From Environmental Documents to Transportation Projects

Why the Department of Transportation Prepares Environmental Documents

Environmental documents are prepared for projects that may have effects on the environment. Projects are brought through a process which involves:

1. Determination of Purpose and Need/Deficiencies in current system
2. Consideration of a variety of alternative strategies
3. Preparation of documentation to assess the transportation, social, economic, and environmental effects of alternatives which fit the purpose and need
4. Public involvement

The type of documentation is dependent upon project type and funding. The types of documents that may be prepared include:

- ☞ **Federal Categorical Exclusion** (CE)
- ☞ **Federal Environmental Assessment** (EA)
- ☞ **Federal or State Findings of No Significant Impact** (FONSI)
- ☞ **Federal Environmental Impact Statement** (EIS)
- ☞ **State Environmental Impact Evaluation** (EIE)

Environmental documents are intended to be used in deciding upon a preferred alternative which would be the best balance of meeting the identified needs, while minimizing the impacts resulting from the alternative. Documents are written for both the public and technical reviews, focusing on key transportation issues and the effects of the alternative strategies being considered. Some of the information is preliminary and, oftentimes, is not finalized until the permit preparation/final design phase of a project.

Environmental documents are prepared and processed to satisfy both Federal and State requirements. Subjects that may be included within an environmental document are:

- Summary
- Project Description
- Purpose of and Need for Action
- Alternatives Considered Including Proposed Action (if one has been identified)
- Affected Environment
- Environmental Consequences
- List of Agencies, Organizations and Persons to Whom Copies of the Document are Sent
- Comments and Coordination/Public Involvement

Purpose and Need for Action

This section identifies and describes the transportation problem(s) that the project is intended to resolve; it demonstrates that a need exists. The following items may be included in the needs explanation:

- Lack of roadway capacity for the volume of traffic
  (existing and/or future years)
- The demand for specific transportation services
  (existing and/or future years)

- Social demands or economic development needs
- The interrelationship between transportation modes, such as roads and rail
- Existing or potential safety hazards or problems

Alternatives

This section contains a discussion of the reasonable alternatives that were chosen for detailed study. Alternatives that may have been eliminated earlier in the study process would also be briefly discussed along with the basis for their elimination.

The alternatives to be considered may include:

- Do-Nothing Alternative (No-Build)
- Upgrade and rehabilitation of the existing transportation system
- Transportation System Management - (Types of activities that would optimize transportation system operations using the present system)
- Transit and roadway "new construction alternatives"
- Alignment variations which would minimize adverse impacts

Generally, each alternative in the document is developed to a comparable level of detail.

Affected Environment/ Environmental Consequences

This section provides a concise description of the existing environment, as well as the potential direct and indirect social, economic and environmental concerns for the area affected by the study alternatives.

Also included are any adverse environmental effects that cannot be avoided and possible mitigation measures. Topics of consideration can include:

Air Quality

Regional and localized air quality impacts and the associated relationships with airborne pollutants are discussed in this section. Microscale air quality impacts that include predicted estimates of carbon monoxide (CO) for the preferred alternative along with the comparison of the CO concentrations of the study alternatives are noted.

Noise

A summary of the effects of traffic noise for all alternatives is included. The summary would include identification of sensitive areas and the extent of impact (in decibels). In addition, noise abatement measures which may be considered and situations where no prudent abatement measure is feasible or reasonable are covered.

Water Quality

This section includes an analysis of the effects on surface and ground water quality, both during and after construction.

Wetlands

This section includes:

- a description of the wetlands in project area -including functions and values
- a description of potential wetland impacts/loss of functions and values
- alternatives to avoid wetland impacts
- practicable measures to minimize harm to these wetlands, during and after construction
- identification of any required permits
- types of mitigation measures for the impacted wetlands
- coordination with Federal and State agencies

Social and Economic Resources

This section may include a discussion of changes in neighborhood or community cohesion and, in general, social groups either benefiting or harmed by the alternatives. Changes in travel patterns and land use are discussed, as well as effects on school districts, recreation areas and churches. Also reviewed are the effects on tax revenues, employment opportunities and accessibility. The estimate of households displaced, including where available, characteristics such as effects on minorities, income levels, the elderly, and owner/tenant status and businesses affected and/or displaced are also discussed.

Fish and Wildlife Impacts

The potential effects (i.e. loss or modification of habitat) of the alternatives to fish and wildlife resources are discussed in this section.

Pedestrians and Bicyclists

This section considers the effect of the alternatives on pedestrian and bicyclist activities.

Construction

This section covers the effects and mitigation, during construction activities, that would include such things as:

- noise impacts
- disposal of waste materials
- erosion and sedimentation controls
- protection and safety of traffic and pedestrians
- fugitive dust controls

Hazardous/Contamination Risk

All alternatives are screened for hazardous/contaminated risk areas and general mitigation measures for such areas are discussed.

Public Outreach

The extent of public outreach varies for each project. It is dependent upon the anticipated extensiveness of the study corridor, and the potential effects an alternative or proposed action may have upon the region or neighborhoods. The type of environmental documentation will also dictate the minimum requirements for public outreach in accordance with state and federal regulations.

Generally, the public is given the opportunity to participate in the process at various decision-making points during the development of the proposed action(s). Results of the coordination with local and state officials and impacted groups are documented.

Information is made available to local, state and federal agencies, the general public, interested parties and participating groups. The public outreach plan may include:

- a mailing list
- newspaper advertisements
- television or radio infomercials
- informational meetings and/or public hearings

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Connecticut Department of Transportation
Office of Environmental Planning
2800 Berlin Turnpike
PO Box 317546
Newington, CT 06131-7546