

The Environment and Highways

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Recently, the Governor of Massachusetts announced the completion of his review of highway plans for the Boston metropolitan area. I believe his position represents a fresh approach to inclusion of the quality of the human environment into transportation planning.

The Governor indicated which proposals would be pursued and which proposals would receive no further consideration because of their disruptive effects. Priority attention is to be given to transit options, expressway options at the 4-6 lane scale (rather than 8 lanes), and means of handling motor vehicle traffic that would not involve the construction of new expressways.

In dropping certain expressway alternatives, the Governor pointed out that he was not deemphasizing the needs of the regional economy. He said, "No one is more cognizant than I of the need for economic development and for jobs. At the same time, I think that we have to reevaluate a good many old shiboleths about the means to achieve prosperity. I do not think that the best path to prosperity is one which radically overloads the street system of the downtown core. I do think that concern about the environment and the quality of life is highly compatible with a determination to promote prosperity. I have called upon the planning review for creative thinking about the best ways to reconcile these objectives."

Like the Kentucky Department of Highways, the Bureau of Outdoor Recreation serves a clientele - people who are interested in outdoor recreation, the recreation environment, and the industry which depends on these interests. Yet, we are public servants first. I feel strongly about this. I want to believe that we have a mission in government which transcends the specific objectives of our agency. I hope that this conviction permits me to see the shortcomings and narrow purposes of my activities which may work against the interest of people.

I came to this meeting with deep-rooted convictions. We must have safe, economic, efficient transportation to serve people. We must also maintain a pleasant environment to serve people. The two are not mutually exclusive. There must be an accommodation.

Highways are basically anti-environmental systems. That kind of a statement is bound to raise your hackles - you plan and build highways. You would say that highways are essential to our survival, and they certainly add to the convenience of living. To this extent, they benefit the environment of man. There is no disputing this. We must also think about man's long term ability to live in harmony with the available resources. These involve water and streams, airsheds, forests, prairies, wild animals, minerals, etc. In most situations, highway projects are detrimental to these resources. Only your imagination and commit-

ment can minimize this adverse impact to an acceptable level.

It also happens that some of the man-made alterations in the environment as a result of highway construction can produce environmental benefits which mitigate the losses. Here I am speaking about things like borrow pits which can be used for recreation as well as habitat for aquatic life. Another example would be a carefully designed highway along a ridge which allows people a vantage point to enjoy the beauty of the countryside.

I am aware that Kentucky placed first in two of the eight categories in the Federal Highway Administration's 1971 annual awards competition, "Highway and Its Environment." Under the category Preservation of Wildlife or Natural Areas, the State Highway Department altered the location of State Route 10 in Lewis County to preserve the largest known pin oak tree in the State. Under the category Preservation of Historic Sites, the State designed Interstate Route 64 with a tunnel to preserve the scenic beauty of the Seneca Park area and Cochran Hill in Louisville. There is no doubt in my mind that the people of Kentucky appreciated the Highway Department's efforts in this area. I also think there is a great deal of self esteem involved.

A long way back, the only people fighting to maintain the environment in the face of public works developments were the little old ladies in tennis sneakers. You know, the ones picketing the mayor's office, chaining themselves to trees and pleading for the red-bellied sapsucker.

Well, we've come a long way since then. There are legions fighting now. Today the little old lady in tennis sneakers is disguised as an environmental impact statement.

Our region serves nine states, so we have had some experience in reviewing highway environmental impact statements, and considering 4(f) situations involving highway projects.

An interesting and useful summary of the highway environmental impact review process crossed my desk a couple of weeks ago. It is "Technical Study Memorandum 4" published last December by the Highway Users Federation. The author, Marian T. Hankerd, makes several recommendations to improve the process, from the standpoint of moving projects along as well as assuring adequate consideration of the environment. Without slighting any of the recommendations, I would like to highlight the ones I think are most important:

"The state highway agency should provide personal leadership to coordinate environmental policy development and implementation. He should use citizen and inter-agency advisory groups and authorize environmental coordinators in his own agency.

"The state highway agency should cooperate with other agencies in improving the environmental information in the EIS by developing better definitions and impact data and by more comprehensive discussion of alternatives, including the no-build alternative.

"All agencies must provide additional trained staff for effective development, review, and evaluation of EIS; educational institutions should develop curricula in training programs on an inter-disciplinary basis."

I don't think you can overstate the need for an environmental commitment from the top. It's one thing following established procedure and the letter of the law. It is another thing showing a genuine concern for plants, animals, scenic beauty - those things which surround man and which are essential to his survival and well-being. I believe we can and must expect this involvement from highway administrators in this crowded and increasingly complex society.

I can recall very vividly such a commitment being made by a military engineer about a year and a half ago. I was at an annual meeting of the National Association of Military Engineers. The Division Chief of the Corps of Engineers was addressing the group. He put it on the line - that the Corps had as much responsibility as anyone in making sure that their public works projects did not unnecessarily damage the environment. But, more important than that, he pointed out that the engineers were in an enviable position from the standpoint of evaluating and making proposals for preserving the environment. Engineers have technical training and backgrounds overlapped by few other disciplines. By broadening this training and assuming a genuine interest in environmental matters, the Division Chief felt that the Corps could develop a combination engineer-environmentalist that could not be surpassed.

Unfortunately, I have had dealings with administrators in other areas where it was difficult to achieve any meaningful coordination with the agency staff because of the well-known attitude at the top which was negative to anything but building projects. Here are some examples of this attitude: Trees are valueless unless they can be marketed. A shallow stream is worthless because it cannot float a motor boat or support water-skiing. What's more important, people or ducks? The project will stimulate the economy, and, after all, jobs are more important than the environment.

Contrast these with the attitudes expressed by Secretary Volpe in his March 11 speech at the National Wildlife Federation meeting in Mexico City:

"I believe that environmental considerations are not (as some would have you think) blind opposition to progress but rather opposition to blind progress.

"We are aware that some of the most lasting landmarks can be a boulder not buried-- a tree not felled--an eagle's nest not disturbed."

I would like to expand on Mr. Hankerd's recommendations on highway environmental impact statements, and then I'd like to talk about the special

considerations required by Section 4(f) of the Department of Transportation Act.

The following comments relate to the contents of environmental impact statements that need improvement.

1. Include a map or other suitable graphic presentation and provide enough description of the area so that we can better understand what is involved from the standpoint of topography and scenic beauty, vegetation, and recreation resources.

2. There should be an objective review of the environmental impact. Self-serving language - language which serves primarily to justify the project - should be avoided.

3. Consideration should be given to all the reasonable alternatives, including the no-project alternative. Reasons should be given why certain alternatives are not feasible or prudent.

The handling of alternatives is considered in some detail in a recent decision handed down by the U. S. Court of Appeals for the District of Columbia. The case is Natural Resources Defense Council v. Morton (No. 71-2031, January 13, 1972). I can't take the time here to describe the situation. Suffice to say that the court emphasized the need to adequately describe alternatives to the proposed project.

4. Recognition should be given to the fact that excavation, filling, and paving represent an irreversible and irretrievable loss of natural environmental values.

5. Recognition should be given to the fact that the economic benefits of stimulating industrial and commercial development can often result in adverse environmental impacts.

This brings to mind one of the new books out on this subject - World Dynamics by Jay W. Forrester. He says, "Whether those guilty of it are aware of it or not, to condone or promote economic or population growth is a crime against man and nature." That's one man's view, an extreme position. But, I tend to agree that most development has been at the expense of our environmental surroundings.

A couple of other general comments. We have some difficulty in understanding the likely environmental impact of certain projects because they represent only a segment of a much larger project. There may be negligible environmental effects from an individual project segment. However, when combined to form the entire highway there may be substantial effects.

We will do all we can to respond to your efforts to achieve early coordination in the development of project proposals. There are difficult situations which can be avoided through early consultation. I believe the achievement of a consensus prior to the submission of a proposal is preferable to ironing out differences as a result of formal comments which occur late in the process.

As you know, Section 4(f) of the Department of Transportation Act and subsequent court cases have placed specific and stringent restrictions on the conversion of park and similar areas to transportation uses. Under Section 4(f) there must be a

finding of significance by the officials having jurisdiction over the particular area, and the Secretary may not approve the use of such areas for transportation purposes unless (1) there is no feasible and prudent alternatives to the use of such land, and (2) such program includes all possible planning to minimize harm to such areas.

The finding of significance should not be limited to the specific area which may be affected directly by a highway project. In other words, a 60-acre urban park would have significance although the taking of half an acre may not be detrimental. The urban park itself is the area of significance - not the half acre portion. What is really important is that the mitigation provisions of Section 4(f) should apply to any taking from an area which has significance.

There is some question on feasibility or whether it is prudent to take an action. Practically anything is feasible. This refers to the engineering aspects, the state of the art of construction. You are getting into a judgment area when you talk about prudent. "Prudent" is the consideration of what course of action is the most reasonable and in the best public interest - whether the highway should completely by-pass a 4(f) area or whether it would be justified to infringe on the area to avoid some other adverse effect, such as pulling down a skyscraper.

In regard to including all possible planning to minimize harm to the areas in question, I have several comments. This assumes that an alternative has been selected which will affect the park area.

First of all, we believe replacement of an equal amount of acreage and recreation utility is a must. And here we are really talking about the cost of replacing this land, which may be considerably higher than the fair market value of the land taken. It may also require some site development to make it as usable as the property relinquished.

We are also concerned about noise. This aspect of highway projects is usually not adequately covered. An area may not be physically touched by a highway but may be adversely affected by the accompanying noise of passing traffic. What efforts have been made to screen or reduce the noise effects?

Another area would be access to the affected areas. Does your planning adequately consider reestablishing as good or better access to an area than it had prior to the transportation project?

We also look for evidence of consultation with the administrators of the affected areas and other legitimately interested agencies and parties. We recognize that for the most part these people are in the best position to know what needs to be done to lessen the impact of a project on their areas.

I think we all sense the winds of change for the highway development programs in this country. Many of the proposed raids on the Highway Trust Fund are based at least partly on environmental considerations.

The appeal for funds to support mass transportation is as much an effort to reduce congestion and the adverse effects of automobiles as they are

in improving the convenience for man. Bicyclists want a piece of the action, not only because they like to bicycle but because they feel that bicycles are more compatible with the human environment.

I think the success of the automotive industry to turn out vehicles with sensible noise and emission standards will also have an important impact on future highway construction. With the development of acceptable standards, there will be less opposition from environmentalists.

Something else to consider - could it be that there are some highways which are more important for their recreation values than they are for transportation? If this is so, perhaps it would be desirable to establish a policy of preserving these highways for such use. To a very limited extent, it is possible that additional highways or leisureways could be constructed for this purpose.

Kentucky has a Scenic Roads Commission and several roads have been placed on the State Scenic Roads Registry. This is a good first step. What is needed now are the tools to assure that these roads will remain scenic. Sensible zoning and acquisition of scenic easements are examples.

A thrust from still another direction will have an impact on highway planning and the environment. In 1971, the Administration recommended enactment of a national land use policy. If adopted by the Congress, this would provide assistance to the states in the preparation of land use plans. Once adopted, the plans would serve as a guide to the location and construction of federal as well as state projects. To qualify for funding, the land use program would include a method for exercising control over areas impacted by key public works facilities.

In his environmental message to Congress in February, the President reiterated his concern about the abuse of our land resources and stressed the need for early action to promote responsible land use practices.

Consequently, the President proposed two amendments to broaden and strengthen the previously submitted Administration proposal. The first would clarify the scope of state land use regulatory programs explicitly to include control over the siting of such key facilities as major airports, highways, and recreation facilities. The second would provide sanctions against any state which failed to implement an adequate land use program. Recognizing the significant effect which key facilities can have on broad land use patterns, the sanctions which were proposed would reduce the amount of financial assistance under those federal programs with the most far-reaching effect upon land use. Any funds withheld from states which have not implemented adequate land use programs would be diverted to states complying with the National Land Use Policy Act.

In closing, I would like to pledge my support in your efforts to provide safe, economic, and efficient transportation. You must see that in doing so the least possible damage is done to our environmental surroundings. The monkey is on your backs. The natural environment is there. You propose to use a part of this environment for a

highway project. You must evaluate as objectively as possible the values which will be lost against the values to be won with the project. You must include in your plans all reasonable means to offset significant adverse environmental effects. As

highway engineers and planners, you have superb training. With an equal commitment towards maintaining a pleasant and productive environment, you are in the best position to achieve the proper balance to serve people.