

# **the "no-build" alternative: what it is, why it is necessary, and how it can be handled**

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The "no-build" alternative represents vastly different things to different groups and individuals. To those outside the highway agency, the no-build alternative is uncomplicated. It merely means not adding more pavement to the surface of the earth. The advantages include forcing the development of transit, discouraging the purchase of additional automobiles, and preserving environmental values.

Those of us who work within the highway agency perceive the problem to be much more complex. For example, if a section of highway is deteriorating structurally, is carrying traffic volumes in excess of its capacity, and has a poor safety rating, can we accept the no-build alternative? Since the highway agency has the responsibility for building and maintaining highways, it must at least maintain the structure of the highway in an adequate condition. Thus, the no-build alternative could be thought of as normal maintenance of a surface so that automobiles are not destroyed and safety is not decreased.

In many cases, the no-build alternative consists of maintaining a 2-lane highway in a satisfactory condition so that it provides the function for which it was originally designed and constructed. However, because many highways resulted from incorporating original land service routes into the state and federal-aid systems, that option may not represent a rational alternative. Routes of that type often have extremely poor vertical and horizontal alignment, have narrow free-access right-of-way, and were constructed far below existing standards. Their normal maintenance would not result in a highway facility that the highway agency has a statutory responsibility to provide.

It could reasonably be accepted that reconstruction of such a facility to modern, safe, and structurally adequate standards without increasing capacity would be consistent with the philosophy of the no-build alternative. However, in many cases, existing traffic volumes are greater than the facility can handle except at the lowest levels of service. If the highway agency reconstructed the facility at the same capacity, it would not adequately handle existing traffic, let alone encourage increased volumes.

The highway agency may decide to increase capacity on the facility without altering the basic characteristics of the highway in terms of its structural design and limitations on access, i. e., reconstruct the 2-lane highway into a multilane highway but not a controlled or limited access or divided facility.

Our experience shows that most people consider one of those alternatives, rather than actually doing nothing, to be the no-build alternative. Agreeing on just what the no-build alternative really is is less difficult than agreeing on the necessity of its consideration in the highway planning process. Philosophically, that consideration relates to how highways benefit all of society and not just the highway user. A proposed highway would be viewed with regard to how it fits into the whole social, environmental, and economic fabric of a community and would not be based on a single objective of providing service to the highway user.

Achievement of that objective requires full participation of a wide range of community groups and interests. Community involvement will bring a variety of divergent priorities and values to the highway agency. To achieve a beginning of agreement will require a common and accepted base from which to assess the benefits and losses that will derive from the proposed project. That base is the evaluation of the do-nothing alternative.

An objective assessment of the existing condition of the community and its transportation resources and of the need for improved facilities provides the starting point for evaluating the trade-offs among the social, environmental, and economic values that will result from either building or not building a proposed highway.

Identifying and evaluating the trade-offs are the best ways of setting forth the actual costs and benefits of a proposed new facility. That process provides a mechanism for determining the external diseconomies that will result from the project. The diseconomies of a highway project that are paid for by the loss of social and environmental values provide the major concern of many groups and individuals. The identification of the potential diseconomies of each alternative can contribute to the selection of the most palatable alternative compared to the do-nothing base.

Any of man's activities have an impact on the environment. An alteration to the environment that adversely affects natural balance, reduces diversity, or affects behavioral stability must be considered a negative impact. Changes that reduce the quality and enjoyment of life or endanger public health are negative impacts. Negative impacts to the environment must be balanced by gains, but we must also answer the question, Who benefits and who loses?

The base for all of those evaluations is the existing condition and the comparison is with the do-nothing alternative. From that point we can establish the increasing losses over time that will result from not building the project. Most important, the no-build alternative must be looked at as a positive decision-making tool and not as an anti-highway attitude or a desire to protect the status quo. When we consider it as a method for determining the actual need of a proposed facility, we will be better able to justify needed projects and eliminate unneeded ones.

As part of that positive approach, the question of benefits must be placed on a scale consistent with the overall impact on the environment. For example, we must recognize the significant improvement to the standard of living and the quality of life that has resulted from improved transportation. The entire food delivery system, developed for a highly urbanized society, is dependent in great measure on the level of transportation service. The life style of large segments of our population is largely based on highway transportation. Those factors as well as the specific benefits and losses resulting from the project itself must be weighed.

The no-build alternative implies an evaluation of existing conditions; a projection of existing conditions based on the best available information on population increase, density, and location, the availability and use of resources, and the conditions of the environment resulting from available transportation; and a comparison of the existing and projected situation after the improved transportation system is provided.

Functionally, that process is more easily proposed than implemented. Few major projects being considered are independent of a long-range system plan. The result is often a shallow, pointless discussion of whether a vital link in a system of highways should or should not be built.

From a system standpoint, then, there can truly be a do-nothing alternative. The alternative is based on additions to a system or the development of an additional system. For example, in the southeast Michigan region, the comprehensive transportation planning process has developed a regional freeway plan. The system is currently not completed, but already additions to the system are being proposed, primarily by local governments who are beginning to foresee additional problems developing as a result of existing and projected land use. The no-build alternative from a systems basis would mean that additions beyond the proposed and accepted system would be considered in terms of the overall impact of the total proposed additions to that system. Links within the system would necessarily be evaluated on not only benefits and costs of the project but also impact on all parts of the system. During the evaluation of other links within the system, losses were balanced by overall benefits provided by the highway system and not merely by the individual projects. Not to build a key link in a system may increase the losses absorbed by other areas and decrease the benefits.

None of my remarks should be construed to mean that, if a project is part of an approved system, it should not be subjected to a rigorous no-build alternative analysis.

Although the systems approach is more consistent with regional and community planning, many projects do not fit into that context. The analysis is no less important for those projects. The 3-stage approach set forth in the beginning of this paper appears to be the most reasonable mechanism for considering the no-build alternative on individual projects.

In summary, the no-build alternative is the essential base for considering all other alternatives and for establishing the trade-offs that the community will be required to accept if the project is built. The most practical time to evaluate the do-nothing alternative is when systems changes are anticipated. Often that is not possible, and projects must be evaluated individually.