

## ROADSIDES: THEIR USE AND PROTECTION

## FROM THE PLANNER'S VIEWPOINT

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Today all major American cities and their surrounding suburban areas are suffering from a malady we might call "auto intoxication."

The automobile, which in the last half century has changed our economy, has also changed the pattern of our communities. Limited transportation facilities of a half-century ago necessitated compact urban centers, and travel to the fringe areas was limited to the clusters close to stations of suburban railroads or interurban trolley lines.

The development of the automobile and its increased use, not as a "Sunday-driving" pleasure vehicle but as a means of daily transportation, and the companion improvement and building of roads into hitherto inaccessible areas on the outskirts of cities have created a metropolitan pattern so commonplace that we have a cliché to describe it - "urban sprawl."

It was natural, in the course of this outward expansion, that initially most of it would take place along and adjacent to existing roads radiating from the city. And it is understandable, too, that the first improvements to these roads bothered little with changes in alignment and grade and almost not at all with widening of right-of-way, or the control of access or marginal use. As a consequence, many of these roads, which today are still the main approaches to our cities, are cluttered with a mesalliance of uses such as gas stations; hot-dog and frozen-custard stands; souvenir shops; diners and other eating places of all variety and description; motels, trailer camps, and tourist courts, junk yards; wayside stands selling farm produce, cider, honey, hooked rugs, or what have you; the ubiquitous sign or billboard; and bars and taverns which a writer for Harper's magazine described several years ago as "neon-lighted dens of dreary mirth."

While it might have been expected that enterprising entrepreneurs would see in these roadways, carrying increasing thousands of people, desirable locations for peddling their wares, it is almost incredible that the last twenty years has seen so little in the way of successful effort to control and regulate roadside exploitation along new roads. Many of these have become almost as inadequate to carry safely and expeditiously the traffic for which they were designed as the roads they replaced. Why? -- mostly because of uncontrolled roadside use, frequency and poor location of access points, unregulated roadside parking and billboards. The only purpose of the last mentioned item is to take the eyes and attention of the motorist from his main job of operating a lethal vehicle in traffic to a fleeting consideration of his need for Burps' Beverage, Stale's Tasty Bread, or some other items not purchasable, perhaps, within 5 or 10 miles of the billboard.

Today, most state highway agencies are in the midst of or are embarking

on new programs for highway construction and improvement to try to catch up with the ever-mounting increase in motor-vehicle mileage and congestion. The State Roads Commission of Maryland, for example, is preparing to submit to its General Assembly a 12-year program estimated to cost 568 million dollars. Legislators will be asked to support this program and, if it passes, the motoring taxpayers will be required to pay for it through increases in the gasoline tax and motor-vehicle registration fees. According to the State Roads Commission, this program will provide for the construction of about 300 miles of new limited-access roads of the freeway and parkway type and the improvement and modernization of 3,150 miles of existing state roads. Let us consider for a moment what this program will mean in terms of highways having long-term service efficiency and safety value.

The right-of-way of a limited-access road is owned in fee by the state, and abutting property does not enjoy the right of light, air, and access as in the case of properties abutting the ordinary highway or street. Thus the limited-access highway can be devoted to the sole purpose of moving people and goods, unfettered by frequent access points to private property and uncluttered by billboards and other uses and distractions. This type of road is needed to handle the main streams of traffic entering a city or in bypassing or looping the congested areas. Its value is unimpaired except for normal wear and tear and, even if traffic volumes increase so as to exceed design capacity, extra lanes can be added within the wide right-of-way acquired in the first place.

But only a few of these million-dollar-a-mile roads can be built in any area. What about the efficient and safe handling of increasing volumes of traffic on other major routes - the 3,150 miles, for instance, in the Maryland system? It is here that the need for roadside protection and control comes in - and in my opinion the improvements and modernization of existing highways will to a great extent be nullified and much money wasted if there is not passed as companion legislation to the road improvement bill one which will give the State Roads Commission the authority to establish roadside protective areas or strips of reasonable width in which the location of access points, structures, billboards, and other uses can be regulated and controlled.

The purpose of such legislation would be to:

1. Maintain the maximum efficiency of highways as traffic-carrying facilities by retaining capacity thereon.
2. Reduce the number of hazards, thus lessening the tragic number of accidents, many of which occur at entrances and exits to roadside establishments or because of roadside distractions.
3. Safeguard the large investment in highways by maintaining marginal areas free from encroachment, thereby making future widenings less expensive and reducing the need for costly and disruptive relocation.
4. Promote orderly development in areas adjacent to the highway, thus protecting real and intangible values in these fringe sections.

Bills to accomplish these objectives have been introduced in several sessions of the Maryland General Assembly since 1941 but have failed of passage.

Why have they failed? For several reasons - first there was little public support, the only organized proponents of these bills being chiefly the representatives of garden clubs throughout the state, who stressed the protection of scenic areas, the enhancement of beauty, and other aesthetic considerations and values, instead of highway safety and efficiency. Second, the opposition, made up mostly of outdoor-advertising interests; oil companies; and roadside business associations, representing motels, restaurants, taverns, gas stations and the like, were well-organized, powerful and vocal, and conducted a campaign of misinformation which succeeded in arousing large sections of the rural population against the bills.

A new bill is in preparation for introduction at this session (1953) of the General Assembly but I fear it will have the fate of its predecessors unless a more vigorous campaign with strong public support is waged. This campaign must stress the four fundamental purposes of the legislation for, while aesthetic considerations and protection of the state's natural beauty and scenic values are important, they do not begin to match in strength the arguments for highway efficiency, safety, and the protection of the state's and the motor-vehicle-taxpayers' dollars.

Of course, the principal reason for failure of roadside protection bills is apathy---apathy on the part of citizens, unorganized, uninformed, and lacking understanding of the fact that their highway funds are often wasted because of too early functional obsolescence, that countless lives and millions of dollars in accident costs and property damage are being lost, and that the daily trip on the highway to and from work becomes an increasingly hazardous, nerve-wracking chore. And for what? -- For the benefit of the few who profit from their ability to reach out on the crowded highway for their customers and patrons, and yearly thwart the efforts of highway traffic and safety engineers, planners, and others who try to plan, design, and build better and more functionally efficient and safe roads to accommodate vehicles designed and built to travel faster and faster in ever-growing numbers.

There are some bright spots in the picture, however. Several states, notably Wisconsin, California, Massachusetts, and Vermont, have passed roadside protective legislation. Many communities, particularly cities and suburban fringe areas, have comprehensive zoning regulations and ordinances by which all private land uses and the occupancy of land are regulated. A number of these ordinances have been overhauled or rewritten in recent years and cognizance has been taken of the special land-use problem resulting from high-traffic-volume roadways.

Another field in which attention can and should be given to roadside protection is that of subdivision control. Most cities, and counties adjacent to cities, require that before a plat of land subdivision is accepted for recording, it be reviewed and approved by a public agency having jurisdiction - usually the Planning Commission or city or county engineer.

Through subdivision regulations and subsequent dedication of land, areas for widening or improving alignment of highways can be planned and acquired, even to the extent of providing for service or frontage roads to serve areas bordering high-volume routes.

Some subdivision regulations provide a means for reserving entirely new routes -- a paper prepared by Mr. LeRoy C. Moser, Right-of-Way Engineer of the

Maryland State Roads Commission to be presented to the Highway Research Board's Committee on Land Acquisition and Control of Highway Access and Adjacent Areas, describes the procedures employed in Montgomery and Prince George's Counties, Maryland, adjacent to the nation's capital.

Another method under subdivision control which has been tried experimentally but thus far has had little support deserves further consideration. I refer to the reverse frontage arrangement of lots along a main highway which are "backed in" to the traffic arteries instead of fronting on it. This land-planning device requires the introduction of a non-access strip from 25 to 50 feet in width between the rear lot lines and the road right-of-way. This strip is needed to prevent lot owners from building garages, car ports, or other entrance points along the rear lot line with direct access on the highway. In addition, the strip provides space for needed screen planting, fence, or wall to shield, on the one hand, from motorists' view the rears of houses and yards, and to protect, on the other, the "living area" of lots from intrusion of traffic and its companion noise and dust.

This reverse frontage arrangement, sponsored and promoted by FHA in recent years, has fallen into disfavor lately, due mainly to lack of maintenance of screen planting and to violation of the non-access provisions regarding the strip.

The non-access planting strip has much to recommend it, however, to both developers and state highway officials. From the developer's standpoint there is the advantage of having an interior street with lots fronting on both sides instead of one-sided development, as in the case of frontage or service roads, thus reducing the unit cost. Often shorter utility lines and house connections afford another saving. And finally there is the increased salability of a house which does not face on a heavily traveled thoroughfare.

The public and its highway agencies benefit from the fact that access to the main roadway must be provided at street intersections only. These can be well spaced and provision made for intervening streets to terminate at the interior parallel street which acts as a collector. Furthermore there are no marginal activities distracting to the motorist who has an unbroken view of screen planting. Roadside parking and even sidewalks can be eliminated along these roads since all access to properties and all pedestrian travel can be done from and on the parallel interior street. The success of the reverse frontage type of treatment depends, however, upon the willingness of the highway agency to assume fee ownership of the strip and to maintain and police it. In these days of high construction and maintenance costs, it seems to me that serious study should be given to this type of highway treatment. A comparison between costs of construction, service, and maintenance along typical sections of existing major highways and the estimated costs along highways with reverse frontage treatment would provide the basis for determining whether or not state or other highway agencies should encourage the reverse frontage scheme.

Thus, in conclusion, there is not one but several ways in which to meet the problem of roadside protection and control. Each has its particular sphere of application. The limited or controlled-access highway should be used for the routes having the heaviest traffic volumes in urban and suburban areas and on interurban arteries. Roadside regulations, sometimes called "highway strip zoning," is best employed along other major and secondary roads in rural sections

and in suburban communities lacking comprehensive zoning. Comprehensive zoning, embodying the roadside protection features, and the regulation of land through subdivision control are effectively employed in urban and suburban areas. All of these devices in combination offer the strongest assurance that our highways can be made safe and efficient and have a reasonably long life expectancy.