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the video

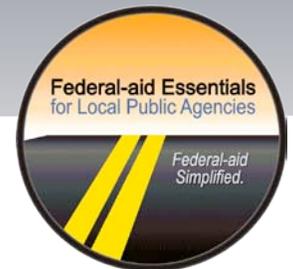
## Environment

### NEPA Regulatory Framework and Process

#### Purpose & Need, and Alternatives

[www.fhwa.dot.gov/federal-aidessentials](http://www.fhwa.dot.gov/federal-aidessentials)

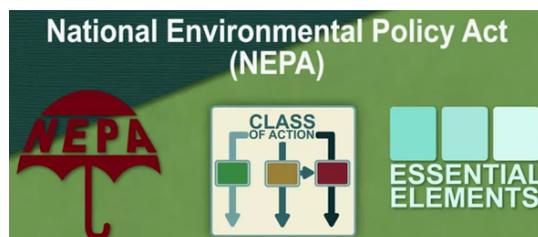
*Agencies are required to explain why a proposed project should be implemented*



## PURPOSE AND NEED

The National Environmental Policy Act, also known as NEPA, is an environmental law that established the decision-making process that agencies must follow prior to the design and construction of transportation projects using Federal funding or requiring Federal approval.

Following the right process - or class of action - is important and is determined by the significance of the impacts your project is likely to have on the human and natural environment. The significance of its impact, not its size or cost, will direct you to the appropriate class of action and will help you identify the requirements for other essential elements, such as documentation, public involvement, and coordination.



Transportation projects are intended to meet an important purpose and need. Therefore, decision-makers on your Federal-aid project require justification to support both the expenditure of tax payers' money and the environmental impacts involved.

Your project's well-reasoned Statement of Purpose and Need explains to the decision-makers, the public, and the stakeholders why the proposed project should be implemented. Here we will explore what constitutes a good purpose and need statement, along with the range of alternatives and the appropriate amount of analysis required for your project. Simply put, the purpose element of the statement explains the problem the project is intended to address. The need element includes the data substantiating that a problem currently exists or is likely to occur.



The



purpose and need is the starting point for developing any necessary alternatives.

When developing alternatives, you should strive to include a reasonable and representational range of options, including the no-build option. Alternatives are not just for highway improvement options; they can include demand management or alternative modes, such as transit, or a combination of all these.

For each potential alternative, ask yourself:

- Does it have logical termini, or logical end points?
- Is it a usable facility in and of itself even if no further improvement were built?

For NEPA purposes, the level of analysis corresponds to the level of potential environmental effects. A project that is processed as a categorical exclusion, or CE, will generally require less detailed analysis than those processed as either an environmental assessment or an environmental impact statement, referred to as an EIS.

As an example, let's walk through the purpose, need and alternatives for a pavement rehabilitation project that is typically a CE. The purpose of the project is to address the deficiencies of a roadway with pavement deemed less than desirable.



The need comes from the fact that the pavement is cracking and may soon be unusable, as evidenced through photographs. An alternative analysis for this project is not required as is typical of projects processed as CEs.

Let's compare this relatively simple CE with a project in which an EIS is necessary. In this case, traffic has become congested and is predicted to worsen.

The purpose of the project is to alleviate current and predicted congestion on a two-lane highway, which will reduce delays and crashes, provide improved access to the center of town and better accommodate through traffic.



The need for the project is supported by crash data and a traffic analysis. In addition to the no-build alternative, three others are being considered.

Alternative one involves widening the existing highway from two lanes to four lanes. The logical termini, or end points, are defined by the intersection with County Route 34 and an interchange with Interstate 50. The usable facility is 12 miles of four-lane highway through town.

Alternative two involves upgrading existing county roads on the south side of town. The logical termini are the same, but the resulting usable facility is a four-lane roadway with safety shoulders and turning lanes.

Alternative three is a new roadway to the north of town. The resulting usable facility is a 12 mile, divided four-lane highway.

From this example, we see that the alternatives address the project's purpose and need and that the variety is appropriate for any potential environmental effects. Traffic demand modifications or transit do not meet the need for providing adequate through traffic capacity.

The documents from your planning processes are an excellent source of information for establishing purpose, need and alternatives. Your State department of transportation (State DOT) has considerable knowledge and expertise in all areas of NEPA compliance. The people there can help you ensure the adequacy and validity of your Statement of Purpose and Need along with any necessary alternatives.

The FHWA is the final authority when determining whether a project's purpose and need as well as its alternatives analysis are



adequate to meet regulatory requirements. Therefore, it's essential that you engage the State DOT and, when appropriate, FHWA early and throughout your project's entire process.

### Additional Resources

- FHWA guidance on project purpose and need  
<http://www.environment.fhwa.dot.gov/projdev/tdmelements.asp>
- FHWA guidance on developing and evaluating project alternatives  
<http://www.environment.fhwa.dot.gov/projdev/tdmalts.asp>
- AASHTO's *Practitioner's Handbook 07* covering purpose and need statement and range of project alternatives  
<http://www.environment.transportation.org/pdf/programs/PG07.pdf>

The content of this document is not a substitute for information obtained from State departments of transportation, appropriate FHWA Division Offices, and applicable laws. Scenarios have been simplified for emphasis and do not necessarily reflect the actual range of requirements applicable to the scenario or this topic. This document was created under contract number DTFH61-11-D-00025 by the Federal Highway Administration, U.S. Department of Transportation, and is offered to the public to heighten and focus awareness of Federal-aid requirements within the local public agencies community and reinforces the importance of these necessary policies, procedures, and practices.

This companion resource is the script content for the video production of the same name.