

**IN THE PUBLIC INTEREST:
PRESERVATION OF LIFE AND LIMB**

HIGHWAY GOALS FOR 1967-68



BPR's Francis Turner
"One traffic death is one too many."

that highway designers and builders haven't learned a thing about safety in more than a half-century.

Of course, this assumption is ridiculous . . . it is refuted by the generally downward trend in traffic fatalities in terms of miles of travel. For example, in 1934 the death rate was 16.7 per million vehicle miles; last year the rate was 5.7.

In other words, had the 1934 rate continued, last year's toll would have been more like 150,000 fatalities rather than the 52,500 we actually had. Certainly not all of this improvement was due to refinements in motor vehicles or in driver performance . . . some of it must be credited to the design of better highways.

"On the other hand," Turner emphasized, "one traffic death is too many. While the general trend has been downward over the years, the fatality rate has edged up slightly every year since 1961.

"During the same period there has been an alarming increase, especially on high-speed highways, in the number of vehicles running off the road and hitting a roadside obstruction, frequently with fatal results."

It is toward the prevention of this type of lethal accident that the AASHO "yellow book," the Bureau of Roads' wholesale adoption of it as policy, and the current Blatnik Committee hearings are mainly directed.

Mr. Turner warned the state officials that in more ways than one, the Federal-State performance in this vital area of highway safety is on trial. He stated, "The speed and efficiency with which we proceed in eliminating or minimizing such hazardous situations will not go unnoticed.

"Foot-dragging or obstructionism in this effort will lead to further erosion of public and official confidence . . . and we may be forced by additional legislation or stronger controls to do what we should be doing voluntarily."

The BPR chief reminded that the Federal-State partnership has both a legal and moral obligation to use all of its expertise to protect the life, limb and property of the motoring public . . . which these days is synonymous with the American people. Long strides have been taken toward this goal in devising and continually updating design standards for the Interstate System . . . with the result that the traffic fatality rate on the open sections is about one-third of that on older, conventional highways.

Many of these standards . . . those justified by traffic volumes and those possible within the limitations of available funds . . . are being incorporated into ABC roads. On older highways, the Spot Improvement Program has a promising potential . . . and the response of the states, while not uniform, has been encouraging.

Those Immovable Objects

Thus, the matter of roadside hazards remains as a principal problem to be dealt with aggressively and imaginatively . . . beginning at once and continuing on a large scale for as long as necessary to provide the highest possible level of roadway and roadside safety on the Federal-aid highway system.

BPR strongly feels, Turner said, that available Federal-aid funds can be put to no better or more urgent use today than in the initiation of a broad program in this area. For this reason, BPR engineers have been instructed to take a broad and liberal viewpoint in regard to approving programs proposed by state departments for work of the type described in AASHO's "yellow book" of February, 1967.

At the risk of over-simplification, this means that safety work other than maintenance proposed by a state, after consideration of the deficiencies it finds in the highways under its jurisdiction, may be ap-

IF IT WERE UP TO Francis C. Turner, DOT's newly appointed director of public roads, to set one all-encompassing goal for 1967-68, it would be "to plan, locate, design, construct, and maintain our highways with an enlightened view toward their total impact on society."

"We've heard a lot these past few years about human and social values," Turner recently told the annual conference of the Western Association of State Highway Officials, "and it's not just talk. If there ever was a time when roads were built only to move people and goods, that time is long gone.

"Certainly, mobility is the basic purpose of highways, or of any other means of transportation . . . and this in itself is a human value of high order. One of the principal ends toward which our efforts must be more vigorously applied this year . . . and every year to come . . . is the preservation of human life and limb, which transcends all other human values."

Some of the news reports of the findings of AASHO's Special Traffic Safety Committee would indicate

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HIGHWAY GOALS—continued

proved for Federal-aid fund participation.

BPR is requiring that all aspects of location, design, traffic control, drainage features and roadside appurtenances be examined continuously . . . particularly to the maximum extent possible in the construction and post-construction stage . . . to insure that hazards arising from vehicles leaving the roadway out of control will receive primary consideration.

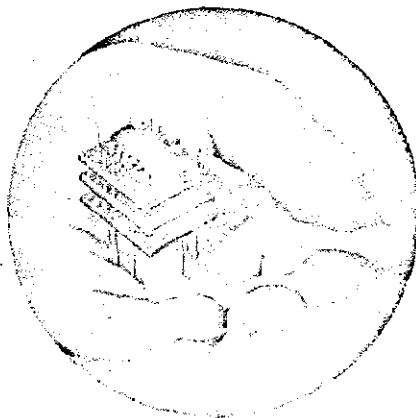
Some highway officials have expressed concern that the Federal-aid highway program will grind to a virtual halt because of the new safety measures being set forth. This is not true, Turner said. Actually, contract lettings need not be diminished . . . and where there is some necessary delay, it will be negligible and certainly it is for the best possible reason.

Other programs high on BPR's "must" list for immediate attention include TOPICS and the joint development concept. TOPICS involves an expansion of the Federal-aid primary system to permit selection of principal streets and downtown grids, in areas of 5000 or more population, to receive Federal-aid

for certain kinds of engineering improvements. These do not involve major construction work but improvements of traffic operations which can step up speeds on urban arteries as much as 25% at a relatively modest investment.

The joint development concept is designed to make maximum use of both space and funds in locating and building urban freeways. It involves use of the freeway to serve social and economic ends of the community as well as its transportation needs. The key lies in acquisition of entire blocks or squares of property rather than the minimum required for freeway right-of-way . . . in many cases, this can be done at little or no extra cost and is certainly much cheaper than buying the same land piecemeal.

Mr. Turner stated that BPR was not "soft-pedaling" physical progress as a goal for 1967-68 but rather seeking quality of construction instead of quantity . . . particularly at a time when performance in enhancing highway safety is under close public scrutiny and when future financing of the Federal-aid program will be up for consideration at the next session of Congress. * * *



Road maps of the future may be compressed into micro-modules such as this. GM researchers will be developing equipment built up from such electronic modules to investigate the feasibility of a national routing system which might speed safe travel and relieve driver stress. * * *

COMING: ELECTRONIC GUIDANCE INSTEAD OF ROAD MAPS

ONE RESEARCH PROJECT of the Federal Highway Administration, DOT, to receive official sanction will evaluate the feasibility of automated highway route guidance system . . . such systems to enable vehicle operators of the future to travel to their destinations without use of maps or route signs, taking instructions instead from automatic communications equipment inside the vehicles. To be determined is whether such a routing system would decrease travel time, driver stress, and traffic problems in general.

General Motors Research Laboratories has received the \$493,000 contract from FHA to make an "objective evaluation" and to develop practical hardware. Substantial support in the investigative and development work will be provided by GM's Delco Radio Division and by the GM Engineering Staff.

Roughly, here's how the routing system might work: At the start of a trip, driver dials his destination code into route guidance equipment inside the vehicle; vehicle then transmits code to roadside equipment at key points along the way; after processing code, roadside equipment . . . either by voice or visual display . . . transmits proper routing instructions to driver.

Highway communications is no stranger to GM's Research Lab. . . its Electronics and Instrumentation Department recently demonstrated a "Driver Aid, Information, and Routing" system which guides vehicle operators to their destination with signals from a display panel on the dash.

Delco Radio also has developed several experimental highway communications systems . . . and has conducted extensive research and development in solid state electronics, micro-electronics, and specialized computers . . . all of which will be utilized in this project. * * *