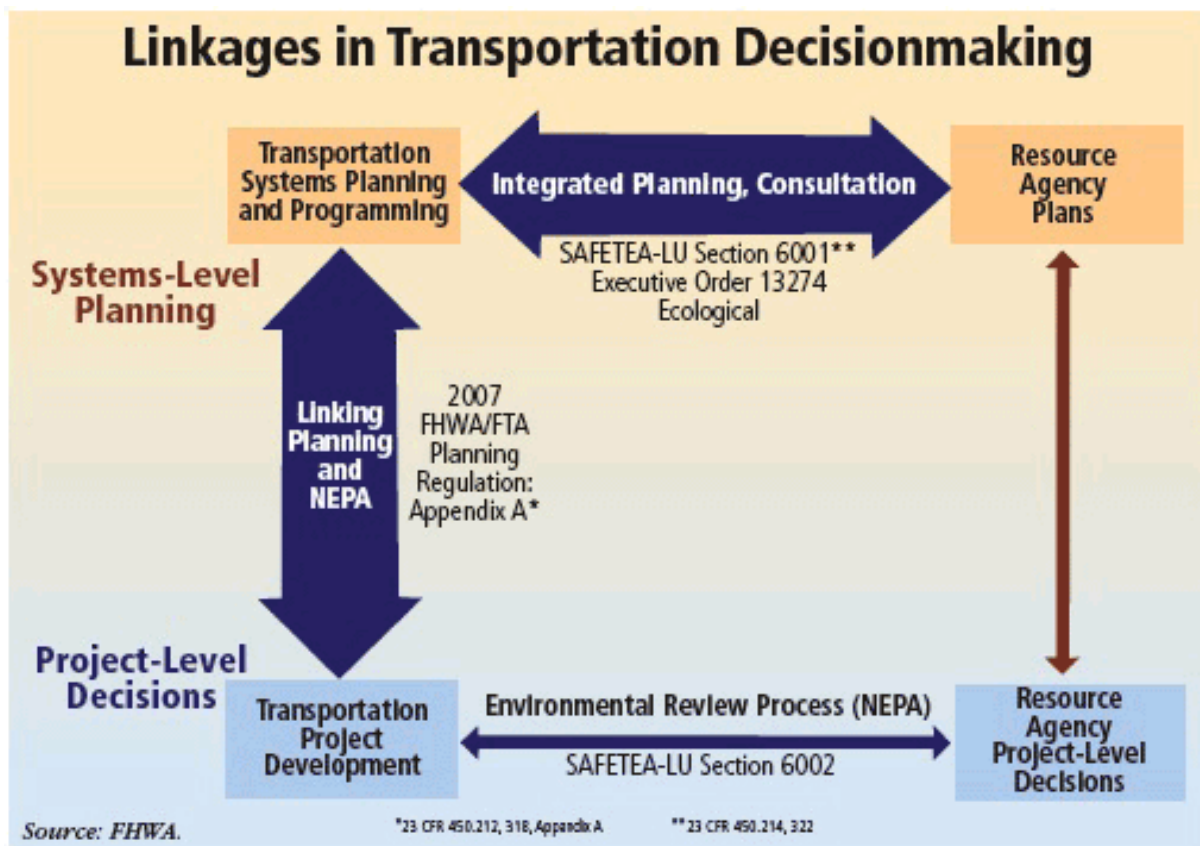
Integrated planning involves the connection between transportation planning, resource conservation and management plans (for instance, local watershed and/or habitat conservation plans), and important information regarding sensitive resources (such as the location of wetlands, endangered species, environmental justice populations, etc.). While resource data can be integrated at any stage of the transportation process (i.e., planning, project development, design, construction, or maintenance), early integration is best since it may be much more difficult to fully connect resource agency goals and priorities at later stages. Integrating respective planning efforts helps develop consensus on how best to confront inconsistencies and generally produces significant time and money saving benefits for transportation decision-making. This type of collaborative planning offers opportunities to see and act on broader scale patterns and trends in our communities, regions, and ecosystems that may be missed if

¹ Federal Highway Administration. 2009. *A Guide to Measuring Progress in Linking Transportation Planning and Environmental Analysis*. U.S. Department of Transportation, FHWA; Washington D.C.

environmental and community aspects are only addressed at the project level. The transportation goals and consensus developed through an integrated planning process should minimize conflicts and surprises during project development. Integrated plans can serve to streamline and provide efficiencies for decision-making during project development.

Whereas each decision to link planning and NEPA depends on the specific circumstances at hand, integrated planning is a more programmatic and fundamental exercise intended to permeate the planning business line. These differences are illustrated below in Figure 2. Many elements of integrated planning are required (of state DOTs and MPOs) by statute and regulation, including coordination with resource agencies and identification of potential environmental mitigation opportunities.

Figure 2: Linking Planning and NEPA vs. Integrated Planning²



II. Why is PEL important?

Both transportation planning and the project development process are intended to help local, state and federal officials reach informed decisions on what transportation improvements to make, and how to make them. Planning and NEPA embrace similar requirements – the consideration of alternatives and their effects, interagency collaboration, public involvement, and

² Barberio, G., R. Barolsky, M. Culp, and R. Ritter. 2008. *PEL – A Pathway to Streamlining and Stewardship*. In FHWA's *Public Roads*, Volume 71, Number 5. Publication Number: FHWA-HRT-08-003.

the like – yet planning and NEPA are often treated as separate and independent processes carried out sequentially. Deficient connections between planning and environmental processes have historically resulted in:

- Insufficient consideration of environmental factors during planning.
- Environmental resource agencies having little influence on transportation planning.
- Planning decisions being re-visited during the NEPA process.
- Long and costly timeframes to achieve project delivery.
- Frustrated public officials, jurisdictional agencies, citizens, and stakeholder groups.

The emergence of PEL as an FHWA initiative speaks to the growing national evidence that the PEL approach can pay substantial dividends. While ODOT has periodically and sporadically applied project-level and program initiatives to integrate environmental process requirements into planning efforts, workable strategies have not yet been formally developed or implemented in a systematic manner.

III. What are the benefits of PEL?

State and local agencies can achieve significant benefits by incorporating environmental and community values into transportation decisions early in planning and carrying these considerations through project development and delivery. Such benefits³ may broadly include:

- ***Relationship-building benefits:*** By enhancing inter-agency participation and coordination efforts and procedures, transportation planning agencies can establish more positive working relationships with resource agencies and the public. Transportation agencies can get better information on environmental issues and can reduce the potential for conflict by engaging resource agencies early in discussions. By engaging interested parties early in the process, agencies enhance public understanding of the overall process and maintain timely interest and involvement.
- ***Process efficiency benefits:*** Improvements to inter-agency relationships and internal agency coordination may help to resolve differences on key issues as transportation programs and projects move from planning to design and implementation. Conducting some environmental analyses at the planning stage can identify potential fatal flaws, reduce duplication of work and settle some issues early, leading to reductions in costs and time requirements, thus moving through the project development process faster and with fewer issues.
- ***On-the-ground outcome benefits:*** When transportation agencies conduct planning activities equipped with information about resource considerations and in coordination with resource agencies and the public, they are better able to conceive transportation programs and projects that serve the community's transportation and conservation needs more effectively. This leads to avoidance/minimization of negative impacts and

³ Federal Highway Administration. *Planning and Environmental Linkages Program Overview*. U.S. Department of Transportation, FHWA, Washington, D.C. Available at: https://www.environment.fhwa.dot.gov/env_initiatives/PEL.aspx

incorporates more effective environmental stewardship in developing acceptable transportation solutions. Moreover, benefits could include assisting resource agencies in achieving their conservation objectives while at the same time identifying a comprehensive mitigation strategy that streamlines future actions in a sub-region or corridor area.

IV. What are the challenges of PEL?

Transportation research reflects that some common challenges to integrating planning and environmental review processes include long-standing agency cultures and process, differing agency missions and goals, lack of trust and understanding, and fear of litigation.⁴ Additional challenges⁵ may include:

- PEL may require more or different environmental evaluation in planning and increased awareness and knowledge from all parties involved. Planning practitioners will need to become more familiar with the environmental process and environmental experts will need to become conversant in the transportation planning process.
- PEL may shift some costs from the NEPA stage to long-range planning, particularly those associated with development of the Problem Statement (which could support the NEPA draft Purpose & Need statement), goals and objectives, evaluation criteria, and alternative development and analysis. While these processes will still be required when NEPA begins, the level of effort required should be reduced because a baseline would be established during planning.
- Integrated planning may create an entirely new cost to the planning process, but one that should create efficiencies in NEPA, environmental permitting, and overall effectiveness at achieving transportation and other agencies' missions. This cost may be accommodated by shifting funds from project delivery to planning
- PEL may require a significant change to existing working relationships. Planning, environment, designers and resource agencies will need to collaborate and communicate on a more consistent basis. ODOT's experience has shown that this enhanced relationship will inevitably require more time of everyone. PEL also requires more resources for metropolitan planning organizations and other planning agencies.

These are not insurmountable challenges and can be overcome with the increased awareness of the opportunities and efficiencies gained through PEL and from programs such as the Collaborative Environmental and Transportation Agreement for Streamlining (CETAS) and planning/project integration processes. Some of these improvements are evident with the success demonstrated in the case studies included in Appendix C of these guidelines.

⁴ Emerson, D. J., and C. Hoffner. 2006. *Improved Linkage between Transportation Systems Planning and the National Environmental Policy Act*. National Cooperative Highway Research Program, Transportation Research Board, Washington D.C. NCHRP 08-36, Task 48.

⁵ ICF International. 2008. *Planning & Environmental Linkages Implementation Resource*. Prepared for the Federal Highway Administration. Available at: <https://www.fhwa.dot.gov/hep/guidance/superseded/pel/index.cfm>

V. What are the primary drivers behind PEL?

The importance of PEL was heightened by the passage of SAFETEA-LU in 2005. PEL implementation is supported by federal transportation law and regulations, as well as FHWA programs and guidance. The most relevant federal drivers include:

- Public Law 109-59 (SAFETEA-LU)
- 23 U.S.C. Sections 134, 135, and 139
- 23 CFR 450 Sections 212, 214, 318, 322, and Appendix A
- 23 CFR 771 Sections 111 and 113
- FHWA’s “Every Day Counts” Initiative – Shortening Project Delivery
- FHWA and FTA Chief Counsels memorandum of February 22, 2005 – “Integration of Planning and NEPA Processes”

ODOT initiatives have also pushed for a better connection between planning and project delivery. The ODOT Project Delivery Team established Operational Notice PD-18 which provides a directive to bring planning information into the development of a project prospectus (i.e., the Planning Checklist). Building on that effort, ODOT is developing new tools to assist with the coordination by requiring a Planning Checklist be completed to better make the bridge from planning to project development.

VI. What is the framework for PEL in Oregon?

The development of the transportation system in Oregon requires consistency with a complex set of planning and environmental laws, rules, and policies. The specific application of these requirements will vary based on the size, scope and context of each proposed plan, program or project. The use of PEL guidance will fit into this framework and identify where transportation planning and environmental review processes present linkage opportunities.

Oregon Transportation Planning

Oregon has a unique planning program that drives and influences the ODOT planning activities. Statewide Planning Goal 12 – Transportation, is the basis for the Transportation Planning Rule (TPR) and ODOT’s State Agency Coordination Rule (SAC). The TPR mandates and guides local Transportation System Plan (TSP) development while the SAC establishes how ODOT produces a unified planning program that makes up the state TSP. The ODOT TSP is comprised of numerous transportation plans developed at various levels of detail, starting with the very general Oregon Transportation Plan (OTP) and ranging to location-specific facility plans. State facilities and systems plans are coordinated with local government TSPs. Environmental analysis and integration is intended to occur with more detail as the plan detail increases. The OTP addresses general recognition of environmental stewardship through goal and policy statements while facility plans can address environmental issues with more detail at the conceptual design level. Table 1 identifies the levels of planning detail and the corresponding levels of environmental analysis.

All of these planning levels have a placeholder for environmental considerations in their respective processes. However, the only state mandate for this analysis is from the Statewide Planning Goals, most specifically, Goal 5 – Natural Resources, Scenic and Historic Areas and Open Spaces which requires local governments to consider the natural environment in their land use and transportation planning decisions. Because of this, most environmental review considerations have historically been deferred to the project development process where NEPA analysis, driven by federal requirements, is performed. However, the planning programs at the state, local and metropolitan level in Oregon are increasing their awareness of the benefits of PEL and are starting to enhance their processes to establish the appropriate levels of coordination and integration.

Table 1: Levels of Planning and Corresponding Environmental Analysis

Planning Levels	Level of Plan Detail	Level of Environmental Analysis
System Plans		
Oregon Transportation Plan	Vision and Goals that include objectives for overall statewide system	Establishes ODOT environmental stewardship commitment.
Modal and Topic System Plans	Statewide policy plans that focus on individual modes and topic areas such as the Oregon Highway Plan. Includes performance indicators.	Review of system level (statewide or regional) environmental issues. High-level environmental policy and goals.
Local Transportation System Plans Regional Transportation System Plans	MPO, City and County transportation plans that establish vision, policies and specify desired solutions. Include performance measures.	Identify system level and “show stopper” environmental issues on identified projects. Environmental analysis and considerations at the system, sub-region and corridor levels.
Facility Plans		
Corridor Plans	Apply goal and policy direction to specific highway segments or transportation services.	
Expressway Management Plans		
Interchange Area Management Plans	Develop plans for a specific site or problem area.	Inventory of environmental issues and analysis for specific impacts at the project level.
Refinement Plans		

ODOT Environmental Review Process

The primary context for ODOT’s environmental review process is the National Environmental Policy Act (NEPA). NEPA directs federal agencies⁶ to make environmentally-informed decisions while coordinating with public and private stakeholders. Because NEPA is an “umbrella” statute, the NEPA process serves as a mechanism for compliance with a myriad of related federal, state, and local environmental requirements (e.g., Endangered Species Act, Clean Air Act, Uniform Relocation Assistance and Real Property Acquisition Policies Act, etc.).

ODOT has historically implemented NEPA in association with the project development process, while under-utilizing preceding transportation planning efforts. A more systematic, deliberate integration of transportation planning and environmental review processes will likely result in considerable time and cost efficiencies, as well as reducing duplication of efforts. For example, because the ODOT facility planning process shares some similar elements with the NEPA process (see Figure 3), integration of these processes and elements could be accomplished on a variety of levels. More specific examples of transportation planning efforts that could provide benefits to the subsequent environmental review process include, but are not limited to, the following:

- involve NEPA practitioners to assist in developing the planning scope of work;
- inclusion of an ODOT Environmental Project Manager in the planning effort;
- consider all relevant conservation and management plans;
- develop a thorough and robust inventory of system or facility deficiencies and needs;
- avoid impacts to sensitive resources, when feasible, thereby lessening the NEPA documentation requirements for the subsequent project(s);
- coordinate early with regulatory agencies regarding potential impacts to resources of concern;
- where possible, establish the general: transportation mode, project limits, and area of potential impacts;
- develop a comprehensive Problem Statement that can be referenced when developing the draft Purpose and Need statement for the NEPA process;
- preliminarily screen and/or eliminate alternatives (this must be based upon NEPA-centric evaluation factors and the criteria and process must be clearly documented, as well as closely coordinated with the future federal action agency);
- take land use actions that help solve the transportation deficiencies; and
- thoroughly document stakeholder involvement, coordination with resource agencies and potential lead NEPA federal agencies and decision-making rationale.

⁶ ODOT assists FHWA Oregon Division with NEPA compliance for projects receiving federal funds and/or requiring federal approvals.

Figure 3 – Related Elements of Facility Planning and NEPA

<u>Facility Planning Elements</u>	<u>NEPA Process Elements</u>
Transportation Deficiencies and Needs	↔ Project Scoping
Problem Statement	↔ Purpose and Need
Solutions Evaluation and Screening	↔ Alternatives
Preferred Solutions	↔ Preferred Alternative

VII. What PEL best practices are recommended for Oregon?

The PEL approach is not new to ODOT. ODOT has implemented several PEL-like processes and programmatic elements over the past two decades. While benefits and efficiencies have been realized through the PEL approach, these gains have been somewhat limited due to several factors, including a lack of PEL awareness and guidance, organizational and funding mechanism barriers, and general uncertainties over PEL-related risks and legitimacy. In order for ODOT to move forward with effective and consistent integration of planning and environmental processes, a comprehensive statewide effort is needed to facilitate procedural and cultural changes.

In 2009 and 2010, ODOT conducted a survey and interview process in order to identify PEL strategies and practices that have worked well in Oregon. Survey and interview participants consisted primarily of planners and NEPA practitioners from ODOT, a few of our partner agencies, and consulting firms. Summaries of the survey and interviews can be accessed through Appendix A and Appendix B of this guidance.

Case studies from each ODOT Region were also reviewed to identify practices that have been applied to planning activities to address PEL concerns. These studies can be accessed through Appendix C of this guidance.

From our knowledge and experience with PEL implementation, the following general issue areas of critical concern have been identified:

- Lack of continuity among staff planners and project managers due to staff turnover at ODOT over the life of a project.
- Early awareness of environmental issues
- Coordination within ODOT and with local, state and federal partners
- Production of meaningful planning products with sustainable decisions
- Documentation of planning actions in a form that can be utilized in a NEPA document
- Public and stakeholder involvement
- Land use issues addressed early
- Use common terminology
- Streamline funding for environmental analysis
- Narrow range of alternatives in plans

Based on ODOT's experience in these issue areas, the following best practice recommendations for PEL have been developed.

Personnel

- A planner should be assigned to the project development team to assist with scoping the project and providing any planning reports that have been prepared.
- Assign ODOT environmental staff and/or consultant teams who could work with planners on each planning effort to inform them of environmental considerations.
- Involve EPMs and technical experts in planning projects and involve planners during the early NEPA project development.

Early Awareness

- Identify and assess any environmental issues and any possible NEPA requirements during transportation planning activities. Early coordination and awareness of environmental issues will help identify efficiencies in the overall project identification and delivery process.
- Establish project parameters in the planning process that will carry over to project development and adequately address public expectations.
- Perform environmental reconnaissance that is appropriate to the level of detail of the planning effort (see Table 1). At the local TSP and state facility plan level the effort should, at a minimum, identify threatened and endangered species, Section 106 properties, existing mitigation sites, Section 4(f) properties, Environmental Justice populations, and any other location-determining environmental requirements.

Coordination

- Establish in each ODOT Region a plan scoping process that engages Planning Managers and Environmental Managers in identifying environmental issues that need to be addressed in the plan and with subsequent projects.
- Ensure that FHWA, as well as other federal and state regulatory agency staff, have the opportunity to be engaged during planning activities to provide context, guidance and expectations early. This will help establish awareness of the issues, concerns and help gain acceptance of the process and decisions made during planning.
- The environmental analysis and language used in planning should be sufficient to be useful in the NEPA process. This will lend confidence in the planning level environmental processes so they will not need to be revisited during the NEPA phase.
- Ultimately, the ODOT EPM and FHWA Oregon Division will need to accept information brought into the NEPA document. As this happens, explicit documentation may be required to record the translation between the terminologies used in these two disciplines.

Planning Products

- Identify, as specifically as possible, the problems of the transportation system/facility that need to be resolved.
- Develop a comprehensive problem statement for each project identified in a planning effort and consider whether this problem statement is appropriate for an environmental document. Where the plan project limits and the environmental document limits are consistent or very similar, use the problem statement to develop the project Purpose and Need statement and the project goals and objectives.
- Produce maps showing the area considered when evaluating the environmental baseline and identifying environmental constraints.
- Identify and document issues needing further study and inform stakeholders of these issues.
- Consider potential direct, indirect, and cumulative environmental impacts and potential comprehensive mitigation strategies during planning.
- Identify and initiate land use actions needed to authorize the project and work towards obtaining local permits.
- The planning process can be utilized to perform sufficient level of analysis to establish environmental classification of a project. FHWA determines environmental classification for NEPA actions.

Planning Documentation

- Document the process used to develop the problem statement, goals and objectives and screening/evaluation criteria in plans.
- Provide an adequate level of detailed documentation to substantiate the rationale for the planning process and decisions that were made.
- Document coordination with resource agencies, including dates, staff and outcomes of meetings and/or decisions or direction provided. Include documentation of efforts made when resource agency staff changes.
- Document environmental review actions associated with planning (goals and criteria, public involvement, and avoidance of sensitive resources).
- Document public and agency involvement and decision-making.
- Provide detailed rationale and documentation for the process used to narrow the number of alternatives in plans, including those alternatives that were considered but not advanced. To be useful for a NEPA process, generally, the narrowing of alternatives will also include environmental considerations.
- Develop a filing and archival process for planning decision documentation to ensure information is transmitted to the project development teams and thus able to support the NEPA process. Each plan that includes projects as implementation actions will have a

Planning Checklist produced when it is completed. This report is a summary of the planning process, products and other information to assist with developing a project Prospectus.

Public and Stakeholder Input

- Planners should meet with project development teams early in project scoping to fully explain the nature and sensitivity of public and other stakeholder concerns.
- Project managers should consult any planning reports that have been produced to better understand what issues were identified and explored, as well as any complexities associated with those issues.
- Planners should provide opportunities for the public to help define the transportation problem that needs resolution, help identify possible alternatives, and to understand why possible alternatives are not viable.
- Public involvement plans for PEL efforts should consider the life of the project/s during both the planning effort as well as the NEPA effort. Be considerate of the NEPA process which will follow. Involve the public strategically, and work to avoid stakeholder burnout by holding meetings at key decision points.

Continuity

- Maintain as much as possible, participant continuity during the process. Linking planning and NEPA processes is most successful when participants continue throughout the planning and NEPA process with minimal turnover.
- Keep team members informed with substantive meetings.

Transitioning from Planning to NEPA

- Recognize that context can change; therefore, the original scope and intent may change between the transportation planning effort and the development of a NEPA document for a specific transportation improvement.
- A STIP project needs to be consistent with and authorized in regional and local TSPs and facility plans. The development of a project should be consistent with applicable plan direction.
- Be aware of independent utility and the potential for future NEPA segmentation when identifying transportation “projects” during planning. Planning should strive to identify discrete projects where appropriate to engage and add value to the environmental process.
- Work closely with the future federal NEPA action agency to determine and clarify the level of detail produced in a plan. This will assist with understanding the acceptable level of engagement with the NEPA process. This clarification will help minimize revisiting decisions made in a plan.

Program Direction

- Provide cross-training and rotational opportunities for ODOT staff to improve planning/NEPA integration.

- Train local governments about the scope and rigor expected of the environmental analysis during planning. This can be done as an early phase of developing a TSP or facility plan.
- Re-evaluate the ODOT organizational structure to help avoid inconsistencies and roadblocks in planning/NEPA integration. Consider the potential benefits of organizing EPMs under Planning at ODOT instead of within Project Development.
- Include specific environmental assessment task in planning work order contracts. Identify ODOT policy and guidance regarding the appropriate level of environmental scoping and analysis that should be built into the work scope for the development of TSPs and facility plans.
- Establish a process to integrate planning and project-level environmental review that is acceptable to the FHWA.
- Adequate budget and other resources should be assigned to the planning process to adequately assess environmental issues.

VIII. Are there examples of how PEL has been applied in Oregon?

Case studies from each ODOT Region have been developed to illustrate some of ODOT's various PEL efforts to date. These studies are available in Appendix C of this guidance.

IX. How can I learn more about PEL?

A few of the most comprehensive and practical sources of PEL information include:

American Association of State Highway and Transportation Officials (AASHTO). 2008. *Using the Transportation Planning Process to Support the NEPA Process*. AASHTO–Center for Environmental Excellence. Washington DC. AASHTO Practitioner's Handbook No. 10.

Federal Highway Administration (FHWA). *Planning and Environmental Linkages Program Overview*. U.S. Department of Transportation, FHWA, Washington, DC. Available at: https://www.environment.fhwa.dot.gov/env_initiatives/PEL.aspx

Federal Highway Administration (FHWA). 2011. *Guidance on Using Corridor and Subarea Planning to Inform NEPA*. U.S. Department of Transportation, FHWA, Washington DC.

National Cooperative Highway Research Program (NCHRP). 2008. *Linking Environmental Resource and Transportation Planning*. NCHRP, Transportation Research Board, Washington DC. NCHRP Project 25-25, Task 32.

Federal Highway Administration (FHWA). 2005. *Integration of Planning and NEPA Processes*. U.S. Department of Transportation, FHWA, Washington DC. Available at: <https://www.fhwa.dot.gov/hep/guidance/plannepalegal050222.cfm>

An annotated bibliography of these as well as other federal and state PEL resource information has been compiled and can be accessed through Appendix D of this guidance.

X. List of Appendices

Appendix A – Oregon PEL Phase I Survey Summary

Appendix B – Oregon PEL Phase II Interviews Summary

Appendix C – Oregon PEL Case Studies

Appendix D – Annotated Bibliography of PEL Resources