



U.S. Department
of Transportation

Federal Highway
Administration

Memorandum

Subject "Purpose and Need" in Environmental Documents Date SEP 18 1990

From Acting Director, Office of Environmental Policy Reply to HEV-11
Washington, D.C. 20590 Attn of

To Regional Federal Highway Administrators
Federal Lands Highway Program Administrator

The Project Development Branch (HEV-11) in its review of environmental impact statements has noted a systematic deficiency in the purpose and need section. In our view this deficiency is particularly critical because it helps define what alternatives must be evaluated and, in some cases, selected in order to comply with the myriad of Federal environmental laws, Executive Orders, and regulations. For example, a well-developed project purpose and need demonstrates that the no-build alternative is not prudent for Section 4(f) purposes, and limits what can be considered a "practicable alternative" in complying with the Executive Order on Wetlands and the Section 404(b)(1) guidelines.

To address this deficiency, the attached guidance paper entitled "The Importance of Purpose and Need in Environmental Documents" has been prepared. The paper provides detailed information on: The importance of purpose and need; how it drives the range of alternatives that must be considered; its basic elements; and how it can be used in decisionmaking.

Sufficient copies of this guidance paper are attached to provide one each for the Regional Office, each Division Office, and each State highway agency. We suggest you file it under tab 1 of the Environmental Guidebook and it will be incorporated in the next annual update.

We welcome your feedback on the content and utility of this paper.

Richard A. Torlock
for Kevin E. Heanue

Attachment

The Importance of "Purpose and Need" in Environmental Documents

Introduction

The purpose and need section is in many ways the most important chapter of an environmental impact statement (EIS). It establishes why the agency is proposing to spend large amounts of taxpayers' money while at the same time causing significant environmental impacts. A clear, well-justified purpose and need section explains to the public and decisionmakers that the expenditure of funds is necessary and worthwhile and that the priority the project is being given relative to other needed highway projects is warranted. In addition, although significant environmental impacts are expected to be caused by the project, the purpose and need section should justify why impacts are acceptable based on the project's importance.

As importantly, the project purpose and need drives the process for alternatives consideration, indepth analysis, and ultimate selection. The Council on Environmental Quality (CEQ) regulations require that the EIS address the "no-action" alternative and "rigorously explore and objectively evaluate all reasonable alternatives." Furthermore, a well-justified purpose and need is vital to meeting the requirements of Section 4(f) (49 U.S.C. 303) and the Executive Orders on Wetlands (E.O. 11990) and Floodplains (E.O. 11988) and the Section 404(b)(1) Guidelines. Without a well-defined, well-established and well-justified purpose and need, it will be difficult to determine which alternatives are reasonable, prudent and practicable, and it may be impossible to dismiss the no-build alternative.

The transportation planning process, which includes regional, subarea, and corridor planning, can serve as the primary source of information for establishing purpose and need as well as evaluating alternatives. Information and forecasts of vehicle miles of travel, travel demand, highway and travel speeds, traffic diversion, time of day characteristics, and traffic accident rates can be provided by the planning process. This information can be used to evaluate congestion, air quality, safety, and other environmental issues for various transportation alternatives including the no-build alternative. Planning can also estimate the benefits and costs associated with highway and transit projects that can be used in the development of project "purpose and need."

Consideration of Alternatives

In urbanized areas, the urban transportation planning process required by Section 134 of Title 23, should result in plans and programs that are consistent with the comprehensively planned development of an area and that integrate transportation, land use, and environmental considerations. Comprehensive planning, which includes transportation, should establish the basic purpose and need for specific projects and the system wide consequences of operational improvements and the no-build alternative. For example, the planning process should identify the need for a transportation improvement between points x and y at some future date. Further, in a high percentage of

cases, a decision on the appropriate mode (highway or transit) and the basic project concept (freeway on new location, upgrade of existing facility, light rail transit, bus/high occupancy vehicle lanes, approximate travel demand, etc.) can be determined. In other cases, it may not be possible to resolve these issues until the conclusion of the project development process. Scoping meetings early in the environmental process are an excellent means to reach agreement with the participants on the basic purpose and need for the project, the consequences of the no-build alternative, and operational improvements and, where possible, the mode and project concept.

After the basic purpose and need for the project are established, a number of lines can theoretically still be drawn to connect points x and y. If the project's purpose and need are so vague as to only stipulate that a transportation improvement between x and y is needed, then reasonable alternatives would cover a wide range and must be evaluated to comply with the CEQ regulations. As the project's purpose and need is refined, a number of alternatives will drop out, thereby permitting a more focused analysis of those alternatives which truly address the problem to be solved. As alternatives are dropped from consideration, it is recommended that the concurrence of those cooperating agencies with jurisdiction by law be sought in that decision.

In a similar manner, the type of improvement to be considered even after the planning process may be wide ranging: from upgrading an existing facility to multilane freeway on new location. The traffic demands, safety concerns, system continuity considerations, etc., all will help define reasonable alternatives and products from the transportation planning process should serve as a primary source for this information.

Beyond the CEQ regulations requirement of evaluating all, or a reasonable number representative of the full spectrum of reasonable alternatives, there are other more action-limiting requirements for alternatives under Section 4(f), the Executive Orders on Wetlands and Floodplains, and the Section 404(b)(1) guidelines. To address these requirements and conclusively demonstrate that some alternatives are not prudent or practicable, a well-justified purpose and need are vital.

The use of land from a Section 4(f) protected property (significant publically owned public 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 to such use. There are numerous factors which could render an alternative "not prudent" because of unique problems, including cost and environmental impacts. If an alternative does not meet the project's purpose or satisfy the needs then the alternative is not prudent provided the purpose and need section can substantiate that unique problems will be caused by not building the project.

If a proposed action is to be located in a wetland or it entails a floodplain encroachment with significant impacts, a finding must be made that there is no practicable alternative to the wetland take or floodplain encroachment. Any alternative which does not meet the need for the project is not practicable. If the project's purpose and need are not adequately addressed, specifically delineated and properly justified, resource agencies, interest groups, the public or others will be able to generate one or possibly several alternatives which avoid or limit the impact and "appear" practicable. Sometimes long, drawn out negotiations or additional analyses are needed to clearly demonstrate that an alternative is not practicable, where a well-described justification of the project's purpose and need would have clearly established it.

If an alternative does not satisfy the purpose and need for the project, as a rule, it should not be included in the analysis as an apparent reasonable alternative. There are times when an alternative that is not reasonable is included based on the request of another agency or due to public expectation. In such cases, it should be clearly explained why the alternative is not reasonable (or prudent or practicable), why it is being analyzed in detail and that because it is not reasonable that it will not be selected.

Basic Ingredients of Purpose and Need

The purpose and need should be as comprehensive and specific as possible. For example, rather than simply stating that additional capacity is needed between two points, information on the adequacy of current facilities to handle the present and projected traffic, (e.g., what capacity is needed and the level of service for the existing and proposed facilities) should be discussed. Other information on factors such as safety, system linkage, social demands, economic development, and modal interrelationships, etc., that the proposed project will attempt to address, should be described as fully as possible. This will assist in pinpointing and refining the alternatives which should be analyzed. Further, it will in a sense "protect" those viable alternatives from sniping by external interests and capricious suggestions to study something else. If the purpose of and need for the proposed project are rigorously defined, the number of "solutions" which will satisfy the conditions can be more readily identified and narrowly limited.

The purpose and need section of the project may, and probably should, evolve as information is developed and more is learned about the project and the corridor. For example, assume that the only known information with regard to purpose and need is that additional capacity is needed between points x and y. At the outset, it may appear that commuter traffic to a downtown area is the problem and only this traffic needs to be served. A wide range of alternatives may meet this need. As the studies progress, it may be learned that a shopping center, university, major suburban employer, and other traffic generators contribute substantially to the problem and require transportation service. In this case, the need is further refined so that not only commuter trips but also student, shopping, and other trips will be accommodated. These refinements would clearly reduce and limit the number of alternatives which

could satisfy the project's purpose and need, thereby reducing the number and range of reasonable, prudent and practicable alternatives. If an alternative is suggested that does not serve the university or other traffic generator, and such service is a vital element of the project, the alternative may be eliminated from future study since it does not meet the need for the project.

In the example above, it should be noted that products of the urban transportation planning process should identify many of the elements which contribute to the transportation problems. To the extent that the planning process develops these products and these products are utilized in project development, it may not be necessary to prepare additional studies.

Some of the elements which may assist in explaining a project's purpose and need (e.g., capacity, safety, system linkage, etc.), are described on page 14 of FHWA Technical Advisory T 6640.8A - "Guidance for Preparing and Processing Environmental and Section 4(f) Documents." This discussion is included here as an appendix. All of the elements which are relevant should be as fully developed as possible and utilize as specific data as possible to compare the present, future no-build, and future build conditions. Data should be presented on such factors as reduction in vehicle hours of travel, improvements in travel speeds on the system, reduction in traffic accidents, injuries and fatalities, savings in cost to the travelling public, enhanced economic development potential, increased tax base, improved access to public facilities, etc. It is not sufficient to state that the project is needed to provide increased capacity and improve safety. Supporting data must be provided.

Using Purpose and Need in Decisionmaking

As noted above, the purpose and need define what can be considered reasonable, prudent, and practicable alternatives. The decisionmaking process should first consider those alternatives which meet the purpose and need for the project at an acceptable cost and level of environmental impact relative to the benefits which will be derived from the project.

At times, it is possible that no alternative meets all aspects of the project's purpose and need. In such a case, it must be determined if the alternatives are acceptable and worthwhile pursuing in light of the cost, environmental impact and less than optimal transportation solution. To properly assess this, it is important to determine the elements of the purpose and need which are critical to the project, as opposed to those which may be desirable or simply support it. The critical elements are those which if not met, at least to some minimal level, would lead to a "no-build" decision. Determining critical needs could include policy decisions as well as technical considerations.

Other times, the cost or level of environmental impact are not acceptable and an alternative that only partially meets the purpose and need or the no-build alternative must be considered. If the costs are justified in relation to the transportation benefits, then a less than full-build alternative may be acceptable.

In the vast majority of cases, however, at least one alternative will fully meet the purpose and need at an acceptable cost and level of impact. In cases where more than one alternative fully meets the purpose and need, a number of factors including cost, traffic service, safety, public support, environmental impact, etc., will be considerations in reaching the decision on which is the preferred alternative. The requirements of Section 4(f), the Wetland and Floodplain Executive Orders, and the Section 404(b)(1) guidelines, of course, play an important role in this process.

Key Points to Remember

In summary, the purpose and need section in the EIS lays out why the proposed action, with its inherent costs and environmental impacts, is being pursued. If properly described, it also limits the range of alternatives which may be considered reasonable, prudent, and practicable in compliance with the CEQ regulations, Section 4(f) the Executive Orders on Wetlands and Floodplains, and the Section 404(b)(1) guidelines. Further, it demonstrates the problems that will result if the project is not implemented.

There are three key points to remember relative to the purpose and need section of an EIS. It should be:

1. justification of why the improvement must be implemented;
2. as comprehensive and specific as possible; and,
3. reexamined and updated as appropriate throughout the project development process.

Appendix

The following is a list of items which may assist in the explanation of the need for the proposed action. It is by no means all-inclusive or applicable in every situation and is intended only as a guide.

- (1) Project Status - Briefly describe the project history including actions taken to date, other agencies and governmental units involved, actions pending, schedules, etc.
- (2) System Linkage - Is the proposed project a "connecting link"? How does it fit in the transportation system?
- (3) Capacity - Is the capacity of the present facility inadequate for the present traffic? Projected traffic? What capacity is needed? What is the level(s) of service for existing and proposed facilities?
- (4) Transportation Demand - Including relationship to any statewide plan or adopted urban transportation plan together with an explanation of the project's traffic forecasts that are substantially different from those estimates from the 23 U.S.C. 134 (Section 134) planning process.
- (5) Legislation - Is there a Federal, State, or local governmental mandate for the action.
- (6) Social Demands or Economic Development - New employment, schools, land use plans, recreation, etc. What projected economic development/land use changes indicate the need to improve or add to the highway capacity?
- (7) Modal Interrelationships - How will the proposed facility interface with and serve to complement airports, rail and port facilities, mass transit services, etc.?
- (8) Safety - Is the proposed project necessary to correct an existing or potential safety hazard? Is the existing accident rate excessively high? Why? How will the proposed project improve it?
- (9) Roadway Deficiencies - Is the proposed project necessary to correct existing roadway deficiencies (e.g., substandard geometrics, load limits on structures, inadequate cross-section, or high maintenance costs)? How will the proposed project improve it?