EDC Overview

It is a commonly held perception that it takes an average of 13 years to deliver a major highway project (from planning through completion). However, several opportunities exist in the current project delivery process where innovative approaches will improve project delivery times. Consequently, in the summer of 2010, Federal Highway Administrator Victor Mendez launched the Every Day Counts (EDC) Initiative. Specifically, this initiative is designed to identify and deploy innovation aimed at enhancing the safety of roadways and protecting the environment, while ultimately shortening the transportation project development. process.

What is Meant by Clarifying the Scope of Preliminary Design?

Preliminary design includes the design and engineering information and activities needed to develop final design plans and specifications for a transportation project. The EDC Clarifying the Scope of Preliminary Design initiative is directed at advancing preliminary design activities prior to the conclusion of the National Environmental Policy Act (NEPA) process on all Federal-aid projects.

Contact Information

For training or more information on this Every Day Counts Initiative, please contact your local FHWA Divisions Office.

To learn more about EDC, visit:
http://www.fhwa.dot.gov/everydaycounts

About Every Day Counts

Every Day Counts is designed to identify and deploy innovation aimed at shortening project delivery, enhancing the safety of our roadway, and protecting the environment.

Clarifying the Scope of Prelimnary Design

U.S. Department of Transportation
Federal Highway Administration

What is the Goal of the Initiative?

By providing more flexibility to State departments of transportation (DOT), project alternatives can be developed both to streamline project delivery (prior to the completion of the NEPA process) and to ensure greater consistency of the alternatives and preliminary design practices across Federal-aid highway programs in all States.

What are the Benefits of Preliminary Design?

The initiative focuses on defining which activities can be considered under the auspices of preliminary design and conducted prior to the completion of the NEPA process. Clarifying the scope and parameters of preliminary design activities leads to improved project planning and decisionmaking, reduced project delivery times and costs, and noted environmental responsibility.

What is the Difference Between Preliminary and Final Design?

Preliminary design
is the stage in which general project location and design concepts are determined.

Final design
includes the preparation of construction plans and detailed specifications for construction work to be performed.

The division between the two is not always clear and may vary by project. Preliminary design stops at the point where an alternative is selected at the conclusion of the NEPA process and final design can begin. Unless there is clarity between preliminary and final design, the NEPA process may be open to challenge as being compromised.

What are Examples of Preliminary Design Activities?

Preliminary design activities include various types of design work allowable under current law and regulation within the NEPA project development process prior to NEPA approval, regardless of contracting mechanism.

Preliminary design activities must not materially affect the objective consideration of all reasonable alternatives in the NEPA process or have an adverse environmental impact.

Examples of preliminary design activities include:

- Environmental assessments
- Topographic surveys
- Metes and bounds surveys
- Geotechnical investigations
- Hydrologic analysis
- Hydraulic analysis
- Utility engineering
- Traffic studies
- Financial plans
- Revenue estimates
- Hazardous materials assessments
- General estimates of the types and quantities of materials
- Other work needed to establish parameters for the final design

NEPA regulations may prohibit the start of certain activities (e.g., final design and construction). However, many preliminary design activities can be conducted during the NEPA process without affecting Federal-aid eligibility, provided the activities are undertaken in compliance with the NEPA provisions (23 CFR Part 771 and 40 CFR Parts 1500-1508) and do not limit the choice of reasonable alternatives (40 CFR 1506.1(a)-(b)).

What is the FHWA's Role?

The FHWA is taking the lead in identifying types of preliminary design activities allowable under current law and regulation within the NEPA project development process. By highlighting and clarifying the flexibilities available to States, additional project-specific design can be initiated during NEPA review, as provided in current regulations and statutes.

Under FHWA Order 6640.1A, A Policy on Permissible Project Related Activities During the NEPA Process, States will be consistent in applying the definitions of preliminary design and final design on Federal-aid projects. The FHWA's goal is to clarify the flexibilities available to States so they can be integrated into State DOT policies and project development processes.

Who is Involved in Preliminary Design?

Preliminary design involves professionals from different disciplines to ensure that the best decisions are made. Professionals may include designers; division administrators; project managers; and environmental, Right-of-Way (ROW), and construction managers. This interdisciplinary approach is essential to cutting time and costs while ensuring high standards.