The Federal Highway Administration (FHWA) has long promoted the integration of transportation and environmental planning processes to streamline project development and environmental review. In 2006, FHWA developed the Planning and Environmental Linkages (PEL) program to encourage transportation decisionmakers to incorporate environmental, community, and economic goals early in the transportation planning process. Using PEL analyses, studies, decisions, and materials developed during the planning process, transportation planners can make more informed decisions about future project development and environmental reviews. PEL is a flexible approach to planning and environmental review that helps State and local agencies establish integrated and informed decisionmaking processes that help to reduce duplication of efforts.

Over the past decade, the PEL program has provided technical assistance, guidance, and workshops on how planning is related to the environmental review process. In recent years the PEL process has promoted an integrated and collaborative approach to decisionmaking through planning, project development, design, realty, and construction. To better describe the range of PEL approaches and promote the benefits that PEL creates for State and local agencies, FHWA published PEL Benefits: Measuring the Benefits of Planning and Environmental Linkages in October 2015. This report describes the 10 most common PEL benefits, some of which are highlighted in the case studies below and on the next page.

PEL Provides State and Local Agencies with a Range of Qualitative and Quantitative Benefits

**Assisting the Environmental Review Process:** PEL creates a strong foundation for the environmental review process by collecting and organizing pertinent planning and environmental information from the start of the project development process. This makes it easier for planners to consider potential impacts and public input and proactively identify and address potential concerns more effectively.

**Example in Practice:** Denver, Colorado is one of many planning jurisdictions across the country that faces fiscal constraints when developing “shovel-ready” projects without confirmed funding sources. Since funding sources sometimes require projects to meet specific timeframes upon award, the Colorado Department of Transportation (CDOT) partnered with local governments to expedite the environmental review process with the assistance of a PEL study. In 2009, the city and county of Denver implemented a PEL study to explore ways to improve safety and congestion on Federal Boulevard, a major north-south arterial in central Denver. The process included substantial public outreach and analysis of impacts on historical resources. In instances where entering into an immediate environmental review is not feasible, PEL studies provide an alternative that moves projects toward “shovel-ready” status.

**Cost and Time Savings:** In many cases, PEL lowered costs and shortened timelines for project development and environmental review.
Example in Practice: The Utah Department of Transportation (UDOT) reported significant cost and time savings from using the Utah Planning and Environmental Linkages (uPEL) approach. uPEL is a geospatial tool that brings together diverse datasets to identify environmental, community, and economic considerations early in the transportation planning process. In 2012, while the uPEL tool was being tested, UDOT reported that the cost savings from the program that year totaled $100,000. This savings was attributed to the tool, which reduced the labor hours required for conducting environmental reviews and preparing categorical exclusions.

The Uintah Basin Rail project offers another example of the cost savings generated by uPEL. In 2014, UDOT reported a savings of almost $2,500,000 on the environmental review of the Uintah Basin and a time savings of between 22 to 28 months. These findings led UDOT to decide not to pursue the rail project, which would have cost at least $5 billion to build.

In addition to using uPEL to screen alternatives, UDOT incorporated the tool into other work processes. UDOT staff used the tool on a project to install more than 400 signs across Utah to determine which locations required additional screening for environmental impacts. Using uPEL, UDOT determined that three-quarters of the locations had no potential impacts and did not require detailed studies, significantly reducing the agency’s workload.

Exporting PEL Strategies to the Local Level: Institutionalizing the PEL process can help smaller municipalities without planning resources or in-house expertise improve connections between planning and the environment.

Example in Practice: The Regional Planning Commission of Greater Birmingham (RPCGB) launched the Advanced Planning, Programming and Logical Engineering (APPLE) Program to help smaller municipalities that lacked the resources or internal expertise carry out integrated, proactive planning. APPLE introduced and institutionalized PEL concepts, making connections between planning and the environment that smaller municipalities previously could not afford to make. RPCGB expanded this effort to help local governments develop comprehensive plans through its Building Communities Program. RPCGB encourages municipalities to conduct APPLE studies for the projects that they identify through the comprehensive planning process to determine their feasibility.

Enhanced Community Involvement: A PEL study can give the public an early opportunity to consider different options and direct a future project in a way that is more acceptable to the community.

Example in Practice: CDOT has found that implementing PEL studies offers an opportunity for earlier and more robust community involvement. Throughout Colorado, communities engage with project teams to develop project components, such as the purpose and need, logical termini, and identification of reasonable alternatives. In the case of the US 50 West PEL Study, the community provided input during alternatives screening, and the resulting community support was essential to the success of the project. According to CDOT, a local community that has the opportunity to participate early in a project through a PEL study is more likely to support transportation improvements and often seeks out funding to support implementation. Those funding requests are more likely to be successful due to the planning and coordination already completed as part of the PEL study. For projects with more controversial decisions, a PEL study gives the public the opportunity to voice their concerns and work through alternatives that will ultimately lead to a project that addresses the community needs.

Improved Relationships and Coordination: Relationships with partner agencies often improve as a result of taking a PEL approach.

Example in Practice: According to the South Carolina Department of Transportation (SCDOT), the Advanced Project Planning Report (APPR) process—SCDOT’s version of PEL—has brought about closer relationships with the State’s resource agencies. The APPR process resulted from SCDOT’s need for a system that better emphasized the environmental impacts of proposed projects and engaged resource agencies before the formal environmental review process. SCDOT has used APPR to evaluate projects for the past 10 years, and its implementation has improved the quality of input SCDOT receives on projects, as well as the relationships between and information exchanged among
SCDOT and its resource agency partners. APPR created an inclusive decisionmaking culture whereby SCDOT solicits input from resource agencies at the earliest stages of the project development process. All partners are able to access the same information, which promotes early identification of sensitive environmental resources and agreement on project prioritization among all stakeholders.

PEL Implementation Is Flexible but Produces the Same General Benefits for All Users

The PEL Benefits report demonstrates that there are many ways agencies may tailor PEL strategies and tactics to meet their unique needs, but the benefits of using PEL are similar and consistent across implementation styles. The ultimate goal of using PEL is to reduce duplication of effort and facilitate informed decisions that deliver projects, streamline environmental reviews, and accelerate project delivery. Whether reducing labor hours, shortening review timelines, or positively engaging the public, PEL helps transportation decisionmakers deliver projects faster.

Contact Information

Marisel Lopez-Cruz
Environmental Protection Specialist
Office of Project Development & Environmental Review
Federal Highway Administration
Marisel.Lopez-Cruz@dot.gov
202-493-0356

Jody McCullough
Community Planner
Office of Planning
Federal Highway Administration
Jody.Mccullough@dot.gov
202-366-5001

Look What’s New!

• FHWA posted presentations from the March 2016 Eco-Logical Community of Practice webinar. The webinar featured presentations on Wildlife and Transportation from two State DOTs and featured information on how practitioners can develop a state-wide wildlife connectivity assessment, how data can be collected and used to track wildlife movement patterns and traffic, and how wildlife objectives and adaptive management can be incorporated into the National Environmental Policy Act process.

• The Association of State Wetland Managers released a report in March 2016 that evaluates wetland program efforts across the United States. The report includes analysis on state wetland regulation, monitoring and assessment, wetland water quality standards, and voluntary restoration.

Successes in Stewardship is a Federal Highway Administration newsletter highlighting current environmental streamlining and stewardship practices from around the country. Click here to subscribe, or call 617-494-3719 for more information.