PROTECTING THE ROADSIDES THROUGH COMPREHENSIVE PLANNING

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Comprehensive planning as a means of protecting the roadsides is both a part of and is supplementary to the process of comprehensive planning of an entire highway system. The latter relates both to balanced functional planning of the system as a whole and to the planning of individual units of the system, both functionally and in relation to adjacent land use. The functional design of a highway system takes into account the State's pattern of land uses, population, occupations of the people and recreation areas.*

The program of the Virginia State Planning Board is illustrative of the background planning which may be brought to the aid of a highway department. Under this program existing land uses are being mapped and a study is being made of desirable and potential land utilization; studies are being made of population, both distribution and characteristics, as well as mobility; analyses are being made of the occupations of the people of the State in relation to land use, population distribution and the economic and social characteristics of the population; studies are being made of recreational facilities and the recreational habits and needs of the people. All these data provide an indicator and a measure of the service which must be rendered by the highway system. It would be foolhardy and futile for a State Planning Board to undertake to plan the State highway system, but the State Planning Board can supply basic facts as to the State and its development, its people and their needs, that are essential to the intelligent planning of a State highway system.

There is a distinct service to be rendered by a coordination of research in the fields of these basic data. Each operating agency of government naturally has a purpose in research which is limited to its own field. It is highly important that the data which are sought shall adequately serve all the agencies having an interest in them. Data as to land use concern not only the highway department but the agencies operating in the fields of agriculture, forestry, recreation, schools, welfare and others. Studies of population are of concern to all governmental agencies. A State Planning Board should serve as a coordinating agency in the field of research. The Virginia State Planning Board is thus serving by its active participation in the work of the Virginia Council on Public Administration. This Council, established by the Governor, represents the various State agencies which are con-

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cerned with research and the various educational institutions in the State. It is now engaged in the following significant program:

(1) A survey of the research resources of the State to ascertain as to each of the several agencies involved information as to its personnel, its equipment, the nature and scope of its authority to do research, the type of research in which it is engaged, and the way in which it is financed and administered.

(2) Preparation of a bibliography of all reports and studies which have been made during recent years concerning public administration in Virginia.

(3) Listing, both as to subject matter and agency involved, all research and studies concerning public administration in Virginia which are now being undertaken or currently proposed.

(4) For the purpose of developing a research program the Council has prepared an outline of the subjects in the field of public administration and those pertinent thereto, listing these under the following broad headings (with a careful detailing of items under each):

A. Physical characteristics of the State.
B. Population.
C. Occupations.
D. Governmental organizations and functions.

(5) Checking against the foregoing subjects the reports and studies previously made and the research endeavors now under way and currently proposed in order to determine what research is required in addition or supplementary to that already completed or under way and to bring up to date the results of research previously done, formulating from this determination a recommended program of specified subjects of research.

The coordinating functions of the Virginia State Planning Board are strengthened by the fact that of the twelve members of the Board, eight consist of the administrative heads of State departments, or of major divisions within departments, and one represents the Agricultural Department of Virginia Polytechnic Institute. This departmental representation assures that the basic studies being made by the State Planning Board shall be of the greatest possible use to these and the other departments of State government. Of particular appropriateness to this Twenty-fifth Anniversary Convention of the American Association of State Highway Officials is the fact that the membership on the State Planning Board of the first President of the Association, Mr. Henry G. Shirley, State Highway Commissioner of Virginia, has contrib-

uted materially to the high caliber of the personnel of Board membership. Much of the work of the Board is carried on in collaboration with the existing departments. For example, the preparation of accurate planimetric maps of the counties of the State is a joint concern of the State Planning Board and the Department of Highways, with assistance by the Division of Water Resources and Power of the Conservation Department. School studies are conducted in collaboration with the State Department of Education, and recreation studies in collaboration with the State Conservation Commission, the National Park Service and the National Forest Service.

The foregoing relates essentially to the material which is basic to the comprehensive planning of a State highway system, but much of this material is directly pertinent to planning in relation to roadside protection. Particularly so are the studies of land use, and of the use of recreation areas, the latter dealing with such subjects as characteristic recreational habits of the people, access to recreation areas, and the broad field of recreation apart from public parks and other recreational reservations.

While roadside protection is intimately related to the comprehensive planning of the highway system itself, it is not the purpose of this paper to suggest principles and standards for the latter. However, one consideration affecting the planning of an entire thoroughfare system will serve to give some measure of the problem of roadside protection. Within recent years there have been developed some excellent parkways in a few places throughout the country. Expanded considerably from its original conception as little more than a well-planted avenue, a parkway is now regarded as an elongated strip of park land having as its primary purpose the providing of a route for recreational travel. The park character of the strip is important. This interposes between the traveled roadway and adjacent property an insulating buffer of park land. Adjacent property does not "front" on the parkway in the usual sense; rather it lies alongside it, with no right of access to the roadway. Access may be provided for adjacent residential property by means of service roadways paralleling the parkway, usually immediately adjacent to it, but not necessarily so. Points of access to the traffic roadway of the parkway are kept to a minimum and main intersecting routes usually cross at separated grades. Thus the character and the design of a parkway protect the traffic on it from interference from adjacent land use or intersecting traffic and at the same time protect any adjacent residential use from too intimate a proximity to this traffic.

The parkway, properly designed, represents an ideal thoroughfare for non-commercial traffic, and enthusiastic advocates of

parkways have suggested that the solution to the problem of roadside protection lies in the wholesale provision of parkways along routes representing the principal lines of traffic flow throughout the country. This view overlooks the fact that the cost of any such program puts its attainment far beyond the possibility of accomplishment within any time which can sensibly be forecast.

The situation in Virginia is illustrative. This State has a more extensive mileage of parkways in existence, under construction and authorized than has any other State. Skyline Drive (in Shenandoah National Park), Blue Ridge Parkway, Colonial Parkway, George Washington Parkway and Mt. Vernon Memorial Boulevard total, about 375 miles, of which 177 miles have been completed, 79 miles are now under construction and 119 miles have been authorized but not constructed.

The costs have ranged roughly from about one hundred thousand to about six hundred dollars per mile, which would indicate that, while there can be expected some expansion of the present and authorized parkway system, there can be no building of parkways on a wholesale scale which would provide them for most of the routes of major traffic flow. Connections from Skyline Drive to the Potomac at Harpers Ferry (for extension into Pennsylvania) and at Great Falls (to connect with the George Washington Parkway) would add about 95 miles to the present system. A possible coastal parkway beginning at Dahlgren, on the Potomac, (to connect with a projected parkway in Maryland from Baltimore and Washington, D. C.), thence connecting with the Colonial Parkway at Yorktown, and extending via Old Point Comfort, Seashore State Park and the Virginia Beach area to the North Carolina State line to connect with the Cape Hatteras National Seashore project, would add nearly 200 miles more. Comparatively, and as a matter of cost, these projects would represent an extensive program. In addition, imagination might look far into the future and foresee two cross-state parkways, one from the suggested coastal parkway at Dahlgren, on the Potomac, thence via Fredericksburg, Orange County and Charlottesville to the Blue Ridge Parkway and from the Blue Ridge Parkway by some appropriate route to the West Virginia State line; and the other a southerly route from the suggested coastal parkway at a point south of Virginia Beach (with a branch from Jamestown meeting this somewhere south of Petersburg) to the Blue Ridge Parkway near Roanoke. These latter routes would total about 570 miles, which, with the additional routes first suggested, would make a grand total of 865 miles.

Thus, approximately 1250 miles (including existing and authorized routes) represents the maximum parkway system which present imagination can project for Virginia. The present State highway system includes 9,377 miles of primary highways and

36,357 miles of secondary highways, a total of 45,734 miles. The entire proposed parkway system would be a little more than two and a half per cent of the resulting total of highways and parkways. Regarded as major routes, they would be less than twelve per cent of the total of parkways and primary highways. As magnificent as these parkways would be--and as valuable as they would be--by far the greater volume of traffic in the State would continue to flow on the primary State highways and the State highways, both primary and secondary, would continue to carry most of the traffic to and from the population centers, industrial districts, agricultural sections and, indeed, most of the recreation areas of the State.

Neither is it likely that throughout the country there will be any wholesale replacement of highways by freeways. A freeway is essentially a strip of land which is used exclusively for the movement of traffic, with the adjacent land having no right of access to it or of light and air over it. Strictly speaking, the strip of land constituting a freeway cannot be called a right of way. That term expresses the original nature of a road--a right of passage over land. The land owner continued to own the land and his full use of it was limited only to the extent that the use should not materially interfere with the right of passage. As roads have become highways in the modern sense, the requirements of traffic, i.e., the right of passage, have become so great that they have practically extinguished the rights of use of the right of way strip by the owner of the underlying fee. But he still retains the right of access to it from any part of his frontage, limited only by such barriers as cuts, fills, bridges and other structures. Even the recent practice of acquiring highway rights of way in fee (a somewhat paradoxical expression) does not deprive the adjacent land owner of access. The balance of respective rights has greatly shifted, but the adjacent owner may be said to retain an easement of access, even over a right of way owned by the public in fee.

In a freeway no such right of access remains. The strip of land constituting the freeway is acquired and held by the public as completely as in the case of the purchase of a farm by one person from another, or, to use a closer parallel, as in the case of rialroad rights of way, which are completely severed from the adjacent land. Access to adjacent land is had from other roads.

It is obvious that many roadside problems disappear with freeways, since the type and the manner of the use of land adjacent to them neither arise from nor are materially related to the traffic. Traffic on a freeway is thus freed from interference by marginal uses. There can be no "fronting" of commercial uses on a freeway, except for billboards, which do not require physical access. And the fact that the adjacent land possesses no right of light and air over the freeway would make it legally possible to

screen out billboards by dense planting or other means (even though this would not be an especially practical method on any large scale).

But as in the case of parkways, there cannot be expected any wholesale provision of freeways. Thus far, only three States have any statutory authorization for them. Even with extensive statutory authorization, the application of the freeway principle would probably be limited for a long time to the acquisition of entirely new thoroughfares. Its application to existing routes would require the provision of some other means of access for adjacent land--in other words, a virtual duplicating of existing right of way routes. Even some thousands of miles of possible freeways would be a small fraction of the total of all thoroughfares.

This discussion is not for the purpose of discounting the value and the importance of parkways and freeways, but to indicate that their provision in any practical measure can affect but a small part of the total highway mileage. The hundreds of thousands of miles of highways and roads of ordinary pattern will continue to carry the bulk of the traffic of the nation. It is the problem of protecting the roadsides of these highways which will be discussed in this paper.

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Roadside protection would appear to have three principal objectives: (1) Avoidance of hazards to traffic, (2) Protection of roadside appearance, and (3) Prevention of misuse of adjacent land.

Limiting the subject to what happens along the roadsides, and not considering the structural design of highways, there is impairment of traffic safety in (1) frequent points of exit from and entrance into the traffic stream as a result of scattered business uses, (2) interference with traffic by the standing of automobiles and local traffic movements incidental to roadside business uses which crowd up to the edge of narrow rights of way, and (3) the distraction of the attention of motorists by roadside advertising, whether this be by billboards and other signs apart from places of business or by the excessive display of signs by roadside business establishments. In suburban areas there is added traffic hazard resulting from a multiplicity of intersections with a highway by local streets. Apart from these interferences with the traffic functioning of the highway, there is probably some hazard to the safety of traffic by the psychological effect of too great a disruption of the natural harmony of the landscape by highways which are not properly fitted to the landscape, either in original design or by subsequent landscaping of their margins. This is obviously an intangible thing--and it may be a fanciful one--but undoubtedly the psychological condition of the driver has some bearing on his alertness and other factors

of efficiency as a motor vehicle operator. A more direct concern is the factor of driver fatigue. Roadside advertising adds its distraction to the other conditions causing fatigue, while, in contrast, the opportunity to stop at a highway wayside is an important means of relieving the strain of long periods of driving under tension.

Of the factors which affect highway safety roadside business uses, outdoor advertising and the relation of highways to the landscape particularly concern roadside appearance, as does also the character of residential development along thoroughfares in suburban areas, whether this be in compact communities adjacent to population centers or in attenuated form along the roadsides.

All the foregoing factors are involved in the best use of land fronting highways. In this we are dealing primarily with uses which arise from the advantage of access afforded by the highway or in response to the purchasing power of passing traffic and only in part with the dominant land use characteristics and desirable land utilization of the general territory through which the highway passes.

Means of solution of the problem of roadside protection fall under three general headings: (1) The relation of the highway to the landscape, (2) Rights of way, waysides and scenic easements, and (3) Regulatory measures.

<u>Relation of the Highway to the Landscape</u>

This involves the factors of location, position and design of the highway. These are subjects which have been so amply explored by forward looking highway officials and others that their detailed treatment may be considered as lying beyond the scope of this paper. It should be pointed out, however, that there is no rule of thumb which can be applied. Standards of alignment, grade and curvature depend on the function of the highway and the volume of traffic which it is expected to carry. A highway at best is an artificial feature of the landscape. The charm of a narrow, winding road in the woods cannot be retained on a primary highway carrying a heavy volume of traffic any more than can the seclusion of sylvan surroundings be maintained in an urban area of maximum or even average population density. It has been said that beauty, like happiness, is a by-product. Thus it is best achieved in the manner of doing things, rather than as a dominant objective. (Exceptions should be noted in the case of highway or other projects which have for their primary purpose the provision of access to or use of areas of especial scenic value.) But the standards which are required for the proper service of a particular highway function can be applied in any one or a combination of several of a multitude of ways. Increasing concern with the landscape on the

part of highway engineers is leading to a continually improving technique in the application of required functional standards in such a way as to achieve the best possible relation of the highway to the landscape.

Landscape treatment of the margins of highways, particularly cuts and fills, is an important supplement to an original design which respects the natural landscape in so far as the functional standards permit. Where the highway must be essentially a slash across the landscape, proper marginal planting may soften an otherwise ragged appearance. Even here it should be noted that frequently a rocky cut may possess an appearance of strength and ruggedness which becomes a new and acceptable feature of the landscape. A "cosmetics" type of landscape treatment is to be avoided, since it accentuates artificiality and in its futility has an unsatisfactory appearance. The excellent roadside landscaping being done by the Virginia Department of Highways has achieved a most happy result, both in merging the roadsides with the landscape and in protecting slopes against erosion.

It is rarely possible to achieve a complete adjustment of a heavy traffic thoroughfare to the landscape, since the excessive movement of natural material and extensive planting which this would require are usually beyond the limits of financial possibility. The cost of several hundred thousand dollars per mile necessary to attain such a result on the Mount Vernon Memorial Parkway is an illustration in point. The expenditure in that case can be justified by the outstanding historical significance of the purpose of the Parkway and by its place in a system of parkways for the National Capital metropolitan area, but such a justification can exist for only an extremely small part of the total mileage of a highway system.

The objectives of the proper relating of highways to the landscape can probably be summed up as (1) reasonable adjustment of the highway to the landscape in conformity with the standards of alignment, grade and curvature which are required by the dominant function of the highway and (2) such marginal landscape treatment as will soften the artificial nature of the highway as a physical structure.

Rights of Way, Waysides and Scenic Easements

Ample rights of way free the highway designer from limitations which impair a proper consideration of the landscape and provide adequate space in which effective subsequent marginal landscaping can be done. Of themselves they tend to protect roadside scenery, especially in wooded areas, and they exercise considerable control over roadside uses. Right of way limitations due to high

land values occur for a comparatively small part of the total mileage of a highway system. Compromises which are necessary in urban and suburban areas and, in some cases, in areas of intensive agricultural use, do not occur for the great bulk of the territory of a State. In the great open spaces which are traversed by much the greater part of the mileage of a State highway system the expenditure of a few dollars more for rights of way, even at the cost of some slowing up of the rate of construction, will usually not only greatly facilitate the problem of the engineer of design, aid in the protection of the natural landscape and lessen the danger of undesirable roadside uses, but, particularly in the case of a new route, will markedly reduce the cost of subsequent widening, minor corrections in alignment and future improvements to a higher standard. The acquisition of rights of way 400 feet in width across the public domain of Nevada is worthy of emulation in similar circumstances. The acquisition of some rights of way of widths of 160 and 200 feet in Georgia and Florida offer examples in this section of the country.

Protection of highway safety and preservation of scenic outlooks and other spots of especial scenic value can be accomplished by additional acquisition for and the development of highway waysides. Several States, including Virginia, have made notable progress in this. The traveler on the highway is greatly served by having an opportunity every few miles to pull off the traveled roadway at some point with a commanding view or at a place where he may eat his lunch or rest for awhile. Such waysides can be made features of great attractiveness to visitors to the State and of great service to those who customarily travel the highways within the State. Such waysides may require protection themselves. Michigan has done some excellent work in roadside planting and provision of roadside picnic areas. But in many cases this has been seriously impaired by roadside shacks of poor appearance and without properly designed means of access from the roadway. There is apparently little or no control of the locations of roadside commercial uses and no adjustment is made between the roadside landscaping and the design of business establishments. At each place of business the roadside planting is cut for unnecessarily long frontages and the roadsides are littered with signs for a considerable distance on each side. What is required is a supplementing of the roadside landscaping and picnic facilities by such regulatory measures as will be discussed in the latter part of this paper.

The protection of views frequently calls for the acquisition of scenic easements in addition to the acquisition of actual rights of way or adjacent land for waysides. The scenic effectiveness of the Blue Ridge Parkway in Virginia is greatly enhanced by the generous acquisition of such easements in addition to the rights of way, which of themselves average from eight hundred to a thousand

feet, and never less than two hundred feet, in width. Here the purpose is not the acquisition of areas for public use but the taking of an easement that has for its primary purpose the protection of the scenery. Under the statute authorizing the acquisition of scenic easements adjacent to the Blue Ridge Parkway such an easement is defined as follows:

> "Scenic Easement. - Scenic easement shall mean the easement or right of the Commonwealth of Virginia or its grantee or assignee, the United States of America, to restrict the use of any and all lands covered by or subject to said easements so the owner or owners of said land, or any part thereof or their grantees or assignees, shall not have the privilege or right, (first) to erect or authorize the erection of any building, pole line, or other structure, except for farm or residential purposes, (second) to erect any commercial building, power lines, or industrial or commercial structures, except that existing commercial buildings may be altered or the property may be otherwise improved for the purpose of continuing the present established use or other use with the consent of the Commonwealth or its grantee or assignee, (third) to construct thereon any private drive or road, except with the consent and approval of the Commonwealth of Virginia, or its grantee or assignee, (fourth) to require the Commonwealth of Virginia or its assigns to construct any access or drive thereon, (fifth) to remove from or to break, cut, injure, destroy on the said land, any mature or stable trees or shrubs without the consent of the Commonwealth of Virginia, its grantee or assignee, except such seedling shrubbery or seedling trees as may be grubbed up or cut down in accordance with usual farm practice and residential maintenance, and except that cultivated crops, including orchard fruits, may be pruned, sprayed, harvested, and otherwise maintained in accordance with usual farming practice, (sixth) to place thereon any dumps of ashes, trash, sawdust, or any unsightly or offensive material, (seventh) to place or display thereon any signs, billboards or advertisement, except one sign not greater than eighteen inches by twenty-four inches advertising the sale of the property or produce raised upon it.
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> "In the event the State Highway Commissioner, in the condemnation or purchase of scenic easements as hereinafter authorized, should desire to condemn

> or purchase an easement containing a part but not all of the restrictions above set forth, the deed or condemnation petition shall set forth the specific restrictions purchased or sought to be condemned; and same shall be deemed a scenic easement within the meaning of this act."

Extract from Chapter 389, Acts of the Virginia Assembly of 1938.

Such an easement does not materially interfere with the agricultural or residential use of the land which it covers and thus should be acquired at much less cost than the acquisition of extensive rights of way. In some cases property owners may be induced to convey such easements without cost. This method might be used in the transforming of a multiple purpose highway in an area of natural attractiveness to a thoroughfare of parkway character. The time to do it is in advance of the occurrence of conditions which impair the scenery. Since an easement is an actual conveyance to the public of a right in the land, which thus consists of a portion of the title, its effect is permanent and is much more certain than any attempt to attain the same results under the police power. The applicability of the latter to the accomplishment of objectives which, legally at least, would be regarded as aesthetic, is still uncertain and greatly limited. Furthermore, police power regulations are subject to change, and the pressure arising from individual demands, with no organized resistance in the public interest, is likely to nibble away at their effectiveness until the results tend to disappear in a ratio which increases with the actual need for them.

Regulatory Measures

While the foregoing has indicated the weakness of police power regulation for the protection of scenery, it should be pointed out that the scope of the police power has been broadly extended during recent years. We have come a long way from the time that a court of appeals held that a statute prohibiting the use of the American flag for advertising purposes was unconstitutional as having no relation to the public health, safety, morals or general welfare. Comprehensive zoning was first upheld by the United States Supreme Court as recently as 1926.

But as far back as 1911 the United States Supreme Court said (Noble State Bank vs. Haskel, 31, Sup. Ct. 186): "It may be said in a general way that the police power extends to all great public needs. It may be put forth in aid of what is sanctioned by usage, or held by the prevailing morality, or by a strong and preponderant opinion to be greatly and immediately necessary to the public welfare."

In 1927 Newman F. Baker said (in his book, "The Legal Aspects of Zoning"): "It is predicted that the time is not distant when the courts of our country will hold that reasonable legislation affecting the property of individuals will be considered constitutional if passed to promote the well-being of the people by making their surroundings more attractive, their lot more contented, and by inspiring a greater degree of civic pride. The decisions denying that the suppression of ugliness is a necessity do not settle the matter for all time. As soon as the average person may be thought to have developed an appreciation of the beautiful, the courts will, no doubt, sanction legislation for aesthetic purposes. Whenever things, once considered luxuries, become, in the course of progress, necessities, the courts may be depended upon to treat them as such."

In 1935 the Supreme Court of Massachusetts upheld the regulation of billboards by the State Department of Public Works under a State statute. The court declared that the regulations are valid because outdoor advertising, which has for its purpose the attracting of the attention of the traveler on the highways, distracts his attention and is a menace to the public safety and, furthermore, that the traveler on the highway has a right to be free from annoyance, this right being invaded by outdoor advertising, which intrudes itself upon him and demands his attention, whether he be willing, indifferent, or averse. But the court went a step further and declared that, regardless of these other considerations, the protection of the scenery of the Commonwealth is a public purpose. Courts had previously held that the validity of regulations which rested primarily on considerations of health, safety and morals would not be impaired by the existence of an esthetic consideration as well. But the Massachusetts case was the first time that the higher court of any State had declared that a consideration heretofore regarded as essentially esthetic, the protection of scenery, could stand alone.

The Massachusetts decision is an affirmation of a growing public sentiment for the protection of the natural landscape from despoliation. Indeed, this sentiment is not a new thing. It resides in the American people. It has been aroused, not by a new awareness of undesirable conditions that have always existed, but by the increasing despoliation of the landscape as improved highways have extended their networks and have thereby made possible not only opportunities for commercial service to highway travelers, but also forms of commercial parasitism on growing volumes of traffic.

The first attack has usually been on the billboards. And these, indeed, have been the worst offenders. The hideous

disarray of the roadsides of U. S. Highway No. 1, from Maine to the tip of Florida, is a striking example. So are the approaches to almost any resort area in the country, whether it be Atlantic City, Virginia Beach, St. Petersburg, San Diego, or the resorts of Puget Sound. Charlottesville, Virginia, one of the most charmingly situated cities in America, is ringed by billboards on its principal entrance highways. The cities, towns and resorts along the Blue Ridge and in the Shenandoah Valley, which feature the scenic and recreational qualities of their surroundings, impair these very characteristics by signs and billboards which assualt the traveler.

Outdoor advertising claims that it is an important part of our commercial life. No one will dispute this claim in a commercial area. But outdoor advertising along the open landscape can claim no consideration. Here it is an unmitigated evil and by its own characteristics calls on the American people to extirpate it without compromise. In this there is no destruction of a legitimate commercial enterprise. In a hearing on a county zoning ordinance three or four years ago a leading outdoor advertising company stated that in the three States in which it operated it had a total of about 150,000 individual displays, that of these less than 1,500 were along the open roadsides and that this small portion was the least profitable part of its whole "plant". Let outdoor advertising have its place in commercial districts, among commercial uses, subject to proper zoning regulations as are all business uses, but let it be confined to those districts and let it be swept from the rural landscape.

A careful distinction should be drawn here. There is a great difference between a general commercial district and the occasional roadside use which exists for the service of traffic. A limited roadside service business district, with its filling station, eating place, and, possibly, overnight stopping place is not by any stretch of the imagination a general commercial district. This consideration illustrates the fact that control of roadside uses consists of far more than a "single-shot" campaign against the billboards. The roadside business itself has no right to destroy the scenic attractiveness of its situation. The problem, then, becomes one of comprehensive regulation. The first attack on the problem of roadside protection is usually a measure for the regulation of billboards. Statutes requiring licenses for outdoor advertising companies and permits for the placing and maintenance of outdoor advertising signs and structures and prohibiting the location of outdoor advertising so as to impair adequate vision clearance at curves, intersections and railroad crossings, have been adopted in a considerable number of States. Their purpose is good and their results have generally been good. Such a statute in Virginia, effectively enforced by

the State Highway Department, resulted in the immediate elimination of over 120,000 roadside signs. It should be pointed out in passing, however, that most of these have been small signs, of the so-called "snipe" type. Their elimination has greatly improved roadside appearance, but it has at the same time left the field of roadside advertising to the huge billboards, whose owners have been willing to assume the expense of taking out licenses and obtaining permits. Again, such a regulatory measure is excellent, so far as it goes. It effectively covers a part of the total field of roadside regulation but in so doing it also accentuates the great part of the field which remains untouched.

What is required is a comprehensive regulation of roadside uses, and this is the field of zoning. A goodly number of States have already adopted statutes authorizing local governments to adopt zoning regulations outside incorporated cities and towns. In New England the power is lodged in the towns, which occupy all the territory between the incorporated municipalities. In Wisconsin the county governments formulate the regulations, which become effective upon approval by the local town boards whose jurisdictions cover the unincorporated territory. In Virginia, Washington, California and some other States the zoning power resides directly in the county governments. There is ample authority in several States for roadside regulation and excellent progress has been made in a few cases. Some of the towns in Fairfield County, Connecticut, and elsewhere in New England have provided good protection for roadsides. A number of the California counties have made outstanding progress.

But on the whole, progress has been exceedingly slow and only a minor fraction of one per cent of the total highway mileage in the country has felt the beneficial effects of roadside zoning. This has led to efforts in several States to transfer the power for roadside zoning outside municipalities to the State itself. The American Automobile Association, with the assistance of the American Planning and Civic Association, has prepared a model bill to this end. Unfortunately this bill tends to separate roadside control from comprehensive planning. It would seem that there is required authority and procedure for a better integration of roadside zoning and the planning of the entire area concerned than is provided by this bill. A bill providing for such integration was prepared by Alfred Bettman of Cincinnati and a form of this was proposed in Ohio but was not adopted by the Legislature. A bill for roadside zoning by the State was proposed in Indiana and one for cooperative action by the State and the counties in North Carolina, but neither of these became law.

With proper regard for the integrity of local government, it is desirable that all police power regulations in the

field of zoning should be exercised by local governmental agencies. But it should be recognized that for the local governmental agencies to be given and to retain this authority requires that they be prepared to assume the responsibility of exercising it. The answer might be to provide an alternative procedure whereby if the counties fail to act, the State may step in and do the job. U. S. Highway No. 1 through Virginia from Washington, D. C., to the North Carolina State line passes through twelve counties. County zoning is in effect in one of them and in a small part of another and is proposed in a third. U. S. No. 99 from San Francisco to Los Angeles passes through ten counties. There is county zoning in only two of them and roadside zoning in only one of the two. This is under a county zoning law which has been in effect for over ten years. The situation is at least a challenge to the exponents of zoning by counties to prove that they can and will do the job.

Furthermore, it can be said that a major highway exists as a unit and, except in congested urban areas, is not successively appurtenant to the communities through which it successively passes. In this fact lies the justification for roadside zoning which is concerned with a strip of land on each side of the highway, as a distinct item in the total plan of the area involved. It also indicates that there is justification for a leadership which will endeavor to coordinate the roadside planning activities of the local jurisdictions through which the highway passes and, possibly, in the absence of local action, to undertake the job as a whole.

"Strip zoning" along the roadsides should be coordinated with county, regional and State planning, in varying degrees, but of itself does not violate the principal that zoning must be comprehensive. Property fronting on a highway through an area which is dominantly agricultural, or residential, or industrial, has an added land use characteristic to that which pertains to the entire area. There is added a set of conditions and relationships which result from what may be called the impact of the traffic on adjacent land use. There is thus justified a separate and distinct set of regulations, whether these be applied in a separate zoning classification as such, or whether they be added as combining or supplementary regulations to those in effect in the general area through which the highway passes.

So much for the jurisdiction and general nature of roadside zoning. As to its detailed provisions, it should seek first of all to designate the locations for roadside business centers. Much of the traffic hazard and the impairment of roadside appearance which result from roadside commercial uses occur because of their scattered locations, with frequent opportunities for movements in and out of the traffic and with a succession of roadside

structures and appurtenant signs which dominate the view. High speed traffic tends to telescope the view ahead, and while there may be considerable distances between roadside business establishments, they may seem to "shingle" the view as they are observed in perspective down the highway. A relatively few roadside service establishments will care for considerable volumes of traffic. These establishments should be located at convenient centers rather than being allowed to scatter at random. Such centers can be properly located with respect to intersecting highways and their possible additional service to adjacent residents and with due consideration to traffic safety in respect to curves and grades.

The limiting of roadside business uses to occasional centers will, in suburban or residential estates areas, protect the best use of highway frontage land in the aggregate by permitting residential development which is unimpaired by the intrusion of commercial uses. It is not enough to wait until the damage is imminent and then to try to avert it. A State Supreme Court has said that zoning in its best sense looks forward and seeks to protect districts and neighborhoods yet to be developed.

It may be felt in some local situations that, as a practical matter, this essential confining of roadside commercial uses to designated centers is all that should be undertaken as a first step in the application of roadside zoning. Much would be accomplished by this first step alone. But much more can be accomplished by applying further regulations in the business centers themselves. This could be done as a subsequent step, but, if possible should be done as a part of the original job. These further regulations are as follows:

(1) If the roadside business centers constitute concentrated business districts, they should be open to all classes of commercial use and, unless otherwise indicated as part of a community zoning plan, possibly to some industrial uses as well. If, however, a business center is primarily of the traffic service type, there is justification for limitation of permitted uses, and outdoor advertising, apart from places of business can properly be excluded. In scenic or recreational areas there should probably be an even stricter limitation on the types of uses which are permitted. In any case, automobile wrecking yards (designated by statute in Virginia as "automobile graveyards") should be considered as industrial uses and should be permitted only in industrial districts or mixed commercial and industrial districts where other industrial uses are permitted. An exception may be made in case the automobile wrecking establishment and all its operations are entirely confined within a building or completely enclosed

within a fence of approved design. These may be permitted in general commercial districts, but should not be allowed in business districts of the small roadside service type.

(2) The zoning plan should provide for the proper design of the roadside business center, with adequate building setbacks and adequate automobile standing space off the highway right of way. The roadside business establishment represents a commercial advantage to the land owner, resulting from the existence of the highway and its traffic, neither of which the property owner has created or paid for. The securing of this commercial advantage is not an inherent right, but is a privilege which is conferred by the public and is subject to limitation in the public interest, particularly in relation to the conditions by which the commercial advantage is made possible, i.e., the highway and its traffic, Preferably, a roadside business center should have its buildings set well back from the right of way, with designated entrance and egress roadways and with ample space for the standing of the vehicles which may be expected to stop to do business. The entrance and egress roadways should not depart from and enter the main roadway suddenly but should be provided with decelerator and accelerator traffic lanes. The provisions of these is the responsibility of the roadside business owner, subject to detailed State supervision.

(3) In the case of a roadside service business center of a limited character which justifies the exclusion of outdoor advertising apart from places of business, there should be a limitation on the display of signs by the business establishments themselves. Some zoning ordinances have undertaken to do this by limiting the maximum size of any one sign, such as to 24 or 30 square feet, and by limiting the total display by any business establishment to one square foot for each foot of frontage occupied by the building in which the business use is conducted. This, however, does not prevent an undesirable multiplicity of signs, and a provision which has worked successfully is to provide that unless all signs displayed are made a part of an approved architectural design of the building or premises, no sign shall exceed a maximum size of, say, 24 square feet and that no business establishment may display more than three signs.

(4) In the roadside service types of business centers discussed in the preceding paragraph, there should be supervision over the design and appearance of the roadside buildings. This requires that a building permit* be secured (and this, indeed, is

*It should be noted that the requirement of such building permits does not necessarily involve the application of building code regulations, covering the manner of construction. For zoning purposes what is meant is a permit which is checked against the zoning regulations in order to secure conformity to them.

necessary for the proper enforcement of any of the zoning regulations) with the further requirement that plans and sketches of the proposed building shall be submitted with the application for a permit and that no permit shall be issued until the plans have been approved by a designated agency, usually the planning commission. The strict application of a high architectural standard might become involved with difficulties of enforcement and is of doubtful legality. But if enforcement is directed toward a gradual improvement in architectural standard and if the submitting of plans by an applicant is regarded primarily as an opportunity for discussion and the offering of suggestions for improving the appearance, and thereby probably the commercial effectiveness, of the building, excellent results can be obtained. Such regulations as those under discussion have been applied in a number of the counties which have done roadside zoning. There have been hundreds of cases in which the regulations have worked, possibly not ideally, but at least in a way which is gradually elevating the standard of appearance of roadside buildings.

(5) Building setbacks should be applied not only in the designated business centers but to all roadside structures, thus preventing any encroachment on the traffic functioning of the highway and protecting roadside appearance as well.

Such setbacks have also the advantage of keeping structures back from narrow rights of way which may require later widening. However, setbacks for this purpose should preferably be applied under a different procedure from zoning, although they may temprorarily be tied into a zoning ordinance pending the working out of a plan of precise lines of future rights of way and the adoption of regulations preventing the construction of buildings within these lines. As a matter of fact, in States in which there is not specific or implied statutory authority for the adoption of such future right of way lines, it may be necessary to apply them within the structure of a zoning plan. But it is important that there be kept in mind the distinction between these lines and building setback lines (known in zoning as "front yard lines") which regulate the use of property outside both existing and future right of way lines. The "front yard" type of setback line is for the preservation of neighborhood amenities in a residential area and for the protection of traffic safety there and elsewhere. The establishment of future right of way lines must be based on a comprehensive thoroughfare plan in order to avoid discrimination and arbitrary action and in order that they may have validity by representing the necessities of the public welfare as represented by a comprehensive plan.

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There is another type of roadside regulation than zoning which is particularly applicable in suburban areas which are sub-

ject to subdivision. This consists of the proper regulation of subdivisions. Subdivision regulation should be based on considerations of comprehensive community design and should be coordinated with the regulation of the uses of land and buildings and the open spaces about buildings which constitutes zoning. Protection of the traffic function of a major thoroughfare may require a subdivision design which includes service roadways for access to abutting property. Again, the advantage which the property owner has by reason of the location of the property along a thoroughfare should be used in such a way as not to impair the traffic functioning of the thoroughfare. The subdividing of acreage into town lots or other small parcels may change an effective traffic thoroughfare to little more than a city street, with all the interference to free movement of traffic which results from automobile parking and numerous private driveways. The service roadway is a satisfactory answer to this problem. If the service roadway is not used, the subdivider should be required to dedicate or reserve a strip for the widening of the right of way, since the intensification of adjacent use requires an additional width in order to preserve for traffic use the width which theretofore existed solely, or nearly so, for the movement of traffic. Such a strip for widening must be more than merely the minimum width of a line of local traffic and space for curb parking; it should be wide enough to provide for these traffic services which are appurtenant to the property at a distance somewhat removed from the lanes for through traffic and should thus leave a buffer strip between the through traffic and these local movements. This, preferably, should be an actual physical separation, provided that such be not constructed immediately at the edge of the outer traffic lane, thus impairing freedom of movement on the latter.

Subdivision design should also keep the number of intersecting streets to a minimum, with the long dimensions of adjacent blocks being parallel to the highway. Proper design will enable the collection of the internal streets of the subdivision into a minimum number of intersections with the highway.

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All these regulations require a basis of comprehensive planning for their full effectiveness, if not for their legal validity. In the case of urban and suburban areas the basic planning will be of the community type, since the functioning of the highway is intimately affected by the physical design of the community and its pattern of land uses. In non-urban areas the planning will be essentially of the highway system and of its units, but is likewise concerned with the adjacent land use pattern and the general population pattern.