

# Highway Planning and Protection Measures In Wisconsin: A Panel Discussion

## *Introduction*

J. H. BEUSCHER, Professor of Law, University of Wisconsin

● AT THE 37th Annual Meeting of the Highway Research Board the author and associates (1) outlined a program of law-in-action research which they proposed to follow. This put them in an enviable position, as they had only to report what they planned to do. Now they are in the somewhat less enviable position of reporting what they have done. However, it is believed that some of the findings deserve reporting.

The study undertaken is a three-part venture involving the efforts of two lawyers and an economist working together and reminding each other that the limits of useful research are not always congruent to the limits of a single discipline like law or economics. The group has managed to work together quite closely, exchanging notes and conducting research jointly.

The papers of this panel discussion are not complete reports of all that the cooperative study has produced. Instead, each researcher summarizes those of his findings which in his opinion are of greatest interest to a group interested in right-of-way problems.

It is hoped to illustrate by this first phase of the Wisconsin research program that the American university provides a unique set of research tools which can be of use in studying highway problems. At the same time it is hoped to emphasize the value in conducting research on an interdisciplinary basis drawing what is available from all the social sciences.

## REFERENCE

1. Beuscher, J. H., et al., "A Program of Highway Research at the University of Wisconsin." HRB Bull. 205, p. 11 (1958).

## *Impact of Police Power Controls Along the Wisconsin Trunk Highway System*

FRANK M. COVEY, JR., Graduate Fellow in Law, University of Wisconsin

## ROADSIDE CONTROLS

### Need for Roadside Controls

● IN THE LAST fifty years the United States has undergone a "transportation revolution." This revolution has altered the face of the nation and surpassed in its impact the great canal and railroad building booms of the 19th Century. It has created metropolitan regions bounded not by measurements of distance but by measurements of time of travel.<sup>1</sup> It has increased and highlighted the problems of urban government; it has accelerated the trend to governmental centralization and urban decentralization. It has opened new vistas of progress and has altered and shaped the national development and culture. This transportation revolution has been sparked by the mass production of the automobile and enkindled by the construction of the largest and most advanced road network in history—a network totaling 3,300,000 miles and used by 63,000,000 vehicles.<sup>2</sup>

<sup>1</sup>Editors of Fortune, "The Exploding Metropolis." P. 53-80 (1958).

<sup>2</sup>U.S. Bureau of Public Roads news releases.

This revolution has not been accomplished without violence. Since the first motor vehicle fatality in 1899 it has cost more than a million human lives. Through mid-1956 the deaths totaled 1,168,075, and in 1955 alone there were some 38,300 deaths, 1,350,000 injuries, and an economic loss of \$4,500,000,000.<sup>3</sup> The average toll on the highway system of the United States is over 100 deaths a day.<sup>4</sup> The road network has also proven deficient in other ways. In some urban areas it has provided slower transportation than the horse and buggy days.<sup>5</sup> It has proven unduly expensive for the road building authorities in successively more expensive relocations or bypasses of structurally sound roads that have become functionally obsolete because of close-in roadside development.<sup>6</sup> Some of these deficiencies can be remedied through more advanced design and engineering or better law enforcement and motor vehicle administration. But of all the control devices or design factors that could improve the system of roads, control of roadside development will contribute the most to highway safety, economy, and permanence.

While extensive roadside control in the United States dates back only a relatively few years, some evidence is available which indicates that these conditions are valid.

**Safety.**—It is clearly established that full control of access generally reduces the fatal accident rate to one-fourth to one-half that of comparable roads without access controls,<sup>7</sup> but there is also evidence that such lesser control devices as access limitation and subdivision controls provide added safety factors even without full access control. Access limitation generally reduces the accident rate by about 40 percent but results in a small increase in the fatality rate;<sup>8</sup> subdivision control has also been shown to be directly related to highway safety.<sup>9</sup>

**Economy.**—It is clearly established that travel on roads with full control of access is faster—9 to 21 mph greater average speed,<sup>10</sup> and more economical—3 to 4 cents a mile less over-all operating costs<sup>11</sup>—than conventional roads. Studies of driving conditions on roads including partial access control conclude that there is a significant savings of time and gasoline consumption in urban areas and a significant savings of time in suburban areas.<sup>12</sup> Ease and economy of travel in areas zoned with a highway orientation indicate a similar improvement.<sup>13</sup>

**Permanence.**—Control of roadside development protects the state's vast financial investment in the highway in two ways. It insures that the state will get the maximum possible safe use for as long a time as possible. Without such roadside controls the roadway may become functionally obsolete long before it is worn out. The "highway cycle" of overcrowding the roadside, unregulated growth of traffic-service facilities, and crippling of the road's traffic carrying capacity will result in the destruction of the usefulness of structurally serviceable roads. Law<sup>14</sup> cites the example of US 41 north of Milwaukee, Wis., as an instance where relocation was made necessary because of

<sup>3</sup>National Safety Council, "Accident Facts." P. 43 (1956).

<sup>4</sup>Williams, "The Nonsense About Safe Driving." *Fortune*, Sept. 1958, p. 118.

<sup>5</sup>Sert, "Can Our Cities Survive?" (1942).

<sup>6</sup>Ahner, "Planned Access Keeps Our Highways Young." *Traffic Quarterly*, Oct. 1957, p. 453.

<sup>7</sup>Owen, "The Metropolitan Transportation Problem." P. 43-45 (1956).

<sup>8</sup>President's Advisory Committee on a National Highway Program, "A Ten-Year National Highway Program." P. 11 (1955).

<sup>9</sup>Marks, "Subdividing for Traffic Safety." *Traffic Quarterly*, July 1957, p. 308.

<sup>10</sup>Cunningham, "The Limited Access Highway from the Lawyer's Viewpoint." 13 *Mo. L. Rev.* 19-23 (1948).

<sup>11</sup>Automobile Manufacturers' Association, "Automobile Facts and Figures." P. 48 (1956).

<sup>12</sup>May, "Economics of Operation on Limited Access Highways." *HRB Bull.* 107, p. 49 (1955).

<sup>13</sup>Grotewald and Grotewald, "Commercial Development of Highways in Urbanized Regions: A Case Study." *Land Economics*, 34: 236-241 (1958).

<sup>14</sup>Law, "Controlled Access, Zoning, Set Back Lines, and Land Platting Along the State Trunk Highways." *Better Roads*, 19: 26 (1949).

close-in development that could have been prevented by roadside controls.

A road that is protected by roadside controls is safer, more economical, and more permanent. It is a better investment of public funds and provides the maximum possible safe use of the roadway. There can be no doubt that such controls are a necessary adjunct of a well balanced road program. The choice of the specific tool for roadside control in a specific set of circumstances will involve many considerations. The concern of this paper will be with a portion of those available tools, namely the police power control devices, in an attempt to evaluate their effectiveness in providing this desired roadside protection.

So far roadside protection sounds like an engineering device which, along with gentle curves and adequate sight distances, should be incorporated in all new highways. However, control of roadside development is essentially a legal problem since the courts have held that the "right of access" which is the core of roadside development, is one of the property rights of an owner of land abutting a highway. Since access is a property right, any attempt to control it or roadside development will fall under the general limitations that are placed upon the government when regulating property rights.

The right of access may be defined as the right of reasonable ingress to and egress from the abutting land onto the system of public roads subject to reasonable traffic regulations and not denied or affected by any division of traffic on the road or circuitry of travel encountered once on the roadway.<sup>15</sup>

### The Police Power Controls

State actions to control access will fall under one of two basic constitutional classifications: eminent domain (the power of the state to take property on the payment of just compensation) or police power (the power of the state to regulate reasonably the use of property without compensation). In the area of roadside controls the eminent domain powers and the police powers are closely interwoven.<sup>16</sup> In determining whether a particular restriction or control device should be compensated requires a weighing of many conflicting interests—the rights of the landowner, the rights of the highway user, and the rights of the state. Several modes of distinguishing on the conceptual level between exercises of the police power and eminent domain power have been suggested: impact on the landowner,<sup>17</sup> purpose of the regulation,<sup>18</sup> and nature of the condition sought to be remedied.<sup>19</sup> Without entering into this conflict we will simply delineate as police power regulations those which the courts have allowed without the payment of compensation to the affected landowner, and conversely, where compensation has been required, these devices will be treated as exercises of the eminent domain powers.

Generically, the police power controls of roadside development are access limitation, subdivision controls, official mapping, zoning and planning.<sup>20</sup> These can be bro-

<sup>15</sup> There is much law, case and statutory, on each phrase of this definition. The proposed legislative bill to effect a revision of present Chapter 32 of the Wisconsin Statutes prepared by the Governor's Committee on the Revision of Eminent Domain Law in Wisconsin, Dec. 6, 1958, provides in § 32.09(7)(j) that "complete deprivation of right of access" is compensable in eminent domain proceedings. See also Report of the Committee to the Governor, Dec. 12, 1958, pp. 7-8, items (16)(k) through (n).

<sup>16</sup> See concurring opinion, *Rigney v. City of Chicago*, 102 Ill. 64, 83 (1881).

<sup>17</sup> *Bacich v. Board of Control*, 23 Cal. 2d 343, 144 P. 2d 818 (1943). See also *Kramer*, "Values in Land Use Controls: Some Problems," 7 *Amer. Univ. L. Rev.* 1 (1958).

<sup>18</sup> *Town of Windsor v. Whitney*, 95 Conn. 357, 111 Atl. 354 (1920). See also, Note, "Freeways and the Rights of Abutting Owners," 3 *Stan. L. Rev.* 298 (1951).

<sup>19</sup> *Freund*, *Police Power* § 511 (1904).

<sup>20</sup> Also generally included in this classification is the restriction of access on the construction of a new road on restricted alignment. *Carazalla v. State*, 269 Wis. 593, 71 N.W. 2d 276 (1955). While this is a police power action it relates to the nature of the road rather than the control of roadside development.

ken down into two categories—control of the amount of access and control of the type of access. The former type of control, which includes access limitation, subdivision controls, and official mapping, provides roadside protection through the control of the number and location of the access points allowed to the abutter. The latter type of control, which includes zoning and planning, provides roadside protection through the control of the nature and use of the access allowed the abutter.

The desirability of the police power controls is three fold: cost, effect on landowner, and flexibility. The police power tools are by their very nature inexpensive. Their only direct cost to the public is the cost of administration; their application does not require compensation to the property owner. This makes them particularly desirable for the state trunk highway systems where a great amount of funds will not be available for protection devices but which will carry the 80 percent of American highway traffic not carried by the Interstate System. Further, these police power measures usually apply much less pressure to the effected landowner than the eminent domain controls. The limiting effects of the police power measures are by their very nature less restrictive on the landowner than a complete taking under the eminent domain powers. Finally, these devices are more flexible than eminent domain powers; they allow specific consideration of local differences and can make allowance for future local development.

**Control of Amount of Access.**—The first approach to providing roadside protection under the police powers includes the devices which seek to control the amount and location of the access points onto the road. Where the access is concentrated into predetermined areas, special traffic-receiving facilities may be designed to receive the increased traffic; even without such special facilities, the reduction in the number of access points results in a reduction of the danger created by such points. The designation of the location of such access points can have a salutary effect on traffic safety and economy. This type of control includes access limitation, subdivision control, and official mapping.

**Access Limitation.**—A controlled access road is one planned to give preference to through traffic but allowing some private access onto the road at selected points. This control device allows certain limited access in those areas where it does not constitute an undue danger and eliminates it entirely in danger areas. This restriction and selective elimination of access has been justified by the courts on the basis of modern traffic conditions.<sup>21</sup> In congested areas, complete extinguishment of the existing rights of direct access may be necessary. In areas where there is less extensive traffic, as in agricultural areas, some limited direct access may be permitted to abutting owners without unduly endangering through traffic. The controlled access road presents a flexibility of approach to the roadside problem. It allows the degree of protection to vary with the need—maximum protection through complete access control in areas of dense traffic and minimal acceptable protection through access restriction in areas of sparse traffic.

An effective controlled access program involves three steps: (1) freezing all existing access points on the highway and allowing future access points only under specified conditions as to number, use, location and construction; (2) restricting existing access points to their current use; and (3) eliminating access altogether in those areas, for example, curves, vision triangles, and under those uses, for example, commercial, which constitute an undue hazard to through traffic.

While the older cases speak of access from any point on the land contiguous or adjacent to the highway, the modern well-reasoned cases<sup>22</sup> and statutes<sup>23</sup> restrict the

<sup>21</sup>Department of Public Works v. Finks, 10 Ill. 2d 20, 24, 139 N.E. 2d 242, 245 (1956).

<sup>22</sup>State Highway Commission v. Smith, 248 Iowa 869, 82 N.W. 2d 755 (1957); Hillerege v. City of Scottsbluff, 164 Neb. 560, 83 N.W. 2d 76 (1957); New York, C. St. L. R. R. v. Bucsi, 128 Ohio St. 134, 190 N.E. 562 (1934).

<sup>23</sup>For example, Ill. Rev. Stat. ch. 121, § 300d (1957). The tests of reasonableness are enumerated as "reasonable means of ingress from and egress to the road, street, or highway consistent with the use being made of such property and not inconsistent with public safety or with the proper construction and maintenance of the highway for the purpose of travel, drainage, or other appropriate public use."

right to only reasonable access from the land. In those states where the abutter's right of access entitles him to only reasonable access, there should be no legal problem involved in freezing all existing access points and allowing future access points only where they are reasonable in the light of all the circumstances, namely, location, design, and intended use, public safety and the nature and use of the road. This is generally held to be a police power measure.<sup>24</sup> Such a step will prevent the further unregulated growth of roadside enterprises. Following this action, the restriction of all existing access points to their current use will prevent the conversion of existing residential and agricultural uses into commercial and industrial ones. This is also generally held to be a police power measure.<sup>25</sup> Such a step will prevent further unregulated development within the existing roadside pattern. Finally, existing access points in those areas or under those uses which are unreasonable or dangerous to the highway should be extinguished. The closing off of existing access, if it merely restricts the access to reasonable access, is a police power measure;<sup>26</sup> but if the regulation completely denies existing access or destroys its total usefulness, then the access rights must either be purchased by agreement or condemned.<sup>27</sup>

In Wisconsin there is statutory authorization for the controlled access highway on rural portions of the state trunk highway system.<sup>28</sup> On such highways, if the traffic count exceeds 2,000 vehicles a day and the requirements of notice and public hearing in the county concerned are met, the road may be designated a controlled access highway if the Highway Commission finds that such designation is necessary in the interests of public safety, convenience, and general welfare. On such designated roads, not to exceed 1,500 miles of highway, the Highway Commission can prohibit access except at specifically designated points, and the abutter has only a "controlled right of access." In order to preserve their statutory authority, limited to 1,500 miles, the Commission has, wherever possible, entered into collateral agreements limiting access for nominal consideration.

In the actual operation of the act, the Highway Commission has generally followed only the first step of the program outlined, that is, freezing all existing access points and granting future access only under a permit system. There has been some limited use of the second step, that is, access use restriction. Certain driveways on the controlled highways have been designated for residential or agricultural use only. This has raised the objection that this constitutes an attempt to zone on the state level, that is, determining what use can be made of property through designation of what use can be made of the access. Even if this objection were correct, it would not be fatal.<sup>29</sup> Control of the use of access effectively controls the frequency of that access since the number of vehicular movements at an approach to a highway bears a direct relationship to the kind or purpose of use that is made of the approach.<sup>30</sup> Generally, however, the Commission has designated the allowed access points as "private driveways." This designation covers any non-public use; the landowner can convert to a commercial use as long as he meets the design requirements.<sup>31</sup> Thus there is very little bene-

<sup>24</sup> Even in those states where this action is considered eminent domain, *Department of Public Works v. Wolf*, 414 Ill. 386, 111 N.E. 2d 322 (1953), if the access remaining after the restriction is as good as the prior access, the damages are only nominal. *Department of Public Works v. Filkins*, 411 Ill. 304, 104 N.E. 2d 214 (1952).

<sup>25</sup> See *City and County of San Francisco v. Safeway Stores*, 150 Cal. App. 2d 327, 310 P. 2d 68 (1957); *Man v. Vockroth*, 94 N.J.E. 511, 121 Atl. 599 (1923).

<sup>26</sup> See 22 *supra*.

<sup>27</sup> *In re Condemnation of Land*, 178 Kan. 26, 283 P. 2d 392 (1955); *Boxberger v. State Highway Commission*, 126 Colo. 526, 251 P. 2d 920 (1952).

<sup>28</sup> Wis. Stat. § 84.25 (1957).

<sup>29</sup> See n. 25 *supra*. Actually this is much less restrictive than zoning, for if the property fronts on more than one road it can be used for any purpose as long as the restricted access is used only for its designated purpose.

<sup>30</sup> *Enfield & Mclean*, "Controlling the Use of Access." 101 Highway Research Board Bulletin 70 (1955).

<sup>31</sup> Interview, May 16, 1958, District Highway Engineer, Dist. 2, Waukesha, Wis.

fit from such restrictions except the natural use restriction resulting from any limitation of number, for example, generally land can not effectively be used for a commercial purpose unless there are at least two separate access points. There has been little use of the third step, that is, eliminating dangerous access points partially from the lack of need, for example, this control device can not be used in urban areas, and partially from the desire to avoid apparent arbitrary action by condemning one man's access rights while merely regulating his next door neighbor's.

A controlled access road is created by an interplay of police power and eminent domain control powers. This control device involves only a moderate cost to the state, almost entirely in administrative costs. In turn, it produces only a limited form of protection. While it leaves many access points on the highway, it can effectively regulate the pattern of future roadside development. Its greatest deficiencies are (1) the small statutory limitation on its application; (2) the general failure to restrict the use of existing access; and (3) the general failure of local governmental units to provide complementary control measures.

**Subdivision Control.**—The subdivision of land abutting on a highway intensifies the use of the land, generates more traffic, and creates new highway problems, but only in very recent years have subdivision regulations specifically considered the needs of the highway system.<sup>32</sup> In the absence of valid regulation the landowner has a full unrestricted right to divide and sell his land,<sup>33</sup> but the power of the state extends to the regulation of the subdivision of land in order to provide for orderly urban development and easy description of land.<sup>34</sup> Subdivision regulation, whether of a voluntary type<sup>35</sup> or a mandatory type,<sup>36</sup> is a valid regulatory measure under the police power, if reasonable.<sup>37</sup>

In Wisconsin the statutory authority for subdivision control defines the act of subdivision as one which creates 5 or more parcels of 1½ acres or less from one tract of land within 5 years.<sup>38</sup> Once a land seller meets this definition he is required to file a subdivision plat for approval. Among the certifications necessary is one that the plat is in accord with the rules of the highway commission concerning the safety of entrance upon and departure from the abutting state trunk highways or connecting streets. The rules issued by the Commission provide that street connections or access points between any subdivision and any trunk highway shall be at a minimum number of points and in a manner which is safe, convenient and economical to maintain and regulate.<sup>39</sup> To implement this policy the Commission requires that there shall be no direct vehicular access between individual lots and the highway, adequate set back lines be provided, intersecting streets be kept at a minimum, and, where deemed necessary, additional land be dedicated for future road widening or highway improvement.

Through these regulations which apply to any subdivision which abuts on the state trunk highway system it is intended (1) to restrict direct access from the subdivision by requiring service roads or reverse facing lots, (2) to establish set back lines, and (3) to provide for enforced dedication of land for road improvements. Such a pattern of regulations requires the subdivider to provide a satisfactory relationship between the subdivision layout and the abutting highway. For such regulations to be upheld as valid exercises of the police power they must be reasonable, and it seems clear that

<sup>32</sup> See Housing and Home Finance Agency, Suggested Land Subdivision Regulations (1952).

<sup>33</sup> *Wolpert v. City of Chicago*, 280 Ill. 187, 117 N. E. 447 (1918).

<sup>34</sup> *Alan Realty Co. v. Fair Deal Investment Co.*, 271 Wis. 336, 73 N. W. 2d 517 (1955).

<sup>35</sup> In these cases the regulations are imposed as conditions on the privilege of filing a subdivision plat. *Newton v. American Securities Co.*, 201 Ark. 943, 148 S. W. 2d 311 (1941).

<sup>36</sup> In these cases the subdivider is required to file a plat and the regulations are imposed under the state's police power. *Hillman v. City of Seattle*, 33 Wash. 14, 73 Pac. 791 (1903).

<sup>37</sup> Milli, "Subdivision Control in Wisconsin," 1953 Wis. L. Rev. 385.

<sup>38</sup> Wis. Stat. § 236.01 (1957).

<sup>39</sup> Wis. Ad. Code, Hy. 33.01.

the traffic generating nature of the subdivision may be considered in determining whether the regulation is reasonable.<sup>40</sup>

The first regulation, allowing access from the subdivision only via service road or the internal street system, is clearly effective in reducing the access points and appears reasonable. Under these regulations the Highway Commission requires that the subdivider be granted such access to the highway as is reasonable viewing the subdivision as a whole.<sup>41</sup> Once this number of access points has been granted, the individual lot purchasers will not be able to gain direct access to the highway but will have to proceed over the service road or internal streets of the subdivision. Such restriction on a subdivider has been upheld as reasonable.<sup>42</sup>

The regulations requiring set backs and dedication for future road widening also offer roadside protection by preventing close-in development and keeping land clear and available for widening and other uses. These requirements have also been upheld as reasonable. The case law approved set backs,<sup>43</sup> widening strips,<sup>44</sup> and buffer strips.<sup>45</sup>

Through these regulations placed upon any subdivision which abuts on a trunk highway, the review of subdivision plats presents a very potent police power control device. Since the review of plats by the Highway Commission was initiated in 1949, 480 plats in final form have been approved or certified by the commission. In 1958, about 70 such plats were certified.<sup>46</sup> During the last two years, these approved plats amounted to about 19 miles of land abutting the state trunk system. This indicates one of the inherent limitations of such a device—its over-all application is small in comparison to the trunk highway system. Moreover, there have been some evasions of the law through the use of assessor's plats, metes-and-bounds descriptions, straw-man transactions, and the use of lots over the statutory maximum. On the credit side, the District Engineers have been able to secure some voluntary compliance from subdividers not covered by the statute,<sup>47</sup> and the Highway Commission has been able to secure some added coverage through the use of collateral agreements.<sup>48</sup> It seems clear, however, that for this tool to become fully effective, even on the limited scale on which it operates, such loopholes as the assessor's plats should be plugged. It has also been suggested that the act should cover all land divisions irrespective of lot size.

In spite of these deficiencies the subdivision control act presents an effective, if limited, form of highway protection. This control device provides a means of securing adequate highway widths and some means of access restriction on all subdivided land abutting a state trunk highway. Only one other state besides Wisconsin has any similar requirement for approval of subdivision plats on the state level by the highway commission.<sup>49</sup>

**Official Mapping.**—The official map is a legally effective layout of the future street pattern; it is both one of the oldest and one of the simplest roadside protection devices. Among the uses of the official map are fixing building lines, platting existing streets, protecting the path of future streets from encroachments, and providing a certain location for sewers, watermains, and utility cables.<sup>50</sup> The principal advantages of the official map from the roadside protection viewpoint are the assurance that land needed for future streets will be available at bare land prices, the setting of widening lines or

<sup>40</sup> For example, *Neff v. City of Springfield*, 380 Ill. 275, 43 N.E. 2d 947 (1942).

<sup>41</sup> See *Iowa State Highway Commission v. Smith*, n. 22 *supra*.

<sup>42</sup> *Ayers v. City of Los Angeles*, 34 Cal. 2d 31, 207 P. 2d 1 (1949).

<sup>43</sup> *Bouchard v. Zetley*, 196 Wis. 635, 220 N.W. 209 (1928).

<sup>44</sup> *Ridgefill Land Co. v. City of Detroit*, 241 Mich. 468, 217 N.W. 58 (1928).

<sup>45</sup> *Ayers v. City of Los Angeles*, n. 42 *supra*; *Newton v. American Securities Co.*, n. 35 *supra*.

<sup>46</sup> Letter, Dec. 9, 1958, Director, Right of Way Division, State Highway Commission, Madison, Wis.

<sup>47</sup> Interview, May 27, 1958, District Highway Engineer, Dist. 5, La Crosse, Wis.

<sup>48</sup> Interview, March 20, 1958, Supervisor of Roadside Control, State Highway Commission, Madison, Wis.

<sup>49</sup> Mich. Stat. Ann. § 26.466 (1957).

<sup>50</sup> American Automobile Association, *Roadside Protection* 70ff. (1951).

set backs on existing streets and the providing of direction and pattern to the future growth of the community.

A number of states have some form of effective official mapping act,<sup>51</sup> and a number more have a form of future highway right-of-way reservation similar to, but less effective than, official mapping.<sup>52</sup> The Wisconsin official mapping act is of the former type.<sup>53</sup> It vests the power of making an official map, showing the streets, highways, parkways, and parks, in the city council; and such notice of map is filed with the county registrar of deeds. It is provided that the act of mapping shall not constitute the opening or establishment of any street. To preserve the integrity of the map, no building permit shall be issued for any building in the bed of the mapped street, and if such a building is constructed without a permit, the builder shall not be entitled to compensation for damage to such building in the course of construction of the street. A relief mechanism is provided for hardship cases to insure that the owner receives a fair return on the mapped portion of his property. On a constitutional challenge, the operation of this act was sustained as an exercise of the police power;<sup>54</sup> the court found itself in accord with the basic objectives of the act and held the relief mechanism for hardship cases overcame any contentions that this was not a police power measure.

The official map presents two legal issues: (a) does the act of mapping alone constitute a taking; and (b) may a building permit be refused or compensation denied for building without a permit on the basis of the map's projection of future streets. There is little question that the act of mapping alone does not constitute a taking requiring immediate compensation, but only a plan for future development.<sup>55</sup> This latter question presents a more difficult problem. Many of the older cases hold this provision invalid;<sup>56</sup> while Pennsylvania,<sup>57</sup> New York,<sup>58</sup> Wisconsin,<sup>59</sup> and several other states with weaker statutes<sup>60</sup> have sustained this provision with the reservation that the landowner cannot be deprived of the reasonable use of his property for an indefinite period of time. In these states, where the landowner proceeds and improves his land without a permit it would seem that he can not recover compensation of such improvement once the land is condemned.<sup>61</sup>

The advantages of mapping run to both the landowner and the road builder. The landowner can make his improvements with adjustments to the future streets in advance of their construction; the advantage to the road building authority is the prevention of improvements in the bed of the intended street. The establishment of ultimate right-of-way lines on both proposed and existing highways and streets will prevent the growth of too close-in improvements and highway strangulation. Further, the official map presents a means of planning future intersecting street locations and provides a means of integrating future road use and its traffic carrying design.

How widespread is the use of the official map in Wisconsin? A total of 33 municipalities have adopted official maps. They comprise half of the second class cities (4), half of the third class cities (10), 7.4 percent of the fourth class cities (10), and 2.2

<sup>51</sup>For example, Pa. Stat. Ann. tit. 53, § 1095 (1958).

<sup>52</sup>For example, Ind. Acts 1957 ch. 148, § 12. Under this act, after notification of the landowner, no improvements may be made without giving 90 days notice to the highway department, during which time the land may be purchased or condemned.

<sup>53</sup>Wis. Stat. § 62.23(6) (1957).

<sup>54</sup>State ex rel. Miller v. Manders, 2 Wis. 2d 365, 86 N.W. 2d 469 (1957).

<sup>55</sup>City of Miami v. Romer, 73 So. 2d 285 (Fla. 1954).

<sup>56</sup>For example, Morale v. City of Baltimore, 5 Md. 314 (1854); Forster v. Scott, 136 N.Y. 577, 32 N.E. 976 (1893).

<sup>57</sup>Scattergood v. Lower Marion Twp. Comm'rs, 311 Pa. 490, 167 Atl. 40 (1933).

<sup>58</sup>See Headley v. City of Rochester, 272 N.Y. 197, 5 N.E. 2d 198 (1936). The map has not yet reached a constitutional issue in New York.

<sup>59</sup>See n. 54 supra.

<sup>60</sup>For example, Lansburgh v. Market St. Ry., 98 Cal. 2d 426, 220 P. 2d 423 (1950); Town of Windsor v. Whitney, see n. 18 supra.

<sup>61</sup>Annot., 6 A.L.R. 2d 962 (1949).



percent of the state's villages (8).<sup>62</sup> Of these, 19 have exercised their power to make extraterritorial maps beyond their corporate limits. So long as the exercise of the mapping power is restricted to municipalities, mapping will have little effect on the expanse of the trunk highway system, but where it is in effect it has a broad potential of roadside protection both in preventing close-in development and in preserving future street corridors in those areas where urban growth will give strong impetus to such development.

**Control of the Type of Access.**—The second approach to providing roadside protection under the police powers includes the devices which seek to control the nature or type of the access into the roads. Certain types of access are more frequent and more dangerous than others; residential access presents nowhere near the problem that commercial access does. This type of control includes zoning and master planning. These devices control the type of access by controlling the land use and restricting commercial and industrial development to specified portions of the highway.

**Zoning.**—The basis zoning powers and purposes include the regulation and location of land uses, restriction of the height of buildings, and provisions for yards, open spaces, and building set backs from the street. In Wisconsin zoning powers are extended to municipalities,<sup>63</sup> towns,<sup>64</sup> and counties.<sup>65</sup> Under these powers zoning ordinances have been adopted in over half of Wisconsin's counties and a high proportion of its cities. The basic principles of zoning law are well established. Use district location and regulation and set back requirements have been upheld as exercises of the police power so long as they are reasonable.<sup>66</sup> Highway safety has been recognized as a valid end of zoning.<sup>67</sup>

When a highway enters a zoned urban area it falls under the metropolitan comprehensive zoning pattern. Certain areas abutting the highway will be zoned for industrial or commercial uses; other areas will be divided into various classes of residential uses. When a highway passes through a rural area it is generally subject to no zoning or recreation-forestry type zoning. Generally neither the rural nor the urban zoning is highway orientated; it does not recognize the peculiar character of property abutting a highway. For zoning to be effective as a highway protection device it must be based on a functional differentiation of the land abutting a highway and must be concerned with the intimacy and relation between the traffic way and the abutting land use.<sup>68</sup> Both the use district classification and the set back requirement should be based on the nature of the abutting street or highway, that is, arterial highways and residential streets require different treatment. Set back requirements should not be confined to the zoned commercial or industrial districts but should apply to all structures adjacent to the highway in both urban and rural areas.

Roadside zoning to be effective must seek these basic objectives: (a) restriction of commercial uses to designated commercial areas in which the road would be specifically designed to handle safely the added problems of commercial access through additional lanes, service roads, better sight distances, and designed angle of entrance;

<sup>62</sup> Kucirek & Beuscher, "Wisconsin's Official Map Law," 1953 Wis. L. Rev. 176, n. 1 and 212. A narrow mapping power is granted to Milwaukee county for expressway purposes. Wis. Stat. § 59.965(5) (1957).

<sup>63</sup> Wis. Stat. §§ 62.23(7) and (11) (1957). These sections are made applicable to villages by Wis. Stat. § 61.35 (1957).

<sup>64</sup> Wis. Stat. § 60.74 (1957). This section only applies to towns in counties that have not adopted a zoning ordinance.

<sup>65</sup> Wis. Stat. § 59.97 (1957). Such ordinance is not effective within a town until it has been approved by the town board.

<sup>66</sup> Use districts—State ex rel. Carter v. Harper, 182 Wis. 148, 196 N.W. 451 (1923). Set backs—Bouchard v. Zetley, see n. 43 supra.; Hayes v. Hoffman, 192 Wis. 63, 211 N.W. 271 (1927).

<sup>67</sup> Jefferson County v. Timmel, 261 Wis. 39, 51 N.W. 2d 518 (1952).

<sup>68</sup> Pomery, "Bringing Zoning Up to the Automobile Era," 101 Highway Research Board Bulletin 40 (1955).

(b) requirement that roadside buildings be adequately set back from the highway to prevent over-crowding and to preserve sufficient clear land to allow future road improvement at moderate cost and minimum disruption of the roadside pattern; and (c) control of the appearance of roadside commercial development relating to safety, health, and the general welfare.

An example of such highway-conscious roadside zoning, in addition to its normal pattern, would provide three zones along the highways covered by the ordinance. The specific provisions—size of set backs and frequency and location of the various districts should vary according to the nature of the highway concerned, that is, Interstate System interchange, state arterial, or state trunk highway. The basic zones should be non-commercial, roadside service, and general commercial.<sup>69</sup> The non-commercial (or possibly roadside conservation) zone should be the most common and should cover all danger areas such as hills or curves. In the non-commercial zone, all commercial activities should be excluded for a specified distance from the highway and the area's normal or general land use would be permitted. In the roadside service zone, traffic-service facilities should be permitted with specific provisions for set backs, parking, etc. In the general commercial zone, commercial activities of both a traffic-service and local-service nature should be permitted. The roadside service zone would tend to be narrow and relatively long, while the general commercial zone would tend to be deep and comparatively short. These concepts of use zone classifications result from a recognition of the peculiar character of land abutting a highway. Since the general use classification normally used does not grant this recognition, it offers no substantial protection to the highway. To constitute effective roadside protection zoning must provide use district classification based on the functional differentiation of the land abutting the highway and adequate set back lines for highway use and improvement.

The contention has been made that while use classification and set backs are valid exercises of the police power, the zoning of strips along the highway—either in conjunction with a comprehensive zoning pattern or alone—would be invalid.<sup>70</sup> Such a contention is without merit. Zoning may take into account the particular problem presented by the use or area or end sought,<sup>71</sup> and highway safety is clearly encompassed in this concept. A whole area need not be zoned or need not be zoned identically so long as the action, taken is reasonable.<sup>72</sup> The land abutting the highway may validly be singled out for special treatment.<sup>73</sup> Highway strip zoning has been specifically authorized in some states.<sup>74</sup>

The basic principles of zoning law present one of the inherent limitations on roadside zoning. In Wisconsin it is purely prospective; even under the non-conforming use restrictions,<sup>75</sup> zoning is little more than a palliative with respect to established uses. With respect to future development, roadside zoning can be a powerful control device. Studies have indicated its effectiveness when specifically applied to the needs of the highway.<sup>76</sup> The basic deficiencies of zoning as a roadside protection device have prov-

<sup>69</sup> Solberg, "Safe, Efficient and Attractive Highways," 1958 Land 537, 540.

<sup>70</sup> This is based on the contention that the zoning is spot, piecemeal, or not in accordance with comprehensive plan. See *Darlington v. Board of Frankfort*, 282 Ky. 778, 140 S.W. 2d 392 (1940).

<sup>71</sup> *Town of Marblehead v. Rosenthal*, 316 Mass. 124, 55 N.E. 2d 13 (1944); *Geisenfeld v. Village of Shorewood*, 232 Wis. 410, 287 N.W. 683 (1939).

<sup>72</sup> *Bartram v. Zoning Commission of City of Bridgeport*, 136 Conn. 89, 68 A. 2d 308 (1949); *Edgewood Civic Club v. Blaisdell*, 94 N.H. 244, 61 A. 2d 517 (1948).

<sup>73</sup> See n. 67 supra.

<sup>74</sup> For a review of the existing legislation see Solberg, "Roadside Zoning," 55 Highway Research Board Bulletin 49 (1952).

<sup>75</sup> Basically, abandonment for 12 months ends the non-conforming use, and repairs, extensions or alterations of a value of more than 50 percent of the assessed value of the property at the passage of the ordinance are barred. Comment, "The Elimination of Non-Conforming Uses," 1951 Wis. L. Rev. 685.

<sup>76</sup> See n. 13 supra.

en to be the failure to adopt zoning over the expanse of the state trunk highway system, its essentially local orientation where adopted, and its general failure to consider the specific needs of the highway.

**Master Planning.**—In the preceding pages we have separated for closer inspection several of the police power tools of roadside control—access limitation, subdivision control, official mapping, and zoning. This last tool, master planning, brings all these devices together into one, unified pattern. Planning is much broader than highways. It is concerned with the traffic circulatory system, land use patterns and growth, location of parks, public facilities and utilities, and economic development. In short, it encompasses much of the fabric of societal living.<sup>77</sup> Our immediate concern, however, is with the master plan and highways.

Master planning can provide the device necessary to integrate the tools already noted. Without this coordination, the proper zoning may not be provided for the correct highway, and the mapped street corridor may have to be abandoned when another location is chosen. Master planning provides the foresight and forethought without which these other devices might remain unused or useless. Planning can determine the location of streets, their widths and the points of intersection. It can determine the pattern of land use as well as the nature and composition of the traffic generators. Most important, it can integrate the roads with the protection devices by providing a coordinated outline of future land use areas.<sup>78</sup>

In Wisconsin there is a broad scale of authorizations to develop master plans. Cities and villages are authorized to develop plans,<sup>79</sup> and counties are empowered to make plans for areas not within municipalities.<sup>80</sup> Further authority is granted for the developing of regional plans over larger areas evidencing certain elements of homogeneity.<sup>81</sup> Finally, a State Planning Division has been created as a part of the Bureau of Engineering and is authorized to cooperate with and assist all local planning agencies to coordinate their efforts and activities in the interest of the state as a whole.<sup>82</sup> One of the express purposes of such planning is to determine the future locations of streets, highways, and parkways. Many local areas are engaged in making such plans. The authority to plan and the acts of planning have been sustained as valid exercises of the police powers.<sup>83</sup>

Master planning is a device for over-all development control and stimulation. It thereby provides the means of developing long range highway and highway protection programs. Since it can determine the nature and location of traffic generators and land uses as well as highway location, it is a potent tool in the over-all highway protection. However, it has realized little of this potential. The local planning authorities have not given adequate consideration to the problems of highway protection in making their plans.<sup>84</sup> Moreover, the detailed highway planning process is not adequately advanced over the construction process to allow such long range planning on the local level.<sup>85</sup> It has been suggested that with adequate staff and financing this planning gap could be bridged and specific long range plans could be formulated.<sup>86</sup> Finally,

<sup>77</sup> See "Metropolis in Ferment," 314 *Annals* 1-164 (1957).

<sup>78</sup> United States Chamber of Commerce, *City Planning and Urban Development* 23-4 (1952).

<sup>79</sup> Wis. Stat. § 62.23(1)-(6) (1957). These sections are made applicable to villages by Wis. Stat. § 61.35 (1957).

<sup>80</sup> Wis. Stat. § 236.46 (1957).

<sup>81</sup> Wis. Stat. § 66.945 (1957).

<sup>82</sup> Wis. Stat. § 15.845 (1957).

<sup>83</sup> For example, *Mogilner v. Metropolitan Plan Commission*, 236 Ind. 298, 140 N.E. 2d 220 (1957); *Kozesnik v. Montgomery Township*, 24 N.J. 154, 131 A. 2d 201 (1957).

<sup>84</sup> Of 28 county highway committee chairmen who responded to a questionnaire, only 2 indicated that any action had been taken in this area and only 5 indicated any awareness of the problem.

<sup>85</sup> Interview, May 15, 1958, Right of Way and Roadside Protection Division, State Highway Commission, Madison, Wis. General plans exist, but they are not sufficiently detailed to act as a base for planning purposes.

<sup>86</sup> Interview, May 16, 1958, District Highway Engineer, Dist. 2, Waukesha, Wis.

the natural coordinating agency for this integrated planning, the State Planning Division, has been able to accomplish little since, because of the long range planning lag, the highway commission has been unwilling or unable to commit itself to specific road locations, and because of a shortage of personnel the State Planning Division has not been able to suggest that adequate protection devices be incorporated in local plans and planning coordination.<sup>87</sup>

### The Police Power Protection Program

The highway system in Wisconsin will present two levels at which control of roadside development will be important. On the first level, the Interstate System, access control will be achieved through full control of access. Much of this mileage will be laid on new location with a restricted dedication. Roadside protection at this level will be a requirement of federal participation in costs. The second level at which roadside control becomes important is the state trunk system which will serve the dual function of acting as feeder roads for the Interstate System and carrying the 80 percent of American highway traffic that will not be served by the Interstate System.<sup>88</sup> On these roads there is no federal requirement of roadside control; but it is, nevertheless, essential to the safety, ease, and economy of both these roads and the Interstate System which they serve and complement.

It is on these roads that roadside protection will have to be accomplished chiefly through the police power control devices. Creating an expressway on a state trunk would be effective; but, in other than highly developed areas or in relocation or new construction where access could be restricted under the police power, it would be too expensive to justify. Therefore, control of roadside development on these roads must depend primarily on the police power tools, namely, access limitation, official mapping, subdivision control, zoning, and master planning. The particular control device used must be chosen to fit the needs of the particular section of the highway to which it is applied. Some of the controls are expressly limited in the application, for example, official mapping powers are only granted to municipalities; others are limited by the peculiar deficiencies that they contain, for example, zoning is only prospective. These control devices should not be viewed as separate powers; they are all expressions of the same power, seeking the same end, but subject to different constitutional, statutory, and practical limitations. All of these roadside controls, however classified, are extensions of the government's power to preserve the road system for the good of the citizens and to protect the state's economic investment.

## INTERGOVERNMENTAL RELATIONS

### The Dispersion of the Powers

The statutory authorization in Wisconsin provides a variety of police power roadside protection devices. These controls are vested on three distinct levels of government—state, county and town, and municipal. Some of them are exercised independently on one level of government, for example, official mapping, but most of them require the cooperative action or at least the approval of more than one of these three levels of government. Table 1 indicates the dispersal of the powers and some of their interrelations. The concern in the previous discussion has been with the statutory authorizations, legal requirements, and potential advantages of these tools. The concern here is with the actual use being made of these protection devices on the trunk highway system, and more particularly, since these controls are spread over three levels of government, how they mesh in providing a unified system of highway protection.

The highway process as a whole can be broken down into three more or less distinct

<sup>87</sup> Interview, May 7, 1958, State Planning Division, Madison, Wis.

<sup>88</sup> While the portion of the Interstate System in Wisconsin is only 482 miles long, the state trunk system is composed of 9,989 miles of rural highway and 810 miles of urban connecting streets.

TABLE 1

## POLICE POWER HIGHWAY PROTECTION DEVICES IN WISCONSIN

(All references are to the Wis. Stat. 1957. Powers exercised cooperatively are underlined.)

(Level vested on:)	<u>Municipal</u>	<u>Town</u>	<u>County</u>	<u>State</u>
Control device:				
ZONING				
County land	-	§ 60.74 + approval under § 59.97	§ 59.97	-
Municipal land	§ 62.23(7)	-	-	-
SET BACKS				
County land	-	§ 60.74 + approval under § 59.97	§ 59.97	-
Municipal land	§ 62.23(11)	-	-	-
SUBDIVISION <sup>a</sup> (All § 236.01)				
County land	-	Town Board	County Board	Highway Commission
Municipal land	City Council	-	-	Highway Commission
MAPPING				
County land	-	-	- <sup>b</sup>	-
Municipal land	§ 62.23(6)	-	-	-
PLANNING				
County land	-	-	§ 236.46	§ 15.845 <sup>c</sup>
Municipal land	§§ 62.23(1) & 61.35	-	-	§ 15.845 <sup>c</sup>
Regional land	-	-	§ 66.945	§ 15.845
LIMITED ACCESS				
County land	-	-	- <sup>d</sup>	§ 84.25
Municipal land	-	-	-	-
LOCATION				
County land	-	-	§ 84.02	§ 84.02
Municipal land	§§ 84.02(11) & 84.03(10) (connecting streets)	-	§ 84.02	§ 84.02

<sup>a</sup> In Milwaukee county for land platted in the City of Milwaukee, the City Council possesses sole review powers. Wis. Stat. § 236.01 (1957).

<sup>b</sup> In Milwaukee county some mapping powers are granted for expressway purposes. Wis. Stat. § 59.965(5) (1957).

<sup>c</sup> The State Planning Agency also reviews all plats but for essentially technical features. Wis. Stat. § 236.01 (1957).

<sup>d</sup> In Milwaukee county certain limited access powers are granted in connection with the county expressway system. Wis. Stat. § 59.965 (1957).

stages: planning, building and maintenance, and protection. The concern here is with the last stage, but it is important at this point to review briefly the other stages in the process. There are two distinct hierarchies engaged in the highway process—the road-building authorities and the road-protection authorities. While the road-building authorities are generally engaged in few if any other functions, the road-protection authorities are engaged in the full spectrum of activities of civil government. At the top of the former hierarchy is the State Highway Commission, on the regional level are the District Highway Engineers and their staffs, and on the local level are the County Highway Committees and the City Street Departments. The road-protection hierarchy is a hierarchy in form only. Except for the coordinating activities of the State Planning Division and the State Highway Commission, there is no pattern of responsibility or line of authority in the protection process. The powers are exercised by the city councils, town and county boards, city, county, and regional plan commissions, and the state Planning Division and Highway Commission. There is no established flow of information and cooperation between these various units. Table 2 indicates the three phases of the highway process and some of the interrelations.

Basically the dispersion of the protection powers and their mode and level of operation raise the query: do the various powers provide a unified and coherent pattern of

TABLE 2  
THE HIGHWAY PROCESS

(Protection devices that are exercised cooperatively are underlined. The broken lines represent the hierarchy of operation.)

PLANNING	BUILDING & MAINTENANCE	PROTECTION
<u>State level</u>		
Design Section, S. H. C. —————→	Construction Section, S. H. C.	Limited Access
State Planning Division		<u>Subdivision Review</u>
		<u>Master Planning</u>
<u>Regional level</u>		
District Engineers, S. H. C. —————→	District Engineers, S. H. C.	<u>Master Planning</u>
Regional Plan Commissions (for example, Nena-Menasha-Appleton)		
<u>County level</u>		
County Highway Committees —————→	County Highway Committees	Zoning & Set Backs
County Planners (for example, Waukesha, Milwaukee)		<u>Master Planning</u>
		<u>Subdivision Review</u>
<u>Municipal level</u>		
City Streets Department —————→	City Streets Department	Zoning & Set Backs
City Planners (for example, Racine, Madison)		<u>Official Mapping</u>
Plan Commissions		<u>Master Planning</u>
		<u>Subdivision Review</u>

roadside protection. Examination of the tools individually will show how much protection is actually provided.

### The Impact of the Powers

**Access Limitation.** — The access limitation powers have been limited by statute to 1,500 rural miles of the trunk highway system, or about 15 percent of its rural mileage. About 400 miles of this authorization have been used chiefly on Wis. 30 and US 51 near Madison, US 41 from Fond du Lac to Green Bay, and in Milwaukee county and several other urban fringe areas. The access limitation program has been a success in that it has closely limited under the police powers the number of access points onto the highway in those areas. While few access points have been limited to particular uses, the mere limitation as to number acts in some cases as a natural limitation of use.<sup>89</sup> In certain areas there has been some access use restriction.

The success of any limited access program must be measured in light of the natural local reluctance to accept any such program. To reach full effectiveness an access limitation program should be matched by the county with an appropriate zoning pattern which would obviate the need for access use limitations, but such complementary zoning has only rarely been forthcoming.

The chief advantage of access limitation is its flexibility. The degree of control can vary with the need. Yet such variation has not always been present. The road has been treated as a whole to avoid charges of discrimination, and lots of unequal size and location have often been granted the same number of minimum access points. This difficulty has been more often than not the result of a determination by the Commission to be unquestionably fair and impartial. Further, the planning lag has resulted in the declaration of controlled access being made at a later stage in the roadside cycle than it should be in the case of existing highways.

Access limitation has been effective as a means of roadside control but has been

<sup>89</sup>For example, it is virtually impossible to operate a gas station with less than two separate access points. Limitation of a piece of property to one access virtually prohibits the use of that property for gas station purposes.

hampered by the local failure to provide adequate zoning, the failure to restrict access use, the local unpopularity of such a program, and the statutory limitations placed on the power.

**Subdivision Controls.**—Subdivision controls operate within a very restricted area, yet within this area they have been quite successful. To a great extent this success is due to the cooperative nature of the control device. Preliminary approvals are made on the local level, but whenever there is a potential conflict between the subdivision and an abutting trunk highway, the plat is reviewed on the state level. This assures local control while providing a minimum standard of uniformity and control from the state level. It is submitted that this basic control device, cooperative state-local review, should be observed as a model for other protection devices.

The subdivision control act nevertheless has defects. It does not apply to lots over  $1\frac{1}{2}$  acres, which is not an unusually large lot in today's development pattern. Further, there has been some use of the straw-man transaction<sup>90</sup> and the assessor's plat to avoid the operation of the statute. The major difficulty of the device is that its protection is spotted unevenly over the whole trunk highway system as only certain land divisions come under the operation of the act. Over any given segment of the trunk system it may offer only little protection, but where that protection is offered it is in an area of relatively great traffic generation. Moreover, the act does not cover small scale divisions for commercial purposes. Thus a tract could be divided into four commercial lots and not come within the operation of the act, even though those commercial uses will generate more access uses and more dangerous uses than a greater number of residential access points.<sup>91</sup> Subdivision control becomes more important when it is accompanied by highway-conscious zoning. Any consideration of the existing statutes should include these shortcomings.

Subdivision control has been very effective on a limited scale but should be strengthened to include small scale commercial divisions, oversize lot divisions, and the various evasion devices. An immediate change should be made to cover metes-and-bounds descriptions by the act.

**Official Mapping.**—Official mapping also operates within a restricted area, but within that area it has had some degree of success. The greatest drawback on official mapping is the planning lag. It is impossible to protect the bed of a future highway by mapping unless the exact route of the road is known in advance; it is worse than useless to map a highway and have that path abandoned and another chosen. The lack of advance planning has restricted the usefulness of official mapping at least as much as the statutory restriction of its exercise to cities and villages.

The potential advantages of official mapping are great. It preserves bare land for street purposes in those areas where urban growth is liable to be dense, but these advantages cannot be fully realized unless the highway is speeded up so that there is detailed advance highway planning and location choice. The inability of the planning process to make detailed plans far enough in advance of construction has rendered the possible contributions of official mapping less valuable.

**Zoning and Master Planning.**—While zoning and planning can provide highway protection both through the designation and location of use districts and the requirement of adequate set back lines, the mere enacting of a state statute authorizing county or municipal zoning or planning does not guarantee that such protection will be provided or that it will be effective. How much roadside protection does zoning and planning actually provide?

The first step in this inquiry is to determine the existence of local protection devices. How many counties, since over 90 percent of the state trunk system comes within only county control,<sup>92</sup> have enacted any form of zoning or set back requirement? Of Wisconsin's 71 counties, no more than 45 have enacted any form of zoning above the

<sup>90</sup> One transaction in Washington county involved a total of 7 transfers through such straw-man devices resulting in a total of 14 parcels being carved out of one tract in an attempt to evade the operation of the act.

<sup>91</sup> See n. 30 supra.

<sup>92</sup> Of the trunk system over 9,000 miles are rural and less than 1,000 miles urban.

municipal level.<sup>93</sup> For such county ordinances to become completely effective they must be approved by each town in the county.<sup>94</sup> When the ordinance is approved by less than all the towns, it is effective in only those towns that have approved it. In at least 16 counties less than 7 towns have approved the ordinance,<sup>95</sup> thereby making the ordinance effective in only a small portion of the county. Moreover, many of the ordinances are, by their very terms, not a fully effective means of highway protection. At least 27 of these counties have only forestry-recreation zoning which provides little roadside protection, except in isolated cases, for example, Vilas, Eau Claire counties.<sup>96</sup> Of 20 ordinances reviewed, 8 were forestry-recreation, 8 were general use districts, 1 was a billboard ordinance, and in 15 the only highway zoning was by way of set back ordinances.<sup>97</sup> The majority of the set backs were a maximum of 100 ft from the center line or 42 ft from the right-of-way line, whichever is greater.<sup>98</sup> These provisions are inadequate for modern highway design. Further, there is a tendency even in the better ordinances to locate commercial districts exclusively along the trunk highways, and especially at the intersections.<sup>99</sup> If the forestry-recreation zoning and those counties where town approval is sparse or where zoning is only on a town level were eliminated, there are only 8 counties with some broad-scale form of potentially valuable roadside zoning. Further in all the counties having some form of zoning only 64 percent of them have any means of detecting violations of the ordinance other than the issuing of building permits.<sup>100</sup> So while the number of zoned counties is high, the number providing a broad-scale, effective and enforced zoning ordinance is small.

The second step in the inquiry is to determine the consideration given these protection devices in highway location. The best drafted zoning ordinance will provide no effective highway protection unless the highway is located so as to take advantage of such zoning, for example, locating the road in a town that has approved the ordinance rather than an adjoining one that has not. The location of the state trunk system is one of those actions that requires the cooperation of several levels of government. The State Highway Commission has the primary responsibility for the location subject to public hearings and to the approval of the location by the county board of the county involved and the city council for connecting streets.<sup>101</sup> This gives the county board great apparent powers, but in the day-to-day location of the trunk highway system, the decision is made almost exclusively on the state level.<sup>102</sup>

In making these location decisions virtually no consideration is given to the existence of local zoning. Granting that, as was just noted, such devices are not wide-

<sup>93</sup> State Planning Division, Rural Planning and Zoning, Bulletin 19 (1957) Plate I; questionnaires to county clerks.

<sup>94</sup> Wis. Stat. § 59.97(2)(d) (1957).

<sup>95</sup> See n. 93 supra. Of these in 2 counties there is no town approval, and in 5 others, three or less towns have approved the ordinance.

<sup>96</sup> See n. 93 supra. Typical of these is the Forest county zoning ordinance. It divides the county into two zones—a forestry-recreation district and an unrestricted district (which is the larger). There is no provision for set backs. In the forestry-recreation district some protection is offered by eliminating many commercial uses.

<sup>97</sup> The counties were Brown, Calumet, Columbia, Dane, Dodge, Door, Eau Claire, Forest, Jefferson, Kewanee, Langlade, Marinette, Oconto, Outagamie, Racine, Shawano, Vilas, Walworth, Washington, and Wood.

<sup>98</sup> This is based on the zoning ordinances noted in n. 97 supra.

<sup>99</sup> For example, Outagamie county zoning ordinance, District Map 2, Detail Sheet.

<sup>100</sup> Of 28 county clerks who replied to a questionnaire and indicated that some form of zoning was in force, only 12 indicated that some employee was charged, full or part time, with the detecting of violations of the ordinance.

<sup>101</sup> Wis. Stat. § 84.02 (1957).

<sup>102</sup> Scheffer, "State-County Administration of Highways in Wisconsin," County Officer, Mar. 1955, p. 64.



spread, neither the Highway Commission<sup>103</sup> nor the District Engineers<sup>104</sup> have shown much interest in using what zoning is available. County highway commissioners, who are the highway-conscious members of the county board, do not consult local planners or consider zoning when they make their location recommendations.<sup>105</sup> Local planners have found very little interest on the part of the Commission in zoning or municipal planning.<sup>106</sup> Even where zoning is effective there is little tendency to locate the highway so as to take advantage of the protection that it offers.

Since zoning is principally a local-level control—municipal, town and county— and location is principally a state-level process, an acute problem of intergovernmental relations arises. Has zoning been responsive to the needs of the highway, and has the location process been responsive to the advantages of zoning?

Is the enactment and enforcement of zoning and set backs responsive to the needs of the highway? Generally no. With some notable exceptions, zoning powers have been exercised with regard to primarily local objectives, such as county tax base or local business advantage. Two examples will serve to illustrate the point.

The experience with set backs along US 51 north of Madison is typical. In this situation the District Engineer tried to influence the towns to provide set back lines of 300 ft on all intersections of town roads with US 51 so that there would be no undue congestion, adequate vision triangles, and clear space for future road widening. The towns refused to agree to a county ordinance of this type on the ground that this would discourage commercial development at these intersections and thereby prevent a potential increase in the town's tax base.<sup>107</sup>

The experience with use districts along Wis. 30 in Jefferson county between Madison and Milwaukee indicates another type of problem faced. A dangerous location on hill around a curve was zoned non-commercial to avoid the danger of commercial access at this point. The landowner began operating a gas station and beer depot on the location as an illegal use. He protested the zoning classification and carried the case to the Wisconsin Supreme Court, where he lost.<sup>108</sup> Not to be rebuffed by his failure in the courts, he approached the county board which amended the zoning ordinance and allowed the continuing commercial use of the property despite the danger to the highway.

Zoning is not generally adopted on the expanse of the trunk highway system, and it is not generally effective by its terms in providing any form of substantial protection to the highway. But more important, even where it is in effect and effective, in practice it adds little protection to the highway because of its essentially local orientation. Zoning has not been responsive to the needs of the highway.

Has highway location or the activity of the Highway Commission been responsive to the advantages of zoning? Again, generally no. There is a general lack of consideration given zoning in choosing a highway location. To a great extent this is a natural result of the failure of zoning to offer any substantial roadside protection.<sup>109</sup> However,

<sup>103</sup> Interview, May 15, 1958, Chief, Right of Way and Roadside Protection, State Highway Commission, Madison, Wis.

<sup>104</sup> Replies to a questionnaire sent District Highway Engineers not personally interviewed gave three reasons: (a) such protection does not exist on a wide scale; (b) such protection is substandard; and (c) such protection is not uniform.

<sup>105</sup> Of 28 county highway committee chairmen who replied to a questionnaire, only 5 indicated any consideration given to such matters while 6 others indicated an awareness of the problem. Only 2 indicated that they regularly consulted local planners, and 3 others indicated that they occasionally did so.

<sup>106</sup> Interview, May 13, 1958, Beloit City Planner, Beloit, Wis.

<sup>107</sup> Interview, April 23, 1958, District Highway Engineer, Dist. 1, Madison, Wis.

<sup>108</sup> See n. 67 supra.

<sup>109</sup> For example, reply to a questionnaire by District Highway Engineer, Dist. 6, Eau Claire, Wis., "In general not much consideration can be given county or municipal zoning laws in regard to set backs since in most instances local set back requirements are not uniform and are inadequate for the present day design standards for modern state trunk highways."

this is also another facet of the general disregard of any factor other than engineering. "The road is placed in the best topographical area irrespective of zoning," seems to be a prime location rule.<sup>110</sup>

Even if this principle were to remain controlling and unchanged, the location process is still not responsive to zoning potential. With few exceptions, there has been no attempt to influence local units to provide zoning protection for the "best topographical area." The Commission views this as essentially a local matter;<sup>111</sup> and the District Engineers tend to be unwilling or disenchanted with any such attempts;<sup>112</sup> and the county highway committees have either taken no action or have limited themselves to attempting to secure town approval of the county zoning ordinance.<sup>113</sup> Moreover, in those municipal areas where a planner is willing to cooperate in a roadside protection program little attempt is made to enlist his aid.

The Interstate System.—Not only in zoning but in almost all police power controls there has been no attempt to integrate efforts or powers to provide a roadside protection program. The point at which this mutual lack of responsiveness becomes the most critical is the new Interstate and Defense Highway System. This gigantic investment of manpower, money, and materials will be protected along its route in Wisconsin through complete control of access. But it will be provided with virtually no protection in the interchange areas and the feeder roads that will serve as capillaries to these interregional traffic arteries beyond general access control where the feeder or interchange road enters the right-of-way of the Interstate road and generally a short distance beyond.<sup>114</sup> If these capillaries choke up with unrestricted roadside development the Interstate System will be severely crippled and new feeders and interchanges will have to be provided.<sup>115</sup> This is one of the most pressing problems on the trunk system since action must be taken in the immediate future if the police power tools, such as zoning, are to be used—since they can operate only prospectively. An interchange area full of pre-existing and hence legal non-conforming uses is only a little less undesirable than routine roadside development. This problem becomes even more acute when it is noted that most commercial development, even on a conventional highway, is concentrated in the interchange areas.<sup>116</sup> This trend will be stimulated greatly by the design of the Interstate System.

Yet local action, which has not generally been responsive to the needs of the highway system, has been even more unresponsive to the particular needs of the Interstate interchanges. On the state level, the Highway Commission is not seeking either to locate the interchanges in those areas where some form of effective local protection exists or to influence the local units of government to provide some additional zoning protection in those areas where it has chosen to locate them.<sup>117</sup> The District Engineers have extended little effort to secure the enactment of local protection devices for

<sup>110</sup> Interview, Mar. 3, 1958, Design Section, State Highway Commission, Madison, Wis.

<sup>111</sup> Interview, Mar. 3, 1958, Design Section, State Highway Commission, Madison, Wis.

<sup>112</sup> Interview, May 16, 1958, District Highway Engineer, Dist. 2, Waukesha, Wis. "They zone the whole road commercial so it isn't of much use."

<sup>113</sup> Of 28 county highway committee chairmen who replied to a questionnaire, only 3 indicated that any action beyond seeking town approval of the county zoning ordinance had been taken. Eight others were seeking such approval; 16 indicated that no attempt had had been made to secure the provision of any local protection devices.

<sup>114</sup> Interview, Mar. 20, 1958, Roadside Control Supervisor, State Highway Commission, Madison, Wis. But see Letter, Feb. 13, 1959, Office of the Attorney General which indicates that the Commission at the present time has "a program encouraging local zoning on feeder-roads to the Interstate System."

<sup>115</sup> Enfield, "The Law and Highway Modernization," address, pp. 19-21, Jan. 10, 1958.

<sup>116</sup> A study of air-photos covering the period from 1938 to the present indicates that on interregional highways the commercial development is increasing at a rate of three times above the general rate of increase in those areas immediately adjacent to inter-sections.

<sup>117</sup> See n. 114 supra.

these areas,<sup>118</sup> and the county highway committees have made practically none.<sup>119</sup> County zoning in turn has not given any specific consideration to this problem, but there has been some action on the municipal level.<sup>120</sup>

**Conflicts Among the Governmental Units.**—Since these control devices are vested not only on different levels of government but also in various units on each level of government, there is at least a potential conflict between these units in the administration of a highway protection program. The basic trouble spots are: (1) failure to act by one governmental unit in a cooperative action, (2) failure to act jointly in a situation where coterminus powers are exercised by two governmental units, and (3) failure to continue a protection device where jurisdiction is shifted from one governmental unit to another. To illustrate the first, county zoning is only effective within a town when the town board approves the ordinance, and as was noted in at least 16 of the 45 counties that have some form of zoning less than 7 towns have approved the ordinance. To illustrate the second, there is no means of providing that adjacent districts, one under county zoning and the other under city zoning, will be zoned in a reasonable relation to each other. To illustrate the third, where an area is zoned residential under a county ordinance and is subsequently annexed into a city, there is no means of assuring that the area will not be rezoned as commercial or industrial. These problems are relatively infrequent, but they have arisen.<sup>121</sup>

**Over-All Observations.**—The general observations drawn from the foregoing data can be placed in several overlapping categories: (1) failure of the local protection devices, (a) the failure to provide adequate highway protection, (b) the purely local orientation of such protection when provided, and (c) the difficulty of achieving uniformity where the action is taken by diverse local units; and (2) the failure of the state-level location process, (a) the neglect of non-engineering location features, (b) the neglect of providing leadership to the local units, and (c) the inability to formulate detailed plans far enough in advance.

Generally on the local level there is a failure to enact roadside protection devices and those that are enacted are purely local in orientation, thus the contribution of such devices is small. On the state level there is a failure to take advantage of those local protection devices that are effective, a neglect of a program of active leadership in encouraging the enactment of such measures on the local level, and an inability under present funds to reach a stage of advanced future planning. In recent months the Highway Commission has been making advances in these first two areas. Over-all, there is a failure to provide a method of integrating these diversified powers and activities into a unified and coherent pattern of roadside protection.

The police power measures have provided less roadside protection than was expected. However, this does not mean that they have not been successful; they have provided some very effective protection, but it has been of a limited scale. The following suggestions are made with a view to increasing and expanding the protection provided.

## SUGGESTIONS

### Within the Existing Framework

While these particular devices are essentially local controls concerned with local problems and interests, when a trunk highway or Interstate road enters an area, a state-level interest arises and more than purely local interests are involved. Yet the local interests, for example, raising the tax base, encouraging local business, often conflict with the state interests, for example, protecting the investment in the road, increasing the highway user's safety, economy and ease. The local governmental unit

<sup>118</sup> Replies to a questionnaire to District Highway Engineers not personally interviewed.

<sup>119</sup> Replies to a questionnaire by 14 of the 16 counties traversed by the Interstate System indicated that only 1 county was taking any action to protect such areas.

<sup>120</sup> Interview, April 22, 1958, District Highway Engineer, Metropolitan District, Milwaukee, Wis.

<sup>121</sup> Interview, April 22, 1958, Dane County Zoning Supervisor, Madison, Wis.

has little interest or, perhaps more important, little incentive to consider other than purely local matters. If there is going to be any effective highway protection it must emanate from the state level. Within the present framework such state action should take the form of consideration of existing local protection measures in the location of highways, constant attempts to secure the enactment of such measures on the local level, and an attempt to integrate the protection devices on all three levels of government into one coherent pattern. Only with effective and intelligent intergovernmental relations and a full flow of information and cooperation in both directions under a program of active leadership by the Highway Commission can these diverse links be forged into a chain of highway protection. The leadership must come from the state level and must be centered around the Highway Commission but can gain support from the State Planning Division.

#### Advance Planning on the State Level

Perhaps the most easily achieved suggestion for change would be to provide adequate funds and personnel to the Highway Commission to allow detailed advance planning of highway routes. The existence of such detailed plans would allow the planning of adequate protection measures along such projected routes. Without such advance planning, such right-of-way protection devices as official mapping are of little use to the highway system. Further, little use can be made of such devices as master planning unless the location of the road is definitely set out well in advance of its construction. The natural coordinating agency for such planning, the State Planning Division, has indicated that they have been handicapped in developing an over-all roadside protection program by the lack of such detailed advance planning.<sup>122</sup> Such suggested procedural changes as advance acquisition of right-of-way would be impossible without such advance planning. It has been suggested that with adequate funds and personnel such planning could be accomplished and that there is nothing inherent in the highway process to prevent it.<sup>123</sup>

One of the first changes that could be suggested in the present highway process would be to provide funds to the Highway Commission to make the necessary movement into the area of advance planning.

#### Highway Mapping on the State Level

The next logical step after advance planning would be to grant official mapping power for highway purposes on the state level.<sup>124</sup> Through mapping the state could protect the projected bed of these planned roads. The mapping could either be of the reservation type, that is, preventing improvements within the projected road for a limited period of time after notice,<sup>125</sup> or the dedication type, that is, preventing the improvement in the bed of the road except in hardship cases.<sup>126</sup> The burden of such mapping would be comparatively light on the non-urban landowner and should have less difficulty being upheld by the courts than urban mapping. The advantages of such a device are mutual. Buildings could be set out so as to avoid the projected roadway, and the road would be less expensive to build since its path will not be built up with structures.

This device would have the advantages over municipal mapping of extending to the whole state trunk system and being free of the possible too local orientation that may prevent such municipal action from being fully effective. This device is also less drastic than advance acquisition since it does not require the immediate outlay of funds for purchase or condemnation.

After advance planning, the next step should be the authorization of the Highway Commission to make effective official maps of projected highway locations.

<sup>122</sup> Interview, May 7, 1958, State Planning Division, Madison, Wis.

<sup>123</sup> Interview, May 16, 1958, District Highway Engineer, Dist. 2, Waukesha, Wis.

<sup>124</sup> Such a suggestion has previously been before the legislature, Bill 561S (Wis. 1957).

<sup>125</sup> Something similar in effect to Wis. Stat. § 59.965(5)(k) (1957).

<sup>126</sup> Something similar in effect to Wis. Stat. § 62.23(6) (1957).

### State-Local Cooperative Zoning

The most desirable innovation in the present system would be a form of state-local cooperative zoning.<sup>127</sup> If zoning is to realize its potential as a roadside control device, the state must be brought into the process on the local level. This is necessary not only because of the narrow self-interest conception of the problem on the local level but also because of the general failure to enact such controls. With some share in the zoning process vested on the state level the Highway Commission would have a great incentive to make full use of the benefits of such controls. A cooperative state-local zoning device for the land immediately adjacent to the trunk highway system would seem to be an effective means of overcoming this mutual lack of responsiveness in this area.<sup>128</sup>

A suggested means of achieving this cooperative zoning would include these basic requirements:

- (a) The local units must possess zoning powers—both use districts and set back powers.
- (b) The State Highway Commission must be empowered to request any local unit (depending on the location of the highway) to zone the land abutting a state trunk highway.
- (c) If the local unit does not act within a specified period of time or their action does not provide adequate roadside protection, for example, zoning the whole road for commercial uses, then the Highway Commission may zone a 500-ft strip (or any other reasonable distance) on either side of the highway, imposing both use district and set back requirements.
- (d) If the local unit does act and provide satisfactory protection, an annual zoning grant-in-aid should be paid to that unit to help administer the zoning controls.
- (e) The Highway Commission should be empowered to police and enforce the zoning, whether it is ultimately enacted on the local or state level.

Through such a method or some variation of it, the local interests would be preserved as fully as possible and would only be overridden where they were incompatible with the state-level interests. The Wisconsin subdivision control act is an applicable example of such a possible state-local control device. State-local cooperative zoning would appear to strike the best balance between state and local interests.

### Conclusion

Local interests are important and should be protected wherever possible. But it must be remembered that the function of the road is to provide traffic service not to raise local land values. The only way to enforce this axiom short of universal access control is to provide a unified, effective roadside protection program. Within the present framework, only through the effective leadership of the Highway Commission matched by the intelligent and full cooperation of the local units can this be accomplished. Building on this base, suggestions can be made for future revision looking toward advance planning, official mapping of highways and state-local cooperative zoning.

The United States has been enmeshed in a transportation revolution. While the basic steps have been taken and the initial turmoil has subsided, it still remains for the state and local governments to secure the gains made by protecting the road network against future damage and providing a safe, efficient and permanent road system. The

<sup>127</sup> Such a suggestion has also previously been before the legislature, Bill 43 S (Wis. 1949).

<sup>128</sup> For some plans for cooperative state-local zoning with reference to the Wisconsin situation but with somewhat divergent viewpoints see the following: Beuscher, "Protection of Highway and Feeder Streets Through Subdivision Controls," 101 Highway Research Board Bulletin 52 (1955); Levin, "Highway Zoning and Roadside Protection in Wisconsin," 1951 Wis. L. Rev.; Law, "Controlled Access, Zoning, Set Back Lines, and Land Platting Along State Trunk Highways," 19 Better Roads 26 (1949).

police power roadside protection tools will play an important role in this consolidation program.

#### ACKNOWLEDGMENTS

The study reported here was made possible by a grant from the Automotive Safety Foundation whose generous support the author wishes to acknowledge. The ideas and conclusions contained herein are solely those of the author and do not necessarily reflect those of the Foundation. The author alone should be held responsible for the accuracy of the research.

Also acknowledged is the full cooperation given by the Wisconsin State Highway Commission and its District Highway Engineers in making information available.

### *A Comparison of Statutory and Court-Made Rules of Eminent Domain Valuation with Actual Practices*

DONALD HEANEY, Graduate Student in Law, University of Wisconsin

● THE PURPOSE of this paper is to make some observations on the relationship between the law of eminent domain valuation as it exists on the books and the activities of highway administrators working under that law. It is a study of the realism of highway law. The method of presentation here will be to present a few selected propositions of law, testing them by comparing the rule to the current practice.

The paper is the result of research conducted by the University of Wisconsin Law School as part of the requirement for a graduate degree in law. At the date of this writing that research is not entirely completed nor is this a complete report of all findings made up to this point. Rather this is a summary of those findings which in the opinion of the author are of greatest interest to people engaged in right-of-way acquisition. One obvious omission should be noted. No mention of the jury system has been included since it is felt that an insufficient amount of information has been gathered at the date of this report.

In addition to the legal research necessary to isolate the applicable rules of law the method of research employed in this study was basically one of on-the-scene observation and interview both written and oral. Greatest emphasis was placed on the activities of appraisers, the procedures employed in the district offices, the policies of the Right-of-Way Division at the state level, the functions of the office of the Attorney General, the reactions of landowners and the role of the practicing attorney. Limitations of time made it necessary to center the study on one state, Wisconsin, but questionnaires were sent to all highway departments in all of the states and brief trips were made to certain other states for comparative purposes.

The author owes a particular debt of gratitude to the State Highway Commission of Wisconsin for its complete cooperation in all aspects of the study.

#### THE APPLICABILITY OF EMINENT DOMAIN THEORY

Among the greatest contributing factors to the difficulty of applying the law as written is the essential fuzziness of many of the concepts of valuation law. The most graphic illustration of this revealed by the Wisconsin study is in the application of the doctrine of the offset of benefits against the damages suffered by the property. The applicable Wisconsin statute provides:<sup>1</sup>

Special benefits accruing to the property and affecting its market value because of the planned public improvement shall be considered and used as an offset to damages, but in no event shall benefits be allowed in excess of damages.

<sup>1</sup>Wis. Stat. § 32.10 (1957).