

Range of Alternatives

Federal regulations instruct all reasonable alternatives be evaluated and discussion included as to the reasons why alternatives which may have been considered were eliminated from detailed study.

Regulations also direct the following range of alternatives be considered when determining reasonable alternatives:

- **“No-action”**. This may include short-term minor restoration types of activities, such as safety and maintenance improvements that continue operation of the existing roadway.
- **Transportation System Management**. This may include programs or projects which improve traffic flow such as signalization, ITS, and incident management.
- **Mass Transit**
- **Build Alternatives**. Both improvement of existing facility and alternatives on a new location should be evaluated. A representative number of reasonable alternatives must be presented and evaluated in detail.

The no-action alternative must be carried forward for further study. This alternative serves as a baseline from which to judge the other alternatives. It may also be decided the no-action alternative offers a viable choice, or is sometimes the choice where no workable alternatives emerge from the process.

Successfully developing a range of reasonable alternatives relies on using three tools for project development.

- **Purpose and Need Statement**. The first test of any proposed solution is, does it respond to the purpose and need for the project? And next, how well does it accomplish the goal of the project?
- **Environmental Overview**. This will locate sensitive features so that proposed alternatives anticipate issues rather than react to late discoveries. This will help determine what environmental issues are likely to arise from each alternative, though a full impact analysis will not be performed at this stage.
- **Public Involvement**. Meaningful interaction with all stakeholders during the development of alternatives.

These tools used together will result in the best representative alternatives to carry forward. Alternatives should not be offered if they are not buildable. Yet, alternatives should be offered and considered even if they are unlikely to be the final choice. All alternatives that were suggested for consideration but not advanced need to have the reasons for dismissal documented.

Identification of 'significant' environmental impacts

A significant environmental impact is one where issues cannot be overcome by the proposed alternative, while other viable alternatives exist that can meet the purpose and need of the project without the impacts.

Alternatives that would give rise to significant impacts in the following areas should be dropped from further consideration:

1. use of 4(f) property (*publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance*);
2. a jeopardy finding on an endangered species;
3. a major land use goal exception requirement;
4. impacts to prime aquatic resources;
5. alignments that cross unmitigated Superfund hazmat sites; and
6. alignments that disproportionately impact but do not equitably benefit low income and minority communities.

When all the alternatives have one or more of the above impacts, often the proposed alternatives can be adjusted so that the impact is minimized or avoided.

Factors to consider regarding intensity or severity of impacts include:

1. impacts that may be both beneficial and adverse;
2. the degree to which the proposed action affects public health or safety;
3. unique characteristics of the geographical area;
4. the degree to which the effects on the quality of the human environment are likely to be highly controversial;
5. the degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks;
6. the degree to which the action may establish a precedent for future actions with significant effects;
7. whether the action is related to other actions with individually insignificant but cumulatively significant impacts;
8. the degree to which the action may adversely affect resources listed in or eligible for listing in the National Register of Historic Places;
9. the degree to which the action may adversely affect an endangered or threatened species or its habitat; and,
10. whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

Documentation

One cannot simply depend on the information in the NEPA document to establish the administrative trail. Large scale projects frequently take several years to complete. During that period, staff may change and understandings about what was decided may erode. In order for projects to make orderly progress, new staff and stakeholders need to be able to review decisions that were already made and the logic for those decisions. This information therefore should be contained in the documentation for each decision as it is made and become part of the project's permanent file. If there are legal actions against the project, this file will form the basis of the administrative record for the project. It will demonstrate the appropriate alternative development process and a reasonable, supportable method for eliminating alternatives was followed.

Proposed alternatives and the reasons for forwarding or dismissing them must be included in the permanent record for any proposal that is intended to result in a constructed transportation facility using federal funds. The information will be used in later environmental documentation and will be required for the project to enter onto the TIP for design and construction.

Planning "hand-off" products

Early coordination and information sharing between agencies and other transportation stakeholders provide opportunities to develop better projects, while addressing environmental and community concerns, and reducing project delays. This also provides the opportunity to balance the purpose and need for transportation improvements with the potential impacts to the community and environment early in the decision-making process, and allows for consistency between transportation and land use policies.

Development of 'hand-off' products during the planning phase enables the planning and NEPA processes to be linked, provides for a continuum of information flows, and eliminates the duplication of activities between planning and subsequent environmental analyses carried out through NEPA.

The following planning products are valuable inputs to the project-level detailed analysis, documentation, design and permitting necessary for project implementation:

- Tiering of environmental review (CE, EA, EIS)
- Purpose and need statements
- Scoping and alternatives identification, evaluation and/or elimination of alternatives
- Baseline of environmental conditions, including indirect and cumulative impacts, and exploration of potential mitigation opportunities
- Preparatory analyses for permitting including land use, economic development, natural resources, air quality, water quality, quality of life, travel performance - utilizing context sensitive solutions, scenario planning, community impact analysis