## New environmental "need" concepts to guide future highway planning

(See Editorial page)

The highway projects that contractors will be bidding on must increasingly be designed to a new set of concepts. The new approach, taking environmental and social factors into consideration, was outlined recently by Federal Highway Administrator Francis C. Turner at an industry meeting.

Speaking at the National Limestone Institute's annual convention in Washington, Turner took the occasion to explain the new concepts, and to explore the role of the highway departments in future highway planning.

Following are excerpts from Turner's talk.

It was significant that President Nixon on January I signed the National Environmental Policy Act. Remarking on the work of his Cabinet Committee on Environmental Quality, he said: "We have devoted many hours to our pressing problems of pollution control, airport location, wilderness preservation, highway construction and populations trends.

Highways can and must be made compatible with and must enhance the environment. Furthermore, we must be concerned not only with problems of the physical environment, but also the social environment—with the interaction of highways and people, with a highway's impact on individuals and communities . . . it is obvious that our future highway needs and the ways to meet them cannot be considered in a void, insulated from the rest of our society.

Highway transportation, more than

any other form of transportation, provides the facilities and the services that will enable the American society of the 1970's to function. And highway planning, highway decision-making, and highway construction must be done in the midst of that society, in the real world where people live and work and spend their leisure.

To a significant degree therefore, the success of the highway program now and in the future will depend on how well we respond to this situation of fact. It is not a challenge to be viewed with dismay nor timidity, for we have built up many resources over the years in the highway program and are far better equipped to meet the situation than some people would have you believe.

New pioneering: Highway builders have been pioneer builders from the earliest days. We also pioneered in administrative management by creating a Federal-State partnership which has been the world's outstanding example of successful intergovernmental cooperation... and which has made enormous contributions to the capital growth and social advancement of the nation.

We have long supported research and development to bring about improvements in engineering and construction, to increase the safety and efficiency of our highway facilities, and to provide needed answers to economic and social questions.

In fact, the highway program has been in the forefront in finding solutions to some of the difficult problems facing many other elements in our society today. For example, the acceleration of the Interstate Highway System construction program in the 1950's required a more effective planning of transportation facilities in urban areas, in view of the great impact of freeways in both serving and shaping urban development. Several states had begun tackling this problem as early as the middle 30's. On the basis of their experience, we wrote into law in the 1962 Act a Congressional mandate requiring that all highway projects after 1965 in urbanized areas of more than 50,000 population would have to be based on a contincomprehensive, cooperative transportation planning process.

Landmark legislation. This gave a spur to urban planning generally throughout the nation. For the first time all municipalities were forced to face up to and do something about the need for area-wide urban land use planning—since transportation planning is based on land use planning. And for the first time state highway departments and local governments began to engage in a continuing, cooperative planning effort because transportation planning was to include not just highways, but all modes of transportation.

Today, using quite sophisticated techniques, transportation planning is being closely coordinated with the newer regional planning organizations.

Serious effort has been devoted to the problem of identifying community goals, to make highway location and design more responsive to the social and environmental as well as the economic values. While it is admittedly difficult to quantify such seemingly subjective values, we hope that the interdisciplinary contacts which we have developed will prove useful in integrating community values into transportation planning.

Leadership examples: Meanwhile, we have over the years developed a long list of these socio-economic concerns that must be considered in the highway location process. We insist upon early consultation with interested agencies, such as those responsible for fish and wildlife, historic preservation, and parks and recreation. Early consultation offers the best promise for accommodating other public interests and for satisfactory resolution of differences that too often become polarized when confronted at a later date.

The public hearing procedures, part of our highway procedures for 20 years, have the same objective; that is, to obtain citizen acceptance through early and active involvement and participation of local communities in the highway location and design process.

Corridor concept: We have also urged communities to take advantage of a unique opportunity to meet community needs through the joint development of highway, and particularly freeway corridors. Working with State highway departments, many local government agencies, non-profit corporations and private interests are providing for multiple use of the highway right-of-way, for such things as parks, playgrounds, parking areas, warehouses, transportation terminals, post offices, fire stations, and even commercial, residential, or educational uses.

Joint development also offers exciting possibilities in undeveloped or sparsely developed areas when opportunity for compatible land and transportation development has not yet been disclosed.

Another example of how our highway program has led the way: the 1968 Act provides a plan for producing improved housing for persons and businesses displaced from the path of one of our Federally-aided highway projects.

I want to make it clear that we in the highway program recognize our social responsibilities and are doing something about them. We are as concerned with the social impact of our program as we are with its economic impact. We know that we must discharge our social responsibilities if we are to meet our fundamental responsibilities of serving the transportation needs of the nation.

More than road-miles: The point is, when we talk about transportation needs—or future highway needs—we are not just talking about miles of roads and the cost of engineering, right-of-way and construction. We are talking about joint development, air rights, aesthetics, environmental factors, multiple use, roadside development, scenic enhancement, relocation assistance, safety, traffic operations improvement, equal employment opportunity, improved public transportation, a host of other things.

It is because highways are so predominant that they have such a pervasive influence on all of our lives and our communities and nation.

To illustrate: in urban areas of more than 50,000 population 98 percent of all person-miles of travel today are by highway vehicle; in smaller towns, generally 100 percent. Intercity travel is 88 percent by highway.

Many benefits: Not only are highway improvements vital to continued social and economic growth, they also are needed to reduce the cost and enhance the quality of transportation, especially in terms of safety and efficiency. For example, opening 1,000 miles of Interstate highways results in saving more than 150 lives a year and preventing at least 6,000 injuries and 13,500 accidents a year for every year into the long future.

Savings in travel time from the opening of 1,000 miles of Interstate result in savings of about \$15 million a year, repeated every year into the future; not to mention the additional benefits in comfort, convenience and vehicle operating cost savings.

The production of highway transportation services involve a heavy commitment by labor, business and government. About one-sixth of the labor force and one-fifth of our business firms are in industries directly related to highway transportation.

Highway construction consumes significant proportions of the national production of cement, asphalt, concrete. metal pipe, limestone, and other aggregates. The manufacture and use of motor vehicles consumes major amounts of lead, iron, steel, rubber and petroleum.

In view of the dominant role of highways in the transportation system of the nation, and their pervasive role in our economic and social life, it is apparent that a continued high level of public investment in improvement of highway facilities will be necessary to keep pace with the demands of national growth.

The special needs of our urban areas, where passenger car travel is doubling every 20 to 25 years,

call for particular attention. Congress is now considering the Administration's Public Transportation Assistance Bill, which would provide \$10 billion over the next 12 years for additional bus and/or rail transit facilities. Buses today provide 70 percent of the transit passenger service in this country. Their expanded usage offers the best hope for reducing congestion and obtaining more capacity utilization from our existing highway system—while avoiding the need for additional expensive highway construction and displacements in many of our cities.

For this reason, the Federal Highway Administration is encouraging demonstration projects of express bus service through reserved or preferential use of freeway lanes or by other devices in cooperation with our sister agency, the UMTA.

Trust fund's importance: As you may know, under present legislation the Highway Trust Fund is scheduled to go out of existence in 1972. Work on the Interstate, not to mention other Federal-air systems, will extend well beyond that date. This will call for decisions this year on the future of the Trust Fund.

The Highway Trust Fund has been a tremendous success. It has provided the stability and certainty needed for long-range planning, which is absolutely essential to efficient management of the massive Federal-aid program-a program which involves not only the cities and state highway departments, but thousands of contractors and suppliers and other interests in our economic system. I believe the Trust Fund is the best instrument for seeing the Interstate program to completion and for guaranteeing a smooth transition into essential follow-on programs.

With Trust Fund financing assured, I have full confidence in the ability of the highway program to meet the many social and economic challenges facing highway transportation.

And so I say to you that this is a crucial time in connection with both near-term and long-term policy decisions in the highway program. We are shaping our highway plans to respect all of the social and environmental factors as well as the economic and engineering considerations. These in turn bear heavily on the financing aspects and the total package must be considered during the current year.

For these reasons, you have a responsibility to let your wishes in the matter be known to your public representatives as the question is being considered in the Committees of Congress.