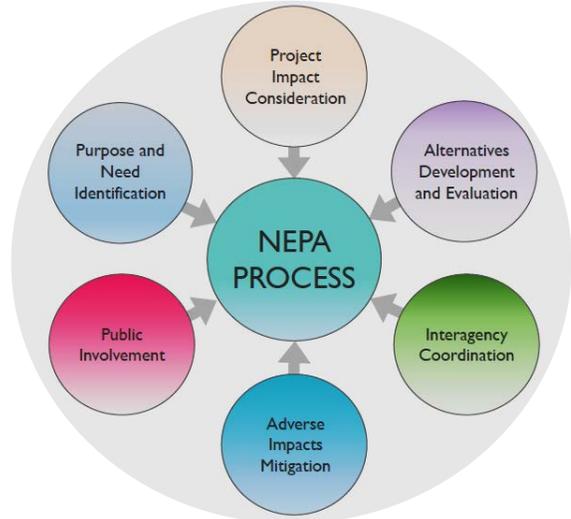


Summary of the National Environment Policy Act (NEPA)

The National Environmental Policy Act (NEPA) was signed into Law on January 1, 1970. NEPA requires the examination of potential impacts to the natural and human environment when considering approval of proposed federally funded transportation projects by the Federal Highway Administration (FHWA).

FHWA adopted the policy of managing the NEPA project development and decision making process as an "umbrella" under which all applicable environmental laws, executive orders, and regulations are considered and addressed prior to the final project decision and approval. The FHWA NEPA process allows transportation officials to make project decisions that balance engineering and transportation needs with social, economic, and natural environmental factors. During the process, a wide range of partners including the public, businesses, interest groups, and agencies at all levels of government, provide input into project and environmental decisions. In accordance with NEPA, it is the policy of the FHWA that the essential elements of the project development process include:



- *Define the Purpose and Need for the project*
- *Evaluate a full range of reasonable Alternatives*
- *Assessment of potential social, economic, and environmental impacts with hierarchal consideration of avoid, minimize, and mitigate impacts*
- *Mitigate environmental impacts to the extent practical and feasible*
- *Interagency coordination and consultation*
- *Public Involvement including opportunities to participate and comment*
- *NEPA documentation and disclosure*

Purpose and Need

The purpose and need of a project is essential in establishing a basis for the development of the range of reasonable alternatives to be considered and assists with the identification and eventual selection of a preferred alternative. The following items are typically described in the purpose and need statement, as applicable, for a proposed action:

- *Project Status - Briefly describe the proposed action's history and relationship to local and statewide transportation plans*
- *System Linkage - Discuss how the proposed action fits into the local and regional transportation system*
- *Mobility - Discuss the capacity of the existing facility*
- *Transportation Demand - Discuss the traffic projections for the project area*
- *Safety - Explain existing or potential safety hazard(s) to be addressed by the proposed action*
- *Social Demands or Economic Development - Describe how the action will foster new employment and benefit schools, land use plans, recreation facilities, etc.*
- *Modal Connections - Explain how the proposed action will interface with and complement other multi-modal plans, including mass transit, pedestrian and bicycle accommodations*
- *Roadway Deficiencies - Explain if the proposed action is necessary to correct existing roadway deficiencies*

Alternatives Development and Evaluation

The identification, consideration, and analysis of alternatives are key to the NEPA process and the goal of objective decision making. Consideration of a full and reasonable range of alternatives leads to a balanced solution that satisfies the project purpose and need, and protects environmental and community resources to the extent practical and feasible. The alternatives development and evaluation process under NEPA is required to:

- *Rigorously explore and objectively evaluate all reasonable alternatives*
- *Evaluate alternatives carried forward in detail within the draft environmental document so that reviewers may evaluate their comparative merits*
- *Include the alternative of No-Action*
- *Identify the preferred alternative in the draft environmental document*
- *Include appropriate mitigation measures*

As a rule, if an alternative does not satisfy the purpose and need for the action, it should not be included in the analysis as a reasonable alternative. Beyond the requirement to evaluate all reasonable alternatives, there are other requirements for analyzing alternatives. These requirements fall under Section 4(f), the Executive Orders on Wetlands and Floodplains, and the Section 404(b)(1) guidelines. The use of land from a Section 4(f) protected property (publicly owned park, recreation area, or wildlife and waterfowl refuge, or any significant historic site) may not be approved unless a determination is made that there is no feasible and prudent alternative for such use, and/or a *de minimis* impact finding is granted.

Many factors exist that could render an alternative "not prudent," including cost and environmental impacts. If an alternative does not meet the action's purpose or need, then the alternative is not prudent. If a proposed action is to be located in a wetland or significantly encroaches upon a floodplain, a finding must be made that there is no practicable alternative to the wetland take or floodplain encroachment. To ensure a meaningful evaluation of alternatives, and to avoid commitments to transportation improvements before they are fully evaluated, the action evaluated shall:

- *Connect logical termini and be of sufficient length to address environmental matters on a broad scale*
- *Have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made*
- *Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements*

Determining and Mitigating Environmental Impacts

The direct, indirect, and cumulative environmental impacts and effects of the proposed action must be addressed and considered in satisfying the requirements of the NEPA process. Impacts and effects includes ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the effect will be beneficial. The determination of significance with respect to impacts and effects is a function of both context and intensity. To determine significance, the severity of the impact must be examined in terms of the type, quality and sensitivity of the resource involved; the location of the proposed project; the duration of the effect (short- or long-term) and other considerations of context.

The mitigation of unavoidable impacts must be considered. Agencies are required to identify and include in the action all relevant and reasonable mitigation measures that could improve the action. In this regard, mitigation is typically defined as:

- *Avoiding the impact altogether by not taking a certain action or parts of an action*
- *Minimizing impacts by limiting the degree or magnitude of the action and its implementation*
- *Rectifying the impact by repairing, rehabilitating, or restoring the affected environment*
- *Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action*
- *Compensating for the impact by replacing or providing substitute resources or environment*

This ordered approach to mitigation is known as "sequencing" and involves understanding the affected environment and assessing transportation effects throughout project development.

Agency Coordination and Public Involvement

As lead Federal agency in the NEPA process, FHWA is responsible for scoping, inviting cooperating agencies, developing consensus among a wide range of stakeholders with diverse interests, resolving conflict, and ensuring that quality transportation decisions are fully explained in the environmental document. These responsibilities force the FHWA to balance transportation needs, costs, environmental resources, safety, and public input in order to arrive at objective and responsible transportation decisions. Project development procedures must provide for:

- *Public involvement activities and public hearings throughout the entire NEPA process*
- *Early and continuing opportunities during project development for the public to be involved in the identification of social, economic, and environmental impacts*
- *One or more public hearings to be held at a convenient time and place for any Federal-aid project which requires significant amounts of right-of-way, substantially changes the layout or functions of connecting roadways or of the facility being improved, has a substantial adverse impact on abutting property, or otherwise has a significant social, economic, environmental or other effect*

Documentation

Transportation projects vary in complexity and the potential to affect the natural and human environment. An [Environmental Assessment \(EA\)](#) is prepared for actions in which the significance of the environmental impact is not clearly established. Should environmental analysis and interagency review during the EA process find a project to have no significant impacts on the quality of the environment, a [Finding of No Significant Impact \(FONSI\)](#) is issued.

Further information on NEPA and the Federal Project Development Process can be obtained at: <http://www.environment.fhwa.dot.gov/projdev/index.asp>