

Land Acquisition and Control of Adjacent Areas

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It is putting it mildly, to say that I am happy to be here in the Hoosier State, in this veritable "Valley of Democracy" of the Midwest where I too had my beginnings. Indiana is characterized, among other things, by its close economic balance between agriculture and industry; and by the fact that it is directly in the path of one of the Nation's greatest east-west traffic flows. These two elements combine to bestow upon this State advantages of great moment; but they also impose responsibilities that are sometimes difficult to meet.

It has been said that Purdue is a people's university, "grown out of the demand of the American people that higher education be the birthright of the many, not the privilege of the few." It is indeed proper that, in this august setting of culture and learning, we consider the protection and preservation of one of our most valuable resources—the highways of the State of Indiana, whose benefit and use, like this great university, should be the birthright of the many and not just the privilege of a few to exploit.

By protection we mean the control or regulation of all physical and functional encroachments of adjacent land upon the proper uses of the highway. As we have learned by now—and it has been a painful process, I assure you—a highway serves two functions largely, that of providing direct access to adjacent land and uses, and that of facilitating through movement of vehicles.¹ Unfortunately, these two functions work at cross purposes with one another, when their accommodation is attempted in an improperly designed facility. In other words, what we need to do in our highway modernization program is to properly relate the uses of the roadside to the uses of the

¹ A third function should probably be mentioned in addition to movement and access, namely, parking. Legally, movement and access are deemed to constitute rights, while parking is deemed to be a privilege, from the standpoint of the use of the street by the motorist or abutter.

highway. In this respect, reference is made not only to expressways that involve control of access, but also to all kinds of other roads. It is just as important to integrate the highway with or insulate it from its roadside environment in the case of an ordinary two-lane highway that carries a large volume of traffic, as it is in the case of the divided highway or the controlled-access facility. I have come here this afternoon prepared to discuss some specific ways and means whereby what you and I agree is desirable, can be achieved. First, let's talk about control of access.

ACCESS CONTROL

You may say: Why control of access first? Because of all the modern engineering, economic or legal tools that are now available to the highway engineer or the highway planner, control of access is proving itself to be the most effective in the movement of large volumes of vehicles, safely and efficiently.

Roadside ribbon development is common on many miles of the main arterial highways in the State of Indiana, especially in and near cities. Because of the direct access afforded, it is natural that highways have become a favorite location for gasoline filling stations, restaurants, taverns, billboards, and all the attendant accessories of a roadside jungle. Yet these shoe-string communities are proving to be detrimental to safe and efficient highway travel; financial liabilities to the local governments that must service them with public utilities, fire and police protection, etc.; and eventual bad investments for the entrepreneurs who sponsor them.

For example, the more intensive the roadside ribbon development, the greater will be the exposure to accidents on the highway of ordinary design. Vehicles maneuvering into and out of roadside establishments constitute a serious menace to through traffic.

Moreover, the cumulative effects of vehicular movements in the marginal lanes of travel into and out of roadside establishments reduce the capacity of a highway, i.e., the ability of the roadway to accommodate traffic. Future improvement of highway facilities becomes very costly, sometimes prohibitive, where the roadsides remain unregulated, especially in and near cities and metropolitan areas. Highway departments have found road widenings under such circumstances so costly that new locations have been sought, as the less expensive alternative under these circumstances.

Illustrations aplenty of this unfortunate condition can be found in Indiana. Professor Petty, Chairman of this Annual Road School, has called my attention to a typical example in this very urban area.



Fig. 1. U. S. Highway 1 at Elizabeth, New Jersey. Because the margins of this facility are not protected the functional service of the highway is reduced.

The Lafayette By-Pass was built approximately 15 years ago, to alleviate the congestion characteristic of the narrow, winding route, U. S. 52, that penetrated Lafayette. It was assumed, erroneously of course, that this would constitute a more or less permanent solution to the problem. As all of you know so well, this has not at all come to pass. Instead, the Lafayette By-Pass has now become so congested by its adjacent development of all kinds and the large volume of traffic which uses it that traffic hazards of the first magnitude now prevail over most of its length. The present right-of-way is insufficient to provide the additional capacity that is urgently needed; had the extra land been acquired at the time the by-pass was established, the cost would have been minor. Yet today, the price of acquiring the additional land is probably prohibitive. Accordingly, under these circumstances, you will probably have to "bypass the bypass" to obtain the necessary relief. And if the adjacent corridors of the new route are not protected by control of access or some other effective means, the same costly cycle will start all over again.

If this should happen, abutting enterprisers along the Lafayette By-Pass will find themselves in unenviable circumstances. It is to their interest, as well as that of the highway traveler and the public

at large, that the highway roadside be developed in an orderly manner. Illustrative of some of the benefits to abutters is the provision and regulation of access facilities of such design and in such location as to benefit both the abutter and the motorist. Adequate set-backs can result in the provision of adequate off-the-highway parking facilities. Adherence to reasonable zoning standards can make a roadside establishment inviting and attractive.

Then there is the matter of impairment of the capital investment of abutting commercial enterprises. It should be made clear to owners and operators of roadside establishments that unless a reasonable program of roadside protection is carried out, such owners may find themselves on a highway that has been forsaken by most of the traffic for a new alternate route, because of the hazards and inefficiencies of travel which abutters themselves helped to create or refused to cope with. The law books are full of decisions wherein adjacent property owners have sought in vain compensation for business losses of this kind.

This approach can be most effective in activities which seek to enlist the aid and support of abutters for a reasonable program of roadside protection.

It is not to be assumed, as some seem to fear, that all development adjacent to expressways is stifled by control of access. On the contrary, it might be said that *increased* accessibility with safety is provided by the express highway because of its control of access.

What the expressway does is to encourage the *orderly* development of areas adjacent to the facility and discourage the objectionable type of roadside jungle. I need only cite the case of the Shirley Memorial Highway in the Washington, D. C. metropolitan area, to illustrate this point. As one travels southward on this modern highway, one is impressed with the very intensive and orderly housing and commercial development which flanks the Shirley in Arlington County, with only indirect access to it. Other vast projects, of similar character, are just being completed, and still others are under construction along the margins of the recently-completed sections of the Shirley Highway in the adjoining Fairfax County, Virginia.

Another striking illustration is the 50-mile, \$29,000,000 Gulf Freeway recently opened to traffic between Houston and Galveston, Texas. Approximately eight miles of this expressway is within the City of Houston. Incidentally, this section has already generated over 250 million vehicle-miles of travel; fatalities have amounted to only 1.8 per hundred million vehicle-miles, which compares very favorably with the national average of 7.5 for all types of highways.



Fig. 2. Rotary intersection at junction of the Shirley Memorial Highway, Seminary Road and Gunston Road, Virginia. Through traffic flows freely on this expressway that provides access to housing developments and shopping areas.

In connection with the Gulf Freeway in Houston, I want to tell you a little about a very significant study which has recently been completed in connection with that modern highway facility.¹ As you well know, highway engineers in your State and local highway departments, local civic groups, planning commissioners, business men and others in Indiana have become increasingly interested in the expressway and control of access. Yet I know these same groups in your State are wondering what effect such arteries will have upon the value of land and properties served by such expressways. In an attempt to document and evaluate such effects, the Texas State Highway Department, with the cooperation of the Bureau of Public Roads, undertook to analyze approximately 2300 bona fide sales of real estate which took place along the Gulf Freeway and also in sections of the city completely removed from the influence of this arterial. All sales for the areas studied in each of three periods—1939 to 1941, 1945 to 1946, and 1949 to 1951—were included.

¹ *A Study of Land Values and Land Use Along the Gulf Freeway, Houston, Texas, 1951, Texas Highway Department.*

The mechanics of analysis were consistent with sound technique. Adjustments were made for changes in the value of the dollar during the periods investigated; the value of improvements, adjusted for changes in the construction cost index, were filtered out of the aggregate values; and other refinements were made.

The results of this study will amaze you: The percentage gain

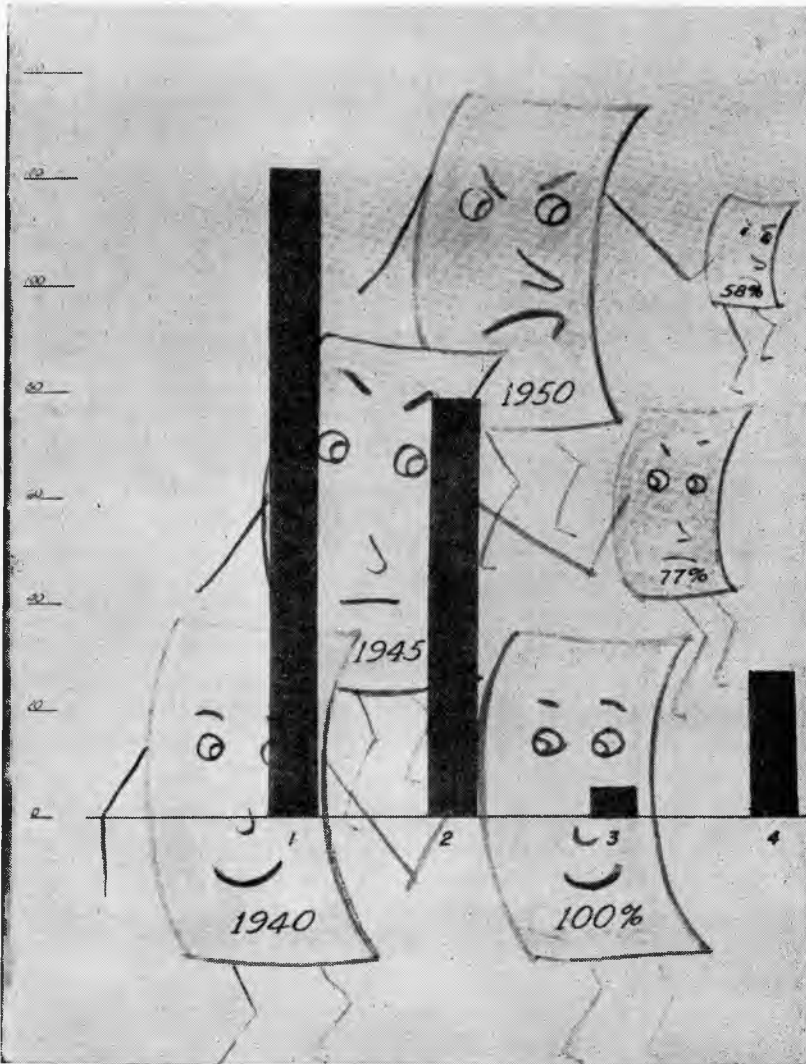


Fig. 3. Percent gain in land values, 1945-1950 in each of four areas investigated in connection with the Gulf Freeway, Houston, Texas. Areas 1 and 2 are close to the freeway, 3 and 4 are not.

in market values in the primary areas immediately adjacent to the Gulf Freeway (where land increased from \$0.65 to \$1.44 per square foot) was more than twenty-four times as great as in the areas only indirectly accessible to the freeway, (where land increased from \$0.57 to \$0.60 per square foot), and approximately five times as great as in the areas completely removed from the expressway (where land increased from \$0.98 to \$1.23 per square foot.) The percentage gain in market values in the secondary areas, close to the freeway but not right next to it (where land increased from \$0.89 to \$1.58 per square foot), was more than 15 times as great as the areas only indirectly accessible to the freeway (where land increased from \$0.57 to \$0.60 per square foot), and three times as great as the regions completely removed from the expressway (where land increased from \$0.98 to \$1.23 per square foot).

The Gulf Freeway land value report contains a host of other, scientifically-derived data. I commend it for your perusal, if you already have not been exposed to it.¹

¹ During the last few years, the California Division of Highways has undertaken a series of studies attempting to measure the impact of expressways on communities of all kinds; some of these are by-pass studies; some are before-and-after appraisals; and some are comparisons of what happened along a modern freeway and other comparable arterials of a lesser design. The following is a complete listing of such studies as reported in CALIFORNIA HIGHWAYS AND PUBLIC WORKS:

Outer Highways, A Study in Successful Planning for Major Retail Business Development, by Frank F. Marshall, May-June 1948, p. 1.

Outer Highway Increased Business for Roadside Restaurant, by E. P. Jones, January-February 1949, p. 38.

Here's Proof, Outer Highway Increases Both Business and Property Values, by Harry N. Cook, July-August 1949, p. 13.

Service Town, U. S. A., Outer Highways Enhance Small Town Development, by J. F. Powell, September-October 1949, p. 1.

Boost for Freeways, Factual Study Shows They Increase Property Values, by Robert L. Bangs, November-December 1949, p. 29.

Freeway Ups Business, North Sacramento Shows Profit, by Stanley Young, January-February 1950, p. 3.

Auburn Study, Economic Survey of Placer County Freeway Shows Business Benefits, by Stanley Young, May-June 1950, p. 1.

Fairfield Study, About 75 Per Cent of Business Bettered by Highway Realignment, by Stanley Young, January-February 1951, p. 1.

Venture Success, by Wayne Hubbard, May-June 1951, p. 7.

By-Pass Effects, by W. Stanley Young, May-June 1951, p. 27.

Temecula Study, by Fred O. Gibbons, July-August 1951, p. 6.

Escondido Study, by W. Stanley Young, July-August 1951, p. 11.

Freeway Values, Abutting Properties Show Exceptional Gains, Stanley Young, September-October 1951, pp. 5, 58.

Shell Beach Study, Expressway Spurs Subdivision Growth, Theodore A. Reinhart, November-December 1951, pp. 39, 64.

Anderson Study, Retail Business on Frontage Road Shows an Increase of 61 Percent, by John F. Kelly, January-February 1953, p. 24.

I am sure all of you will recall the rather unfortunate experience concerning an expressway proposal for Fort Wayne in 1947. The adverse result at the polls might never have come to pass if factual information, of the kind provided by the Gulf Freeway land value report, was available at the time. A recent study by A. K. Branham of Purdue University, entitled "An Economic Evaluation of Two Indiana By-passes," constitutes a start in the right direction.

Aside from safety, capacity, and adjacent land value considerations, there is the matter of economy of motor vehicle operation in relation to roadside uses. The stop-and-go driving that takes place where extensive roadside ribbon development exists is necessarily expensive for millions of motorists. Every stop and start incident to travel through a roadside jungle of establishments, multiplies gasoline consumption, tire wear, and general vehicle tear. It is reported that a single stop and start uses as much rubber as one mile of ordinary travel and enough gasoline to travel two city blocks.¹

So much for the engineering and economics of the expressway; what about some of its outstanding legal characteristics, particularly as it may be applicable to Indiana? Control of access is now authorized in 32 States.² Indiana, of course, is among them. The authorization applicable to this State is of the broadest kind, applicable to the State, its counties, cities, and towns. Control of access can be undertaken with reference to existing highways as well as facilities on new location. Provision can be made for frontage roads where necessary, and intergovernmental cooperation is permitted where it will be helpful. In short, Indiana is fully equipped from a legislative point of view to go forward with an expressway program appropriate for its needs.

I would like to comment briefly on some of the judicial doctrine which is emerging from the increasing body of litigation on the subject.

¹ Moyer and Tesdall, *Costs for Stop-and-Go Driving, Tire Wear and Cost on Selected Roadway Surfaces*, Iowa Engineering Experiment Station Bulletin No. 161, 1945.

² California, Colorado, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

From a judicial point of view, we have to distinguish between control of access involving an existing street or highway, and such control of a facility established on new location. It is pretty well established in the common law that the right of access to an existing street or highway cannot be denied or restricted nor an owner deprived of such right except by due process of law and upon the payment of compensation, and then only for a public purpose. With respect to expressways established on new location, however, the judicial rules appear to be quite different. At least, a doctrine favorable to the public interest seems to be emerging, namely, that the person who becomes an abutter by reason of the establishment of an expressway on a location where no street or highway theretofore existed has lost nothing which he previously had, with respect to access, and therefore is entitled to no compensation therefore. This important principle has now been enunciated by two State Supreme Courts, California¹ and Illinois.²

REGULATION OF ACCESS

Up to this point, we have been discussing the *public control of highway access*, characteristic of the expressway. It is apparent, however, that despite the compelling advantages of the expressway, only a limited mileage of such modern facilities can be built within the foreseeable future, because the resources are limited with which to do the job. Yet the need persists, to improve the character of the transportation service on a much larger mileage of main highways and streets that carry, by far, the bulk of the Nation's highway travel.

Counterparts to this national situation may be seen in Indiana. The \$4 million Tri-State Highway is a good illustration of control of access. You are planning other expressways, I know, particularly in the metropolitan areas of the State; and you will undoubtedly want to design your more important by-passes with control of access, in order to avoid the functional obsolescence which will characterize such new routes unless they are appropriately protected, as I have already suggested. But aside from these instances, I know that you are very interested in improving the situation on many additional miles of your

¹ In the case of *Schnider v. State of California*, 241 Pac. (2d) 1 (1952), summarized in Highway Research Board, Correlation Service Circular No. 162, item 55-1, May, 1952. The same doctrine has been reiterated in a more recent California case, *People v. Thomas*, 239 P. (2d) 914 (1952).

² In the case of *Department of Public Works and Buildings v. Filkins*, 104 N. E. (2d) 214 (1952), summarized in Highway Research Board, Correlation Service Circular No. 171, item 58-2, August, 1952.

main traffic arteries. So we shall have to turn in other directions for other answers.

One such device is the *regulation of access*. This involves the promulgation of standards with respect to the design and location of roadside entrances and exits. It is intended to apply to streets and highways of ordinary design that cannot be converted into expressways.

A program involving the regulation of access is rapidly gaining momentum in the United States. At least 12 States¹ have legislation specifically concerning the regulation of driveways, and nine additional States² have statutes which might be construed as authorizing such control. At least eleven States³ have formulated minimum standards and accompanying regulations for private driveways to State highways. The State of Illinois, your neighbor to the West, has recently joined this group.

To promote the safety and efficiency of travel by highway, the 1951 Maryland legislature enacted two laws authorizing the regulation of access from commercial and industrial establishments to new or existing State highways where the annual daily traffic volume exceeds 2,000 vehicles per day. One enactment authorizes the State Roads Commission to limit the width of points of access, and determine the locations thereof, that any commercial or industrial property owner or user may utilize.⁴ The statute empowers the Commission, in the interest of traffic safety, to limit such width and determine location by any method it deems desirable, except that the Commission is not authorized to deny an abutting property owner any access at all along any State highways except freeways.

The other enactment prohibits the establishments of commercial and industrial access to a State highway carrying an average of more than 2,000 vehicles per day, without a permit issued by the State Roads Commission.⁵ This provides the administrative and enforcement machinery necessary to effect the regulation of entrances and exits authorized in the first statute I referred to.

The principle embodied in this new Maryland legislation is not

¹ Indiana, Louisiana, Maine, Maryland, Mississippi, New Hampshire, Oklahoma, Oregon, South Dakota, Utah, Washington, and West Virginia.

² Alabama, California, Illinois, Massachusetts, Minnesota, Nevada, New Jersey, North Carolina, and Ohio.

³ California, Georgia, Illinois, Louisiana, Maine, Michigan, Minnesota, New Jersey, North Dakota, Virginia, and Wisconsin.

⁴ Laws of Maryland, 1951, Chapter 611, approved June 1, 1951.

⁵ Laws of Maryland, 1951, Chapter 612, approved June 1, 1951.

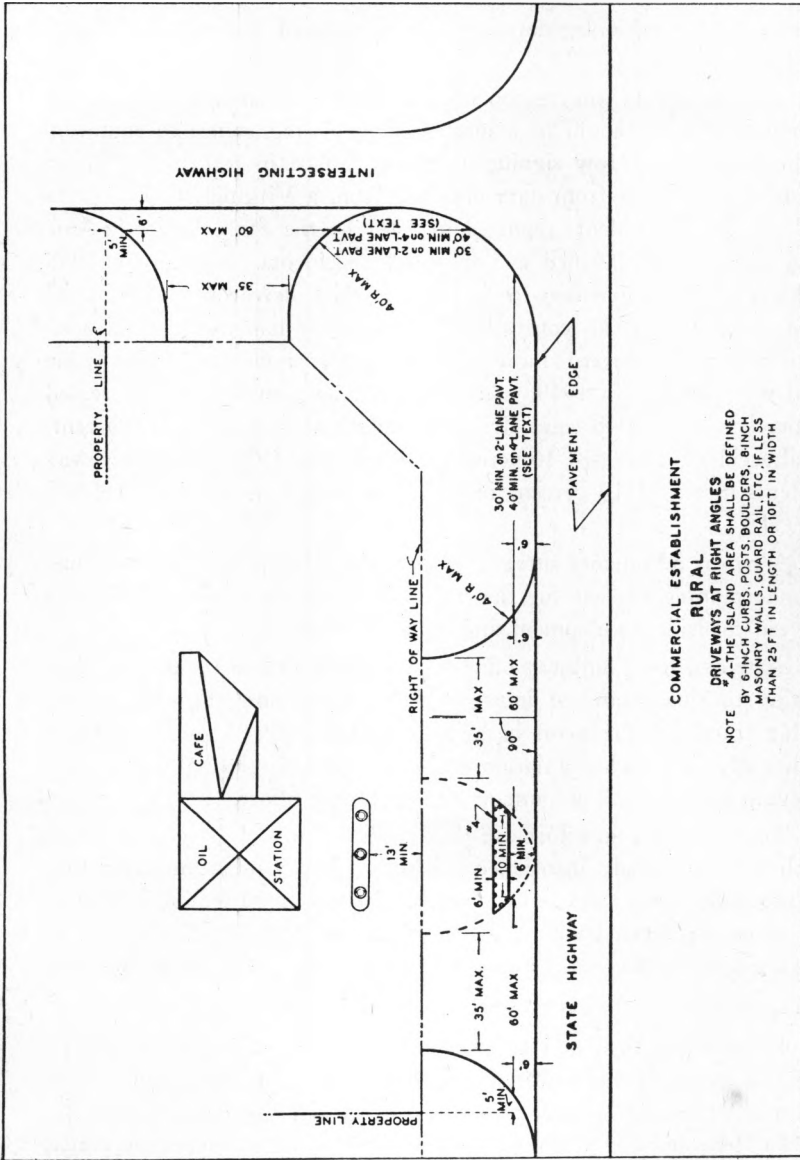


Fig. 4. A typical layout sketch assisting the regulation of access in Illinois. From Illinois Division of Highways.

new, of course. I am sure that most of you are well familiar with it. But what is new about the Maryland statute is that the authorization is specifically and broadly spelled out in the legislation so that it applies to existing accesses as well as new ones. It strengthens the hand of the State highway department in an area where its authority to

promulgate regulations had frequently been questioned by those subject thereto. Comparable legislation was also enacted recently in Maine¹ and Utah.²

The matter of the reasonable regulation of entrances and exits to main highways should be a matter of great importance to engineers of the highways. How significant access can be in terms of accident potential is revealed from data obtained from a Virginia study.³ Of a total of 31,070 accidents reported in 1947 by the State Police in Virginia, 2,100 were classified as "driveway" accidents. Mishaps in 1948 in that State had increased to 37,194, of which driveway accidents accounted for 2,692; this constituted a 19 percent increase in total accidents and a 28 percent increase in driveway accidents. This same trend was repeated in 1949, when total accidents in Virginia increased six percent over 1948, and driveway accidents increased 17 percent. Total accidents increased 16 percent in 1951 over 1950, while driveway accidents increased 19 percent in the same period, amounting to 4,937 in 1951.⁴

A recent Minnesota survey likewise is providing, for the first time, an underpinning of fact for the hypothesis that there is a relationship between roadside development and highway safety.⁵

State and local highway officials in Indiana may want to give close scrutiny to this means of improving the safety and efficiency of vehicular travel on the main highways of this State. I might mention incidentally that such regulation will not cost a single highway dollar, involving only a small amount of administrative effort.

To assist such an effort are the standards of at least eleven States which I have already mentioned. Additionally, I might indicate that the Subcommittee on Roadside Control of the Committee on Traffic of the American Association of State Highway Officials is engaged in evolving a policy for the design of driveway entrances. A preliminary

¹ Maine Public Laws of 1951, Chapter 332.

² Laws of Utah, 1951, Senate Bill No. 9-X, approved June 18, 1951.

³ *The Control of Driveway Entrances by Permit*, by Burton Marye, Jr., Virginia Department of Highways, presented before the Committee on Traffic, American Association of State Highway Officials, Miami, Florida, December 6, 1950.

⁴ *Virginia Traffic Accident Facts*, 1950, and 1951 editions, Department of State Police.

⁵ *Minnesota Rural Trunk Highway Accidents, Access Point and Advertising Sign Study*, Conducted by the Minnesota Department of Highways in Cooperation with the Bureau of Public Roads, 1951.

report on this subject¹ was presented at the 1951 annual convention of the Association at Omaha, Nebraska. A final report, set of standards, and a policy will be available, we hope before another year is out. I urge all of you to seek the means for betterment of highway travel in Indiana through the reasonable regulation of entrances and exits to main arterials.

There is one other matter related to the regulation of access that should be mentioned here. And that is the matter of access requirements under subdivision control, zoning regulation of access, and related tools that have been advocated and used by community planners for years.

I have been very much impressed recently with the effective application of these city planning aids to arterial highway improvement, particularly in the newer areas. Examples abound in various parts of the nation—and there are undoubtedly some in Indiana—where housing developments are “backed up” to the through highway. A system of interior streets provides access to the individual residences with entry to the main highway at a well-designed entrance road at an appropriate location. In other instances, frontage roads are provided, facilitating an indirect means of entry to the arterial highway. There are also illustrations of set-backs, with suitable insulating shrubbery between the structures and the adjacent highway. Full or partial control of access can be achieved in this manner at no cost to anyone; it seems a logical manner in which to make progress.

This has been accomplished by the exercise of authorized control over subdivision plats by the responsible government unit. It has been upheld by the courts in at least one instance.²

There is a close parallel, of course, between the control of access on expressways and the regulation of the roadsides on roads of ordinary design, the difference being largely one of degree rather than kind. Accordingly, land values and land utilization along highways, the roadsides of which are regulated in the public interest, are likely to benefit therefrom. The data which the California and Texas studies,

¹ *Preliminary Report on a Policy for Design of Driveway Entrances, 1951*, prepared by Committee on Traffic, Subcommittee on Roadside Control, American Association of State Highway Officials.

² *Ayres v. City Council of Los Angeles*, 207 P. (2d) 1, 11 A. L. R. (2d) 503 (1949), in which the court upheld subdivision regulations promulgated by the City Planning Commission of Los Angeles, including a requirement that a 10-foot strip along the rear of the lots be restricted to planting of trees and shrubbery in order to prevent direct access from the highway to the subdivision lots.

already referred to, provide, can be used to great advantage in these roadside protection programs.

SUBDIVISION CONTROL OUTSIDE MUNICIPALITIES

Within the municipalities of the State of Indiana, land platting control is probably adequate. But it is in the urbanized areas outside of municipal jurisdictions that a land platting problem may exist with respect to the public highways that are intended to serve them, particularly the arterials.

A recent Wisconsin enactment may be helpful in regulating under the police power, at least this important class of uses along State trunk highways.¹ The act in question specifies that all land subdivisions provided for under chapter 236 of the Wisconsin statute shall be so designed as to provide for the safety of entrance to and departure from abutting highways or streets and for the preservation of the public interest and the public investment in the highway plant. The law further provides that no plat for lands abutting on a State trunk highway shall be valid or entitled to be recorded until it has been submitted to and approved by the State Highway Commission. However, in counties having a county planning board or department employing permanently at least one registered civil engineer, plats are to be approved by such board rather than by the State Highway Commission.

The advantages of such a mechanism are many. First, it places a responsibility upon subdividers of land adjacent to public highways to design their means of entry and exit in a manner consistent with safety on the highways. Up to the middle of last year, over 80 plats had been approved, and substantially more reviewed.

Secondly, through the plat-reviewing mechanism, the Highway Commission is put on notice with respect to new developments contemplated along State trunk highways. This advance notice enables the Commission to reconcile such proposals with their own reconstruction and modernization plans for the highway facility, providing the opportunity for keeping future right-of-way acquisition costs to a minimum. While the law has not been construed as providing for reservation of rights-of-way for future improvement, in a reasonable number of instances, the subdivider has dedicated a nominal additional width for street or highway purposes. Finally, sufficient discretion is lodged with the Highway Commission to require subdivision designs that will not unreasonably jeopardize highway travel.

¹ Wisconsin Laws 1949, Chapter 138; Chapter 236, Wisconsin Statutes (1951).



Fig. 5. Illustration of how subdividers cooperated in the design of the East Shore Freeway in Alameda County, California, a highway designed to handle a large volume of traffic going through Oakland. None of the adjacent residences have direct access to the freeway; it was planned that way.

The administration of this new device has produced some significant overtones. The primary objective of the Wisconsin Highway Commission apparently is to minimize the number of points of direct access between the highway and the abutting platted property.¹ Wisconsin highway officials indicate that this is being accomplished by a dedication of the subdivider for a service road along the highway or by

¹ Based upon a letter dated July 22, 1952 to the author from Mr. R. B. Sawtelle, Right-of-Way Engineer, State Highway Commission of Wisconsin.

an arrangement of interior streets to serve the property; a stipulation is also specifically spelled out on the plat, to the effect that ingress and egress between designated lots and the State trunk highway is prohibited. In some instances, the subdivider has cooperated in establishing a reasonable set-back line, at the time the plat was approved. In general, the Wisconsin Highway Commission has had very little difficulty in the reasonable enforcement of this subdivision control device, and has asserted that most subdividers are cooperative.

The law has a single weakness, however, State officials reveal, namely, that a plat is not subject to review and approval by State agencies if the subdivision contains less than five lots.¹ As a result, an owner can subdivide the land each calendar year into 4 lots or less and sell them by metes-and-bounds description, and thus circumvent the subdivision control statute.

In general, this mechanism has been very effective in assisting in the reasonable control of the character of at least one important class of roadside uses, and one that is a generator of substantial traffic. I commend it for your consideration and possible application in this State.

ADVANCE FINANCING OF FUTURE HIGHWAY RIGHT-OF-WAY

The need for much of the public regulation of the roadsides which we have been discussing thus far stems from the practice of not acquiring enough lands for highway purposes. This, in turn, has largely resulted from the fact that state highway departments, including the State of Indiana, have never had at their disposal sufficient funds with which to undertake a simultaneous program of appropriate size, of construction and land acquisition.

Why worry about the advance financing of future highway right-of-way, you may well ask? Here are some reasons: First of all, the vast amount of building construction of all kinds that is taking place in the areas that are being contemplated for future highway location is distressing highway management because of the obviously adverse effects it will have on the highway modernization program. Then too, the vast amount of effort and expense incident to the *advance planning* of highway improvements will have been wasted, if, when land acquisi-

¹This limitation stems from the statutory definition of a subdivision: A "subdivision" is a described tract of land which has been divided into five or more lots of one and one-half acres each or less in area. Section 236.01 (4). This limits the platting review authority of every portion of Chapter 236 of the Wisconsin Statutes (1951).

tion begins, the right-of-way originally thought feasible now becomes prohibitive in cost.

A good illustration of the practical need for advance financing of lands for future highway right-of-way purposes, or for an effective means for reserving such lands, is a recent instance in Cleveland, Ohio. It has been alleged that \$1,500 in 1947 could have purchased a tract of land now costing \$340,000, involving 59 parcels soon to be need for the right-of-way of the Lakeland Freeway. This same experience will be repeated in Indiana cities many times—if it hasn't already—unless some provision is made for the advance financing or reservation of highway right-of-way.

The plan for the advance financing of highway right-of-way can be relatively simple: The legislature establishes a revolving fund out of general State revenues in an amount deemed reasonable for the purpose. The State highway department then purchases outright, with moneys out of this revolving fund, such lands as are necessary for important projects which may not get built for some years. Then, as the projects for which lands have thus been obtained "mature" and are programmed for construction in due course, the right-of-way advances are taken out of the highway funds currently allocated and the revolving fund is reimbursed to that extent. In other words, the corpus of the revolving fund is kept intact, and the only cost to the public is the debt service charge involved.

Lest you think that this scheme is highly theoretical, let me hasten to tell you that its prototype has already been put into operation successfully in one of the most important States in the nation, California. Last year, a \$10-million fund for the advance acquisition and protection of highway right-of-way was authorized by the California legislature; the fund was completely exhausted before the year was out. That legislature is now considering, at its current session, a similar bill for a revolving fund authorization of \$50 million.

California highway officials have undertaken detailed studies of the savings that could be effectuated in advance land acquisition, in support of this legislative proposal. I know their findings will interest you very much: It is asserted, on the basis of documented information, that for every dollar invested today in future highway right-of-way, savings ranging from ten to thirty dollars will accrue. Perhaps in no other segment of highway development are such fantastic dividends possible!¹

¹ *California State Highways, An Engineering Study of Improvements Required to Serve Present and Future Travel, 1952, Automotive Safety Foundation.*

Naturally, a similar plan for Indiana would perforce be more modest in its extent, because the needs are substantially different. A fund of perhaps several million dollars probably would constitute a start in the right direction. But the concept of providing the financial means for a more economical and deliberate right-of-way policy in the public interest is an important one. I urge you to consider it on its merits.¹

It might be observed that a program for the advance acquisition of lands for highway purposes can be successful only if proposed in connection with a *planned* highway route or section thereof. In other words, the location and design characteristics, at least insofar as they determine right-of-way needs, must have jelled sufficiently. This, perforce, will filter out of the scheme most of the speculation and uncertainties that otherwise would characterize any widespread program of advance land acquisition. This presumes, therefore, the early completion of surveys and design plans—a program in itself worthwhile, as forward-looking highway departments now appreciate.

CONCLUSION

Unfortunately, we still continue, for the most part, to build our main through highways as though they were ordinary local roads and streets. The concept of a "right-of-way" as merely the right of passage over private property still persists, though it is now an anachronism.

One of the urgent needs that has emerged during the past decade is that of properly relating the uses of the roadside to the uses of the highway. If the design and function of both the highway and its roadside environment are appropriately conceived, we shall have highways that are relatively free of hazard and economical and pleasant to use; at the same time, the roadside uses will assist a logical highway transportation service. If we fail to take significant note of the fundamental relationship of the highway to its adjacent corridors, we shall never have highway facilities that can serve large numbers of vehicles safely, efficiently, and at reasonable cost; we shall also be encouraging the development of roadside jungles. Which it shall be is now squarely up to us.

¹ For a detailed discussion of the right-of-way financing problem, see *Financing Highway Right-of-Way*, Right-of-way Committee, American Association of State Highway Officials, 1950.