

# Planning and Environment Linkages Program

**Annual Report  
Fiscal Year  
2008**



Prepared for:  
Offices of Planning, Project Development and Environmental Review, and  
Natural and Human Environment  
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## I. Introduction

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This report highlights the Federal Highway Administration's (FHWA) Planning and Environment Linkages (PEL) program activities for Fiscal Year 2008 (FY08). The PEL program's purpose is to provide transportation agencies with tools and resources that introduce environmental considerations early in planning, with the goal of developing a more seamless decision-making process that minimizes duplication of effort, promotes environmental stewardship, and reduces delays in project implementation.

Through the PEL initiative, FHWA provides state and local transportation and resource agencies with guidelines, decision-making strategies, analytical tools, and technical assistance to link transportation planning and environmental planning and review processes.

In FY08, FHWA set three implementation objectives for PEL:

1. *Technical assistance*: Advancing the adoption of PEL initiatives nationwide through focused state or regional technical assistance.
2. *Outreach/communication*: Increasing the development and dissemination of resources for stakeholders to use in understanding and implementing PEL activities.
3. *Research and targeted expansion*: Expanding the focus of PEL to include other considerations in planning and environment.

This FY08 Annual Report provides information on:

- Background
- FY08 PEL technical assistance activities
- FY08 PEL outreach and communication activities
- FY08 PEL research and targeted-expansion activities
- PEL vision for FY09

## II. Background

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In 2006, the FHWA Offices of Planning, Project Development and Environmental Review, and Natural and Human Environment developed the PEL program as an umbrella approach to help agencies integrate transportation and environmental planning processes and to streamline their project-development and environmental review processes. Prior to the introduction of PEL, FHWA's efforts had focused on helping state and local agencies link the planning and environmental review processes through technical assistance, guidance, and participation in Linking Planning and NEPA workshops. From 2003 to 2006, FHWA delivered 24 such workshops, which helped agencies to develop action plans for integrating their own processes and procedures.

In the past two years, the PEL initiative has expanded beyond the area of Linking Planning and NEPA. In FY07, FHWA began to align PEL with other FHWA activities, also designed to support the streamlined, cost-effective delivery of transportation projects. For example, the PEL approach encompasses related federal activities, including *Eco-Logical*, Context Sensitive Solutions, Corridor Planning, and Integrated Planning. In addition, PEL assists transportation agencies in complying with requirements and taking advantage of voluntary opportunities that Section 6001 of SAFETEA-LU (the Safe, Accountable, Flexible Transportation Equity Act: A Legacy for Users) and the FHWA and Federal Transit Administration (FTA) planning regulations offer to enhance environmental streamlining and stewardship. Coordination between these agencies and PEL helps FHWA to maximize its efforts by the sharing of tools, best practices, and other resources.

In FY08, FHWA continued to develop existing PEL initiatives and launched a number of new activities to encourage state and local agencies to implement the PEL approach.

### **III. Technical Assistance**

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In FY08, FHWA advanced the adoption of PEL initiatives nationwide through focused state and regional technical assistance, and the development of information and resources to promote and highlight best practices.

#### *Implementation Resource Guide*

FHWA developed and published the *Planning and Environment Linkages Implementation Resource Guide*, a document to help practitioners from multiple disciplines better understand how to incorporate PEL into their transportation-decision-making processes. The guide describes key connection points to integrate transportation and resource plans (“Integrated Planning”), as well as transportation planning and environmental review processes (“Linking Planning and NEPA”). It provides information, for example, on how to consider mitigation opportunities, screen solutions or alternatives, and coordinate within and among agencies at different stages of planning and project development. The guide is available at <http://www.fhwa.dot.gov/hep/pel/index.htm>.

#### *State and Regional Assistance*

FHWA continued to provide funding in FY08 to help Colorado transportation agencies to (1) identify high-priority conservation areas through a geospatial environmental analysis of Pueblo and El Paso Counties and (2) determine the most appropriate data layers to use in the analysis. The research was initiated by the Pikes Peak and Pueblo Area Councils of Governments, both of whom were interested in demonstrating the utility of interoperating two different software-planning tools to support long-range planning for these two counties. The Colorado Natural Heritage Program, together with NatureServe and Placeways, LLC, were contracted to perform prototype proof-of-concept analyses focused on the process and integration of these tools. In April 2008, the results of the analysis were published in a report entitled *Geospatial Environmental and Community Analysis in Pueblo and El Paso Counties, Colorado*. The report can be found at [http://www.cnhp.colostate.edu/documents/2008/FHWA\\_PEL\\_Report\\_Tabloid.pdf](http://www.cnhp.colostate.edu/documents/2008/FHWA_PEL_Report_Tabloid.pdf) and is posted on the PEL FHWA/DOT Case Studies webpage at [http://www.environment.fhwa.dot.gov/integ/case\\_studies.asp](http://www.environment.fhwa.dot.gov/integ/case_studies.asp).

This activity completed FHWA’s planned follow-up to the Linking Planning and NEPA workshops.

#### *Workshop Charrette*

Linking Conservation and Transportation Planning (LCTP) workshops, which began in FY06, emphasize the use of information, tools, and methods that can be shared among the transportation community and resource and regulatory agencies at the local, state, regional, and national levels. In February 2008, FHWA hosted a charrette to seek input on how to update these workshops. Participants included past workshop attendees, as well as representatives from FHWA; state Departments of Transportation (DOTs); Metropolitan Planning Organizations (MPOs); the research, academic, and nonprofit sectors; and resource agencies such as the Advisory Council on Historic Preservation and the U.S. Army Corps of Engineers, Fish and Wildlife Service, Forest Service, and Environmental Protection Agency. FHWA incorporated outcomes from the charrette, lessons learned from previous workshops, and regulations described in the Final Statewide and Metropolitan Transportation Planning Rule (23 CFR 450) in the LCTP workshop update.

### *Linking Conservation and Transportation Planning Workshops*

In FY08, FHWA hosted two LCTP workshops with the North Central Texas Council of Governments (Dallas-area MPO) and the Mid-America Regional Council (Kansas City-area MPO). The workshops focused on regional activities with transportation and resource agencies to promote the sharing of conservation and transportation geospatial data, methodologies and tools to advance planning, environmental stewardship, and streamlining goals. Workshop materials are posted on the PEL website, as described in the Outreach and Communication section of this report.

Through their discussions, workshop participants identified common goals, including:

- Integrating ecological, economic, and social factors in both conservation and transportation planning.
- Improving data collection and data-sharing.
- Building and strengthening collaborative partnerships and public support.

### *Webcast*

In September 2008, FHWA and FTA, in cooperation with the American Association of State Highway and Transportation Officials (AASHTO) Center for Environmental Excellence, held a webcast on “Integrating Transportation Planning and NEPA Decision-Making.” Webcast panelists highlighted common analysis and decision points that occur in the planning and environmental review processes, such as developing a problem statement (purpose and need), conducting environmental screening, identifying mitigation opportunities, and supporting early public and stakeholder involvement. Panelists also emphasized the importance of proper documentation to link planning and environmental processes. Slides from the webcast are available online and will be incorporated into FY09 training materials.

### *Peer Exchange on Geospatial Technologies and Data-Sharing*

During follow-up interviews with “Linking Planning and NEPA” workshop participants, states requested assistance in applying geospatial technologies to planning and project-development processes. In response, the FHWA Offices of Interstate and Border Planning, Planning, and Project Development and Environmental Review held a peer exchange, focused on applying geographic information systems (GIS) to implement PEL, on October 4 and 5, 2008, in Portland, Oregon. Thirteen participants from six state DOTs discussed issues and solutions related to data access, management, and sharing within and across agencies, as well as the importance of coordination with resource agencies. Participants shared specific state GIS applications and discussed how they are used or could be adapted to different stages of planning and project development. The peer-exchange proceedings were documented in a report, which is available at [http://www.gis.fhwa.dot.gov/documents/biz\\_models\\_toc112607.htm](http://www.gis.fhwa.dot.gov/documents/biz_models_toc112607.htm).

As a follow-up to the peer exchange, FHWA and the U.S. DOT Volpe National Transportation Systems Center (Volpe Center) researched and developed a report, *Key Practices for Implementing Geospatial Technologies for a Planning and Environment Linkages (PEL) Approach*. Three tools were highlighted to showcase regional, state DOT, and multiagency statewide applications that use GIS to support the integration of transportation planning and project development. The case studies and key findings are available at [http://www.gis.fhwa.dot.gov/documents/geospatialPEL\\_rpt.htm](http://www.gis.fhwa.dot.gov/documents/geospatialPEL_rpt.htm).

### *Integrated Planning Work Group*

The Integrated Planning Work Group (IPWG) was formed as part of the Interagency Task Force created under Executive Order 13274, Environmental Stewardship and Transportation Infrastructure Project Reviews. FHWA, with support from the Volpe Center, continues to work to tie PEL efforts with activities of the IPWG. A new webpage, featuring IPWG activities and promoting the linkages of integrated planning with PEL, was created on the PEL website. (See <http://www.environment.fhwa.dot.gov/inteq/ipwg.asp>.)

In FY08, the IPWG's three small subgroups worked on a variety of items:

- **Small-group A (Transportation Planning Regulations)** began development of a peer exchange, to be held in FY09. The peer exchange will feature successful models of coordination among resource agencies and DOTs and/or MPOs at the planning and programming level.
- **Small-group B (Eco-Logical)** developed a document outlining its mission, vision, and goals and mapping its objectives on a logic model; performed ongoing work with the Eco-Logical Grant Program; and wrote newsletter articles.
- **Small-group C (Tiering, Corridor, and Sub-Area Studies)** developed a plan to conduct research on corridor and sub-area studies with use of a three-phase approach that considers projects across transportation modes. Phase I will comprise a literature review and technical memorandum; Phase II, a peer exchange, outreach to stakeholders, and a gap analysis; and Phase III, an updated guidebook, or addendum, to NCHRP 435, *Guidebook for Transportation Corridor Studies*, as well as training slides and outreach through webinars, conferences, and papers.

### *Eco-Logical Grants*

The Integrating Transportation and Resource Planning to Develop Ecosystem Based Infrastructure Projects Grant (Eco-Logical Grant) is a discretionary program administered by the Federal Highway Administration (FHWA). The grant, which is based on the multi-agency publication *Eco-Logical: An Ecosystem Approach to Developing Infrastructure Projects*, funds the implementation of an ecosystem-based approach to planning and constructing infrastructure. In FY08, FHWA provided funding to 15 recipients, including State and local Departments of Transportation, State resource agencies, Metropolitan Planning Organizations, local governments, non governmental organizations, and one university. The grant projects are administered by FHWA with additional technical assistance from the FHWA Resource Center and other signatories to the Eco-Logical document.

The following table highlights the grant recipient, project title and grant amounts awarded in FY08. For more information, visit

[http://www.environment.fhwa.dot.gov/ecological/eco\\_entry.asp](http://www.environment.fhwa.dot.gov/ecological/eco_entry.asp).

| Recipient  | Project Title  | Grant Amount |
|--|--|--------------|
| Colorado Department of Transportation                        | Developing a Regional Ecosystem Framework for Terrestrial and Aquatic Resources along the I-70 Corridor, Colorado<br>An Eco-Logical Field Test | \$152,500    |
| Chicago Department of Transportation                         | Sustainable Infrastructure Standards for Urban Ecology   |              |
| Tri-County Regional Planning Commission (Illinois)           | Regional Transportation, Ecosystem, & Land Use Integration Plan  | \$109,477    |
| Mid America Regional Council (Missouri)                      | An Eco-Logical Approach to Transportation Planning in the Kansas City Region   | \$90,000     |
| Audubon Society of New Hampshire                             | Creating Tools to Support Integrated Transportation and Resource Planning in New Hampshire   |              |
| Tioga County Soil and Water Conservation District (New York) | Providing Opportunities of Highway Programs in Remediate Natural Resource Concerns in NY   | \$112,490    |
| Land of Sky Regional Council (North Carolina)                | Linking Lands and Communities in the Land-of-Sky Region of Western North Carolina  | \$104,000    |
| North Carolina Department of                                 | Integration of North Carolina's Conservation and Transportation Planning   | \$136,689    |

|   |  |           |
|---|--|-----------|
| Environment and Natural Resources           |  |           |
| Oregon State University                     | Using the Ecological Approach to Develop and Implement Conservation and Mitigation Priorities for Oregon   | \$49,962  |
| Capital Area Council of Governments (Texas) | Central Texas Greenprint for Growth - a Tool for Balancing Sustainable Conservation Goals with the Infrastructure Needs of our Rapidly Urbanizing Region | \$113,882 |
| Houston Galveston Area Council (Texas)      | Developing a Regional Decision Support System for the Houston-Galveston Region   | \$100,000 |
| North Central Texas Council of Governments  | North Central Texas Regional Ecological Framework  | \$177,500 |
| Coalition for Utah's Future/Project 2020    | Blueprint Jordan River, A Lake to Lake Vision  | \$85,000  |
| Virginia Thomas Jefferson Planning District | Integrating Green Infrastructure and Transportation Planning   | \$77,833  |
| US EPA, Region 6                            | A Regional Ecological Assessment Protocol (REAP) for the South Central United States   | \$100,000 |

#### IV. Outreach and Communication

In FY08, FHWA delivered PEL program information to stakeholders through training, websites, conferences, and publications.

##### Website

FHWA developed the PEL website, <http://environment.fhwa.dot.gov/integ/index.asp>, as a comprehensive resource for transportation agencies and stakeholders to help them learn more about PEL and how to apply its concepts and tools locally, regionally, and statewide.

FHWA has continued to enhance the website with more content and better organization of information. One improvement was the addition of several more case studies of effective practices, bringing the current total to 29. The Training and Workshops webpage was redesigned to highlight sample agendas, presentations, and materials from LCTP workshops and to remove outdated information. FHWA will continue to develop case studies as new effective practices are identified, and to find ways to make information clearer and easier to access.

| <b>FY08<br/>No. of Monthly<br/>PEL Website Visits</b> |            |
|---|------------|
| <b>October</b>  | <b>619</b> |
| <b>November</b>                                       | <b>619</b> |
| <b>December</b>                                       | <b>594</b> |
| <b>January</b>  | <b>663</b> |
| <b>February</b>                                       | <b>679</b> |
| <b>March</b>  | <b>651</b> |
| <b>April</b>  | <b>773</b> |
| <b>May</b>  | <b>775</b> |
| <b>June</b>   | <b>724</b> |
| <b>July</b>   | <b>692</b> |
| <b>August</b>   | <b>661</b> |
| <b>September</b>                                      | <b>658</b> |

The chart above shows the monthly numbers of PEL website visits for FY08. These data track visits to the PEL Overview webpage only. As new content is added, it is important to track visits in order to better understand the website's value as an information resource.

##### Re:NEPA

A number of PEL discussion threads were initiated on Re:NEPA, FHWA's online "community of practice," in FY08. These threads focused on topics such as climate change; the use of NEPA information in planning, as shown in case studies; how to document PEL after a planning study; and how to perform traffic forecasting and analysis in NEPA. Several references were also added to the

Transportation Planning and NEPA Linkages topic area, which is specifically designed for PEL discussion.

#### *Conference Presentations*

In FY08, FHWA promoted the PEL approach, and the tools and resources available to achieve integration of planning and environmental activities, through sessions and presentations at the following conferences:

- AMPO Annual Conference, “Linking Planning and NEPA”, Little Rock, Arkansas, October 5, 2007
- Transportation Research Board (TRB) 2008 Annual Meeting, Washington, DC, January 2008
  - “Integration of Planning and Environmental Analysis in Transportation”
  - “Streamlining Transportation Decision-Making While Sustaining and Analyzing the Environment”
- ECR2008, Fifth National Environmental Conflict Resolution Conference, “Use of GIS/Visualization Tools in Transportation to Advance Technical and Community Collaboration” Tucson, Arizona, May 21, 2008
- American Planning Association National Planning Conference, “Streamlining Transportation Decision-Making,” Las Vegas, Nevada, May 1, 2008
- FHWA Environmental Conference, “Streamlining Transportation Decision-Making,” Washington, DC, June 17, 2008
- FHWA/FTA Planners Seminar, “Planning and Environmental Linkages (PEL): The 1/28 Guidance and Beyond,” Washington, DC, July 23, 2008
- TRB Meeting, “Federal Surface Transportation Requirements in Statewide and Metropolitan Transportation Planning,” Atlanta, Georgia, September 2008
  - “Environmental Consultation and Resource Information for Long-Range Planning” workshop
  - “Linking Planning and NEPA”
  - “Discussing Potential Environmental Mitigation”

#### *Publications*

In FY08, FHWA and the Volpe Center authored several articles that featured Linking Planning and NEPA, PEL approaches, and related activities. The publications listed below reach thousands of subscribers, including Federal, state, local, and resource agencies; consultants; and academicians.

- FHWA *Successes in Stewardship Newsletter*
  - “Streamlining Planning and Environment Linkages (PEL) through Statewide GIS Applications,” December 2007
  - “FHWA Awards Grants for Ecosystem-Based Infrastructure Projects,” January 2008
- TRB 87th Annual Meeting Compendium of Papers, *Planning and Environment Linkages (PEL): Using the PEL Umbrella Approach to Streamline Transportation Decisionmaking*, January 2008
- FHWA *Public Roads Magazine*, “PEL: A Path to Streamlining and Stewardship,” March/April 2008
- FHWA *Environmental Quarterly Newsletter*, “2008 FHWA National Environmental Conference Highlights, PEL and Eco-Logical Session: FHWA Initiatives Dovetail Together,” Summer 2008



## V. Research and Targeted Expansion

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Under the PEL umbrella, various issues in integrating planning and environment, including aspects integral to the *process* (e.g., purpose and need, mitigation alternatives), as well as specific *tools* often used in implementing PEL (e.g., GIS, MOUs), are currently being addressed. In FY08, FHWA expanded areas that had previously been targeted, to include new analysis and additional environmental considerations.

### *Institutional Mechanisms to Implement PEL*

FHWA and the Volpe Center researched and documented case studies on institutional mechanisms for successfully implementing the PEL approach, employed by four state DOTs as follows:

- *Colorado DOT*: PEL Program Manager, Planning and Environmental Linkages Decision Tool, FHWA PEL Questionnaire and Environmental Forum
- *Maine DOT*: Gateway 1 Strategic Plan
- *Idaho DOT*: Corridor Planning NEPA Integration Guide
- *Arizona DOT*: Arizona Wildlife Linkages Map

The case studies were posted to FHWA's PEL website, and a one-page handout was developed to use at future meetings and conferences.

### *Building Connections to Emerging Issues*

In FY08, FHWA broadened the focus of PEL to include emerging areas such as climate change, nonmotorized transportation, and freight. Through discussions with staff across FHWA, strategies were developed to build connections through research, outreach, and technical assistance. Resources related to PEL and these emerging areas were incorporated into the PEL website in FY08 and will be expanded in FY09.

Also in FY08, FHWA sponsored two peer workshops on "Integrating Climate Change Considerations into the Transportation Planning Process." The first workshop, hosted by the Puget Sound Regional Council (PSRC) on March 6 and 7, included representatives from 13 MPOs. Workshop participants shared their experiences, including activities and approaches/challenges to integrating climate change within their individual MPOs. A second workshop was held on September 24 in Albany, New York.

## VI. PEL Vision for Fiscal Year 2009

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During FY09, FHWA will continue to expand on existing activities and to launch new endeavors to promote implementation of the PEL approach. FHWA's vision for FY09 includes:

1. Technical assistance
  - Deliver five LCTP workshops in states that have expressed interest, including Oregon, Pennsylvania and California.
  - Develop content for web-based advanced training on PEL, aimed at transportation staff.
  - Deliver three to four regional/national PEL webinars, using materials from the "Integrating Transportation Planning and NEPA Decision-Making" webcast, held in September 2008.
  - Plan and host one peer exchange and one to three webinars on the transportation planning regulations to highlight models of successful coordination among resource agencies and state DOTs and/or MPOs during the transportation planning process and through project development.

- Deliver one peer exchange devoted to Eco-Logical concepts and its approach to mitigation decisions
  - Deliver two webinars for continued outreach and training of Eco-Logical concepts in relation to mitigation decisions
  - Develop and disseminate the Eco-logical communications paper, which will provide details on Eco-Logical and its concepts, as well as recent regulatory endorsements of this approach, including the new compensatory mitigation rule.
  - Partner with the US Fish and Wildlife Service to incorporate modules in existing and future Conservation Fund courses that will focus on transportation planning and environmental linkages and integrated planning. Work under the agreement will also identify opportunities to leverage Conservation Fund activities to access conservation professionals and the conservation community.
2. Outreach and communication
- Assess and/or reorganize PEL website to make it more user-friendly, thus encouraging more viewers and sharing of effective practices.
  - Develop quarterly “PEL updates” for existing newsletters and publications.
  - Distribute PEL marketing materials, including case studies brochure and bookmark.
  - Present information on PEL at various professional conferences and meetings.
  - FHWA will coordinate with the AASHTO Center for Environmental Excellence on activities related to PEL.
3. Research and targeted expansion
- Identify and develop deliverable to highlight PEL performance metrics.
  - Continue to strengthen connections between PEL and climate change
  - Identify opportunities to integrate PEL into existing freight and nonmotorized transportation activities.
  - Sponsor a third peer workshop, “Integrating Climate Change Considerations into the Transportation Planning Process,” in Seattle, Washington.
  - Participate in a NCHRP Task 55, “Design, Organize and Implement a Training Program for Mainstreaming Environmental Stewardship and Enhancement Activities into Planning and Project Development” to ensure coordination with PEL.
  - Participate in NCHRP 25-25 Project 2009-01, “Transportation Corridor Environmental Management Framework” to ensure coordination with PEL/IPWG project on corridor and sub-area studies.
  - Develop a strategy to align PEL with related HEP programs and activities.

PEL can be an effective method for developing programs and projects that serve the community’s transportation needs while enhancing environmental stewardship. FHWA will continue to work cooperatively with states and MPOs to provide technical assistance and disseminate information on how to effectively implement the PEL approach.