Measuring Progress in Linking Transportation Planning and Environmental Analysis

Transportation agencies use a variety of metrics to document progress toward achieving specific goals and objectives. Traditionally, performance measures have focused primarily on system conditions or operations, such as accessibility, mobility, safety, and operational efficiency. To date, measures to track successes in other goal areas, such as integrated transportation planning and environmental streamlining and stewardship, have been underutilized.

While performance measures can benefit transportation agencies, measuring successes in the environmental and planning arenas can be a challenge. Successes can be difficult to quantify and assess because they often relate to planning-process changes and coordination efforts, the results of which may not be immediately evident.

To assist agencies in overcoming these challenges, the Federal Highway Administration’s (FHWA) Planning and Environment Linkages (PEL) program developed a resource document entitled A Guide to Measuring Progress in Linking Transportation Planning and Environmental Analysis (December 2009). This issue of Successes in Stewardship highlights the contents of the guide and discusses how agencies interested in developing their own measurement programs can use it.

Overview

An integrated approach to transportation planning recognizes the ongoing need for State and local governments to link their long-range and corridor-level transportation planning with the planning processes of natural and cultural resource agencies. This approach enables planners and the public to consider the costs and benefits of decisions in a comprehensive manner. Planners can address complex social, economic, and environmental challenges early in the planning process as well as avoid and minimize impacts to natural and cultural resources.

This linkage also supports unification of the transportation-planning process with the National Environmental Policy Act (NEPA) environmental review process. The data and analysis used to prepare transportation plans, and the subsequent results of the planning process, can be used in the NEPA process. For example, the analysis of transportation deficiencies conducted in planning can be used to create the NEPA purpose-and-need statement. Incorporating planning products, such as corridor or subarea studies, into NEPA analysis and documentation creates a cohesive flow between the two processes and minimizes the duplication of work and associated time for project development.

Framework for Measuring Progress

A Guide to Measuring Progress in Linking Transportation Planning and Environmental Analysis is a resource to assist agencies in developing programs for evaluating success in integrating transportation planning and environmental analysis. By establishing metrics in these areas, transportation agencies can demonstrate to the public and external partners, including resource and regulatory agencies, that they are committed to making progress in integrating environmental considerations throughout the transportation-
decisionmaking process. Metrics also help agencies to determine whether activities undertaken to integrate transportation planning and environmental analysis are meeting their intended objectives.

The guide presents a framework for agencies to follow when creating their own metrics. The framework includes four primary steps:

1. Define specific program goals and objectives for linking transportation planning and environmental analysis.
2. Develop a set of metrics to demonstrate results toward reaching the defined goals and objectives.
3. Assess baseline and develop targets to evaluate results achieved compared with results desired.
4. Measure and report results.

To illustrate how a transportation agency can apply this framework, the guidebook identifies an overall goal for linking transportation planning and environmental analysis and provides four sample objectives to achieve this goal (see sidebox). The sample objectives provide a starting point to help transportation agencies define their own objectives.

Tips on how to develop strategies to meet the stated objective in each of the four samples are provided in the guide. In recognition of the fact that appropriate targets depend on context- and agency-specific needs and priorities, the guide does not provide examples. Instead, it offers tips and suggestions for agencies to consider when devising their own targets in association with each of their objectives.

Also included in the guide are sample output and outcome measures that a transportation agency can use to gauge its progress in achieving each objective. The output measures are tied directly to activities that an agency implements in order to achieve its objectives, such as the number of staff trained. The outcome measures are related to the results that these implementation activities are intended to achieve, such as increased knowledge of the planning process.

**How to Get Started**

Agencies that are interested in establishing performance measures to help direct their activities in linking transportation planning and environmental analysis are encouraged to use the sample objectives and measures provided in the guide. Once the measures and appropriate targets have been determined, a regular evaluation of results achieved compared with results desired can be built into the transportation-planning and project-development process. The data collected as part of the measurement program will provide an agency and its partners with impartial information from which to identify work programs or resource allocations that need to be adjusted. The data can also help agencies to determine the appropriate policy or implementation activities to address those needs.

For additional information and resources from the PEL program, visit [http://environment.fhwa.dot.gov/integ/index.asp](http://environment.fhwa.dot.gov/integ/index.asp).
Look What's New!

- The [Environmental Mitigation in Transportation Planning (2009)](http://environment.fhwa.dot.gov/sis_registration/Register.aspx) report presents and synthesizes the findings from nine case studies that examine a spectrum of environmental mitigation strategies, policies, and activities transportation agencies have undertaken to meet SAFETEA-LU Section 6001 requirements. The report's observations and insights can be used to assist transportation professionals nationwide in improving their agencies' planning processes and outcomes.

- A [proclamation](http://environment.fhwa.dot.gov/sis_registration/Register.aspx), issued on January 4, 2010, by President Obama, marks January 1st as the 40th anniversary of the signing of the National Environmental Policy Act (NEPA). The president said that his administration “will recognize NEPA’s enactment by recommitting to environmental quality through open, accountable, and responsible decisionmaking that involves the American public.” The proclamation also calls on Federal agencies “to promote public involvement and transparency” in their implementation of NEPA.

- The EPA is soliciting public comment for a new rulemaking addressing post-construction stormwater discharges from new development and redevelopment activity. Comments must be submitted on or before February 26, 2010. For more information, visit the [National Pollutant Discharge Elimination System website](http://environment.fhwa.dot.gov/sis_registration/Register.aspx).

Successes in Stewardship is a Federal Highway Administration newsletter highlighting current environmental streamlining and stewardship practices from around the country. To subscribe, visit [http://environment.fhwa.dot.gov/sis_registration/Register.aspx](http://environment.fhwa.dot.gov/sis_registration/Register.aspx) or call 617-494-3137.