

Federal Highway Administration **Every Day Counts** Innovation Initiative



Clarifying the Scope of Preliminary Design FAQs

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What is preliminary design?

Preliminary design defines general project location and design concepts. Prior to completion of the National Environmental Policy Act (NEPA) review process, any such preliminary engineering and other activities and analyses must not materially affect the objective consideration of alternatives in the NEPA review process."

What kinds of activities are involved in preliminary design?

The types of activities are determined by the project. They can include any combination of the following: 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, and general estimates of the types and quantities of material and other work needed for the final design. A complete description on allowable preliminary design activities are provided in FHWA Order 6640.1A – FHWA Policy on Permissible Project related Activities During the NEPA Process.

Where does preliminary design stop and final design begin?

Final design means any design activities following preliminary design. The dividing line varies from project to project. Examples of final design activities include the preparation of final construction plans and detailed specifications for the performance of construction work.

Is preliminary design primarily used in Design-Build projects?

Although the definition of preliminary design and final design originated from the design-build (DC) regulation, preliminary design is also an important element in design-bid-build (DBB) contracting.

What are the benefits of this initiative?

Clarifying the scope of preliminary design can improve project decision-making. It can reduce overall project delivery times and cut costs in developing and delivering projects. It also enhances consistency among Federal Highway Administration (FHWA) Division Offices (DOs). Moreover, it can improve agency and staff capacity to make risk-based decisions.

How does preliminary design fit into the NEPA process?

This initiative will help to ensure the integrity of the NEPA process. All preliminary design classified activities that are deemed to not materially affect the objective consideration of alternatives or have adverse environmental impacts can be conducted concurrently with the National Environmental Policy Act (NEPA) analysis. Final design activities cannot be advanced prior to a NEPA determination.

Does preliminary design limit the choice of reasonable alternatives?

No. These activities do not limit the choice of reasonable alternatives. Regulations require that no commitments can be made to any alternative being evaluated in the NEPA process.

How can the perception of bias be minimized?

A perception of bias could cause stakeholders to question the integrity of the NEPA process, so this is a serious concern. Stakeholders might say, "You've already decided on an alternative. This NEPA process is merely a formality." Division Administrators (DAs) must determine whether the level of design activities done prior to the NEPA decision goes too far in focusing on a particular alternative.

What is the role of Division Administrators in controlling the perception of bias?

DAs must consider any possibilities of bias, including the mere perception of bias in considering reasonable alternatives. They must consider whether any proposed preliminary design activities are really relevant to only one alternative being considered. All alternatives must be given fair consideration. Community perceptions should also be monitored, particularly where choices may be controversial.

Who decides which alternatives get funded?

States and other project sponsors decide what projects to fund. But DAs must retain independence and can approve any reasonable alternative under consideration during the NEPA process.

Is preliminary design important in EIS or non-EIS projects?

Both. Preliminary design flexibilities are available for EIS and non-EIS projects.

Who is involved in preliminary design?

To ensure that the best decisions are being made, professionals from different disciplines must be involved. Designers, project managers, environmental, ROW, and construction management must share information. This interdisciplinary approach is essential to cutting time and costs while ensuring high standards.

In Design-Build contracting, a separate notice to proceed is required for final design and construction. Should there also be a notice for preliminary design?

For design-build projects in which a contract is awarded prior to the NEPA decision, the contract should be divided into two phases: notice to proceed 1 and notice to proceed 2.

What is required in the first notice to proceed?

The work in notice to proceed 1 should be limited to preliminary design. The contract should clearly state that no commitment is being made to any alternatives under consideration in the NEPA process. It should also clarify that all alternatives will be fairly considered

What is required in the second notice to proceed?

The work in notice to proceed 2 should include final design and construction. . The issuance of notice to proceed 2 is conditioned upon the selection of the appropriate alternative in the NEPA decision

Are there state-specific requirements for preliminary design?

In many cases, yes. DAs should work with their State DOTs to develop State-specific preliminary design policies for:

- Direct oversight projects;
- State administered projects;
- Local public agency projects; and
- Design-bid-build, design-build, and other project delivery methods that may be used in that State.

Are Division Administrators required to report any preliminary design information to Washington headquarters?

Starting on September 30, 2011, DAs will submit yearly reports to the Office of Project Development and Environmental Review (HEPE-1). These reports must list the number of projects where the SDOT has undertaken preliminary design activities beyond what is necessary to complete the NEPA review process.

Are reporting requirements limited to preliminary design activities listed in Appendix A of the FHWA Order - FHWA Policy on Permissible Project related Activities During the NEPA Process?

No. Reports must include preliminary activities not listed in the definition of preliminary design or Appendix A.

How can I be sure a preliminary design activity complies with FHWA and underlying CEQ regulations?

Until an agency issues a Record of Decision, no action concerning the proposal can be taken that would limit the choice of reasonable alternatives. During the NEPA process, agencies may not undertake any major Federal action that might prejudice the ultimate decision on the program or limit alternatives.

Who is responsible for making sure the design activity design complies with FHWA NEPA regulations?

FHWA will perform the work necessary to complete a Finding of No Significant Impact (FONSI) or an EIS. This work includes environmental studies, related engineering studies, agency coordination and public involvement. Until a project is classified as categorically excluded from further environmental analysis (CE), or a FONSI or Record of Decision (ROD) is signed, no work related to final design activities and ROW acquisition is allowed, except under limited situations (ex. Hardship or Protective Buys)

How will FHWA implement this initiative?

FHWA has issued FHWA Order 6640.1A – FHWA Policy on Permissible Project related Activities During the NEPA Process. This order clarifies what preliminary design activities can be conducted prior to a NEPA determination..

How will SDOTs implement the initiative?

State DOTs in consultation with their FHWA Division office will need to develop an Action Plan that outlines how the FHWA Order will be implemented within their State.