

Economic Evidence in Right-of-Way Litigation

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ECONOMIC DATA IN CONDEMNATION PROCEEDINGS

•THE MERGING of ideas from two fields even under ideal circumstances is a difficult process. In the case of the disciplines of law and economics, however, this process has been going on for many centuries; for instance, present commercial legal practice evolved from the need for rules to implement various institutional relationships in economic affairs. As a consequence, the development of procedural and substantive law involves a recognition of the business climate.

Although the law recognizes various economic arrangements, there are newer means of ascertaining facts today than had heretofore existed. These techniques of factual presentation can greatly aid highway and other public officials in improving their measures of fair compensation for property acquisition. To aid in the refinement of fact-gathering, highway officials across the Nation are engaging in right-of-way and legal research studies to arrive at "true" indicators of value for use in legal proceedings.

It is hoped that from such activities it will be possible to supply the realities behind the "market" and "willing buyer and seller" concepts, abstractions that have been defined fairly specifically in the case law, as described later. It is anticipated substantial savings to the government as well as factual verification and justification of condemnation awards will come from such research.

The occurrence of partial takings of property for highway purposes has made more significant the current law of severance damages and the proof necessary in such cases. Although some 9 of 10 condemnation cases are settled before recourse to judicial procedures, those that find their way to the courts often represent widely varying amounts of valuation for the same parcel of land. The pattern of payments of damages in present as well as future cases is influenced by these interpretations and decisions arrived at in open court. The damages awarded in these cases tend to establish the basis for the level of awards and damages in present appraisal practice because they become part of the jurisprudence kit.

It is in the suggested tools for bridging the gap between current economic practice and the legal tests supplemented by a clear description and analysis of the present evidentiary rules and tests that it is hoped this paper will make some contribution.

Filling in Evidentiary Gaps

Participants in the judicial process in eminent domain proceedings for highway purposes have recognized the need for sharpening factual presentations in condemnation cases. A recognition of this need has been the recent emphasis on pretrial practice¹,

¹ Levin, "Pretrial Practices in Condemnation Cases," Legal Affairs Committee, Annual Meeting, AASHO (December 1960), Naftalin, "Pretrial Practice in State Condemnation Cases for Highway Purposes," HRB Bull. 294, 15-30 (1961), Levin, "Comments on Some Aspects of Eminent Domain Proceedings and Land Use Control in the United States," Comparative Seminar on Land Use Controls (September 1960); Proc. Seminar on Protracted Cases for U. S. Circuit and District Judges, 23 F. R. D. 319 (1958); "Pretrial in Condemnation Cases, A New Approach," J. Am. Jud. Soc., 40: 78 (1956);

on uniform expert appraisal testimony², and on severance damage studies³. The major emphasis in this paper is on severance damage studies with only brief reference to the other two items.

A major interest in this paper is to fill the gaps in evidentiary practice so that both the court and the jury will be assisted in their decision-making roles. The public and individual property owners will benefit by any reduction of guesswork inherent in courtroom valuation of property. Concerned by the inadequacies of the factual presentations currently admitted in the courtroom, various leaders in the right-of-way, appraisal, and legal fields have indicated a need for devices in dealing with certain types of property⁴.

As an example of this concern, a specialist in right-of-way has referred to the valuation of severance damages as

One of the most difficult phases of appraisal work is the assignment of the proper value of severance damages to properties in highway right-of-way acquisition.⁵

The desire of right-of-way officials to provide for fair and accurate compensation has been stated as follows:

It is the general intent that owners of parcels that are severed or reduced in size by right-of-way acquisition be compensated as accurately as possible for damage incurred... that payment be no more, no less, than the true value.⁶

Evidence in condemnation cases turns on the question of the value of the property taken, and in partial taking cases, on this as well as damages to the remainder. In accordance with the established valuation procedures, properties are analyzed in terms of before and after the taking. In this connection, it is essential to realize that market value must always be an estimate. Even under the most refined expert appraisal, no two properties can ever be exactly alike in amount, because of the intangibles of location and quality as well as the different background and training of appraisers. Because estimated values are the bases for the determination of fair and just compensation to a property owner, it is worthwhile to ask what can be added to the right-of-way official's technical equipment that will also aid the courts in increasing the accuracy of the estimate of value.

Sutherland, "The Theory and Practice of Pretrial Procedure," Mich. L. Rev. 36: 215, 224-25 (1937); English, "A Year of Pre-Trial Settlement Conferences," Chi. Bar Rec. 50: 343 (1959); Kaufman, "Calendar Decongestion in the Southern District of N. Y.," J. Am. Jud. Soc. 40: 70 (1956).

² Bonner, "A Uniform Expert Valuation Testimony Act," HRB Bull. 294, 13-14 (1961); Bonner, "A Study of the Persuasion of Juries by Expert Witnesses in Condemnation Cases," Ph. D. Thesis, Ohio State Univ. (1954).

³ For example, Land Economic Study 4, Michigan State Highway Department (September 1960); Washington State Severance Damage Study 9 and 7 (September 1959); and Gilliland, "Land Economic Studies for Appraisal Service," Joint Bureau-State Right of Way Seminar (November 4, 1959).

⁴ Kuehnle, "Expert Testimony," Speech, Annual Convention of American Bar Assoc., Section on Municipal Law (September 1959), Levin, "Highway Right-of-Way Appraisals," Speech, Committee on Right-of-Way, Annual Convention, AASHO (1951).

⁵ Murphy, "Partial Taking and Severance Damage Studies," Panel Discussion, Committee on Right-of-Way (1960).

⁶ Ibid.

The most usual means of proving value in a court proceeding is, of course, that of expert testimony in which experts or informed individuals on both sides seek to impress the jury with the defensibility of their valuations. The recognition of new legal evidentiary devices has indicated that the law has progressed substantially so that the type of evidence generally used in condemnation proceedings may be improved to meet present fact situations in highway condemnation cases. An analysis of the current status of the law of proof and of the admissibility of economic research evidence (such as statistical surveys, samples, and the hearsay objection to such data) are presented later.

In this section, the particular significance of various types of land economic studies to the highway lawyer and appraiser are discussed.

General Economic Impact

In condemnation law, the courts introduce some legal constructs (namely, market value, highest and best use as the determinant of fair and just compensation) just as in other areas of law (i. e., in torts) the concepts of the prudent man and the reasonable man are used.

Such generalized concepts are needed to furnish standards so that a fair decision may be obtained for all concerned. With the tremendous building programs currently in progress, the Interstate and other Federal-aid highway programs, the State and county highway construction effort, urban renewal, redevelopment, reclamation, flood control, parks, and other programs involving the assignment of compensation, the impact of eminent domain proceedings on the general public has grown.

Despite the technological advances illustrated by all these public works programs, the means of proof has tended to remain within the same paths.⁷ Courts, normally however, adapt their present procedures to new problems, for this is how growth obtains in the law to handle growth in the economic system.

When an expert witness is giving his opinion of the value of a parcel taken and damages to the remainder, knowledge of land value trends is an indispensable item to him. He would like to be able to ascertain certain general trends in the area so that he can give due credit to such general inflationary or deflationary movements in arriving at his estimate of value. General land value studies provide him with the expert information that he requires.

It is decidedly difficult and expensive for the individual appraiser to make a thorough study of all land value items in an area. For this reason, the States, Bureau of Public Roads, highway departments, and various universities are making available to the appraisal profession and highway legal counsel through economic impact studies the types of information needed.⁸

It would be well at this point to indicate some of the background of these economic impact studies. The earlier studies of the 1920's were concerned with rural land values. References to the results of these as well as many recent land value studies, perhaps 50 in number, have appeared in the report of the Highway Cost Allocation Study to the U. S. Congress, prepared by the U. S. Bureau of Public Roads.⁹ In all, about 100 highway impact studies have been completed and about 40 are presently under way in some 35 States.

The impact studies have utilized various kinds of approaches. In general, the methodology encompassed what has been called a before-and-after technique—an analysis of some period before a highway improvement compared with a period after the completion of the improvement. Wherever possible, geographic areas subject to highway influences were compared with similar areas not subject to the highway influence in order to isolate, to some degree, the impact of the facility. Although the subject matter in

⁷ See section on "Pertinent Laws of Eminent Domain and Evidence."

⁸ For a discussion of how such studies are made and their importance, see Garbarino, "The Effect of 'High Lines' on the Market Value of Abutting Properties," Paper, Legal Committee, Edison Electric Inst. (April 1961).

⁹ H. R. Rep. No. 72, 87th Cong., 1st Sess. (1961).

these studies varies widely, the concern with right-of-way is seen in these studies because land value analyses are usually a component part of evaluating impact.

The results of the experience gained in these studies have found their way into the courts in some instances, generally through expert presentation. One of the early impact studies that dealt with 2,500 sales in the Houston, Texas, area was used in a Mississippi case as a basis for expert opinion.¹⁰ Other studies provide findings that could be useful in legal disputes, as in the Baltimore Beltway Study¹¹ where little or no damage was found from highway proximity in a study of subdivision property.

Even when an appraiser does not have access to such economic impact studies, he implicitly uses similar information in his evaluation of a parcel. His experience and education become the basis for his expert opinion. Nevertheless, it is opinion testimony and as such it is subject to all the attacks inherent in the cross-examination of any opinion. Neither side to a legal dispute generally has adequate information to evaluate the trends for the reasons of time and expense. It is this factual gap in case preparation that it is hoped will be filled by the economic impact and similar studies. Watson Bowes, MAI, stated this proposition in the following way:

Economic studies are not only advantageous in appraising highway right-of-ways but they are absolutely necessary. Every highway department appraiser employs such studies to some extent. Some appraisers relate economic studies to the subject properties by making only mental notes as they are developing their estimates of fair compensation. Such mental notes are difficult to transmit to juries and do not show on any appraisal report so they can be used as a negotiating tool by the negotiator.¹²

An operating official in the highway field of the State of Washington believes these studies serve

... to provide data to staff and fee appraisers to assist them in more accurately measuring the just compensation in a partial taking problem. I believe that in all States the right-of-way divisions are finding that the constant improvement in appraisal techniques is resulting in more and more accuracy in the appraisal of a total taking, or in the before value of a property involving a partial taking.¹³

Right-of-way specialists are generally in favor of using such land value studies in appraisals as well as in court proceedings. Balfour and Hess of the California Division of Right-of-Way, Lindas of Oregon, Eichhorn of Michigan, and many other State highway department officials, as well as the Bureau of Public Roads in its "Guide for Highway Impact Studies,"¹⁴ have all indicated their support of such research.

¹⁰ W. E. Harreld case on Project F-FI-I (52)—IN-55-(2) 75, Hinds County, tried in Chancery Court in 1957, and appealed to the Mississippi Supreme Court in 1958.

¹¹ Maryland State Roads Commission, July 1960.

¹² Bowes, "The Value of Economic Studies in Right-of-Way Appraising," Speech, Annual Convention, AASHO (1951).

¹³ Arnold, "The Economic Study—Its Uses," Speech, Right-of-Way Section Meeting, AASHO Conf. (1960).

¹⁴ For example, Lindas, "Oregon Land Economic Study," Speech, HRB Meeting, (1960); Moser, "Land Economic Studies in Connection with Right-of-Way Acquisition," Speech, Annual Seminar of the Eastern States Regions, American Society of Appraisers (1959); Bureau of Public Roads, "Guide for Highway Impact Studies," (1959).

Land value studies of impact in an area that abuts a highway, compared with one that is not near the highway improvement, would be particularly pertinent in court cases where land value trends are necessary factual background for the jury. It would then be possible for the court and jury to evaluate the work product of the expert appraiser against these data. The California Law Revision Commission¹⁵ has seen fit to recommend the use of appraisal theory in condemnation cases in order to systematize the concepts of valuation and the background of testifiers. It is usually within the court's power to determine the rules of compensation as a means of implementing a legislative decision for the taking of a specific property subject to a public need.

In the main, empirical evidence at the trial consists of the appraiser's opinion of market value, as described in the following statement:

An appraiser is supposed to reject elements which are remote, fanciful, speculative and uncertain. In judging the situation the appraiser must determine whether the facts establish a diminution in value with reasonable certainty, as distinguished from merely hypothetical or fanciful assertions having no effect upon value.¹⁶

Yet in a world where statistical data are used to ascertain and provide decision-making tools to management and government, it would appear most proper to prove this of value by empirical or statistical evidence. Since the time of introducing appraisal opinion as expert testimony began, the highway lawyers have avoided the use of much significant information, such as the various land value studies. The implications of these studies to evidentiary presentation is discussed in a later section dealing with the admissibility of research evidence in highway right-of-way litigation.

Interchange Impact

Right-of-way personnel have been especially interested in the subject of the impact of interchanges on land values because experience thus far has shown these interchanges to be the hubs of economic activity. Such impact studies at interchange points tend to provide data that can be utilized to indicate objectively the after value of property at such points. In the State of Washington, a number of case studies at interchange points have been prepared that may be used for such a purpose. In addition to this type of case study, general land value trends at interchange points are being established in the economic impact studies¹⁷ at the University of Washington, Texas A & M, and in the States of Michigan, Minnesota, Ohio, Oklahoma, Pennsylvania, and Washington, and many other States where interchange impact on an area (general influence on land values) and on specific parcels can be delineated.

Severance Damage Studies

A major means of establishing property value is that of the comparable parcel, the standard of value, so that the court and the jury may have the opportunity to approximate true value.

To aid the court in this fact-finding function, right-of-way personnel in State highway departments and private appraisers through such professional organizations as the American Right-of-Way Association and various appraisal societies have interested themselves in establishing various researches in land values. These land value studies attempt to supply the appraiser with knowledge of the economy in which he operates,

¹⁵ California Law Revision Commission, Recommendation and Study Relative to Evidence in Eminent Domain Proceedings, 1960.

¹⁶ Luttrell, "Some Applicable Rules in the Trial of a Condemnation Case," 28 Appraisal J 215 (1960).

¹⁷ See Appendix E for list of severance damage studies.

for the findings in such studies provide him and other persons involved in right-of-way or eminent domain proceedings with the reaction of land values in situations similar to the one involving the parcel in question. The important contribution made by this research is the aid that may be given in valuing not whole parcels but partial takes. For where whole parcels are acquired by condemnation, the establishment of market value is not as difficult as it is in the case where only part of a parcel is acquired and the damages to the remainder need to be evaluated.

Nature of Severance Damage Studies.—Severance damage studies are intended to facilitate the objective determination of the effect the partial taking of a property has on the value of the remainder parcel. Such information is invaluable if each affected property owner is to be reimbursed for property taken as well as damages to the remainder. To measure the effects of a partial taking of property, most severance damage studies rely on a before-and-after approach—the value of the property before the highway taking compared with the total amount which the owner received from the property; e. g., for property taken, for damages to the remainder, and from the sale of the remainder. Ideally, the adjustment that should be made with a property owner is the difference in the fair market value of the entire tract before the taking and the fair market value of the remaining real property after the taking. Although the appraisal of these before-and-after values is made at the same time, the appraiser must attempt to determine the value for two different times—one in the past before the highway, and the other in the future after the highway influence has been effected. In those situations where the remainder is sold so that a reliable indication of the value of the remainder is provided, the elements for a meaningful comparison are available—the original value (determined by recognized appraising techniques) vs the value realized by the owner (total payments for property taken, for damages, and for remainder parcels). If there is wide discrepancy between these two amounts, either too much or too little is being paid for right-of-way property or damages; the legal limits to these rules are described later.

Similarities Between Severance Damage and Economic Impact Studies

Severance damage or partial taking studies and economic impact studies have several similarities, and either type of study may sometimes be referred to generally as a land economic study. In fact, severance damage studies may be considered as a particular type of economic impact study. For example, a land value study now under way in Colorado is giving special emphasis to the analysis of severance damages related to controlled access highways. In general, severance damage studies and economic impact studies are, of course, alike in that they seek to identify and measure effects that can be traced to highway improvements. This careful attention which both types of studies give to measuring the impact of highways that have been built in the past results from their common objective—developing a factual basis for predicting highway effects.

Some Contrasts Between Severance Damage and Economic Impact Studies

The differences between severance damage and economic impact studies (which, as noted earlier, are generally alike in seeking to measure highway effects) result primarily from the different types of benefits that these studies seek to identify. Both types of studies ordinarily consist of a comparison of the situation before and after the highway to determine the effect of the highway. Economic impact studies are ordinarily concerned with identifying benefits (or disadvantages) that accrue to an entire community or some portion of a community—with general benefits. General benefits or damages can be defined as injuries or benefits that the owner sustains or receives in common with the community generally and that are not peculiar to him.¹⁸ For example, the increment in land values that a community may experience from a bypass route would be termed a general benefit. (The legal basis for these distinctions are described later.)

¹⁸ Speir, "Appraising for Eminent Domain," Texas Highway Department (May 1956)

Severance damage studies are concerned with highway effects on particular land parcels taken in part for highway property. If the total amount received by a property owner (a) for right-of-way, (b) for damage to the remainder, and (c) from sale of the remainder exceeds the value of the property prior to the highway, a benefit has accrued to the owner. Severance damage studies are often particularly concerned with special benefits—the highway effects that accrue to a particular land parcel taken in part for highway right-of-way—benefits that are peculiar to that property and not shared by other property in the community. In offsetting the damage suffered by remaining land parcels or in paying for property acquired in part, it is more common to look to special benefits than to general benefits, although the distinction between special and general benefits often becomes blurred.

Whether the focus of a study is on general or special benefits affects the method used to identify these benefits. Severance damage studies have commonly employed the case study approach, whereas economic impact studies have been more concerned with the experience of a highway-affected community; e. g., with respect to land value trends, business volumes, or employment.

The different types of control areas used in severance damage studies and in economic impact studies also reflect the different emphasis of these studies. A fundamental type of analysis in economic impact studies, which seeks to detect and measure general benefits, involves comparison of an area influenced by a highway and an area removed from highway influence, the ideal control area being one like the study area except that it has a complete absence of highway effect. The types of controls that have been used in severance damage studies, on the other hand, show some variation, no doubt due primarily to differences in State law as to which benefits can be considered in establishing compensation. In States where both general and special benefits can be applied against the cost of acquiring right-of-way property, a control area removed from the highway influence is desirable. However, in over one-half the States where only special benefits are to be considered in determining adjustments to be made with affected property owners, control areas are needed in the same immediate neighborhood as the study parcel. Appendix D includes a diagram of how severance damage studies seek to measure general and special benefits.

Shortage of Factual Information

One of the major problems in the case of partial takings is the lack of information organized in some systematic fashion. It is hoped that the severance damage program of the Bureau of Public Roads and State highway departments is serving to furnish these facts. An important goal of this program is, of course, to counter extravagant property damage claims with objective analysis.

The difficulty of gauging highway effect without careful reference to the experience in comparable situations has often been illustrated. A severance damage study in Michigan, for example, revealed that a highway-influenced parcel of land that was expected to have a value of only 5 percent of what it was worth before the highway turned out, in fact, to have an after value of 115 percent of its before value.¹⁹ In Ohio, researchers have noted that there has been no instance of an owner having to sell a remainder parcel for as little as 10 percent of its former value, although estimates of 90 percent damages for landlocked property are reported to have become fairly common.²⁰

The dearth of factual information about what happens to remainder properties is widely recognized. One account of a typical appraisal states that it contains "solid proof on the before value of the lands and improvements with full documentation" and then the frustrating words, "in my opinion the remainder is damaged 50 percent by reason of proximity."²¹

¹⁹ Land Economic Study 4, Michigan State Highway Department (September 1960)

²⁰ Little, AASHO, Committee on Right-of-Way, Boston (October 15, 1959)

²¹ Supra note 12

Many appraisers are keenly aware of the fact that large-scale right-of-way appraisal for highway improvements is relatively new, that it poses new problems and intensifies the need for factual information as to how the market reacts to remaining portions in order to make the after estimates "something more than [guesses from a] crystal ball."²²

Accomplishments of Severance Damage Studies

The goal of severance damage studies—to make it possible to predict at the time of right-of-way taking what effect the highway will have on the remaining parcel—appears to be almost insurmountable. Any two or more properties vary to some degree so that predictions of what may happen to one piece of property on the basis of the experience with other properties can only be approximate and must be made with considerable caution. The difficult nature of this problem is emphasized by the wide variation in the experience with remainder parcels, the unit value of remainder parcels in one study ranging from $\frac{1}{2}$ to nearly 15 times the former value.²³

Although exact evaluation of benefits and damages associated with right-of-way taking is desirable, real value can be derived from severance damage studies that are short of such precision. This is evidenced by the usefulness that current studies are having for such purposes as right-of-way acquisition, public relations, highway planning, and administration. In instances where benefits associated with a highway right-of-way taking exceed the value of property taken, it may be sufficient merely to determine that benefits exceed or equal the value of the property taken, inasmuch as benefits cannot ordinarily be offset unless they are matched by the value of right-of-way acquired or by damages as described later. Determining exact amount would appear to be necessary only where the benefit is insufficient to offset costs—in situations where the amount of the award due an owner exceeds any benefits that may be allowed and therefore where the amount of the award payable depends on establishing amounts for benefits or for any damages. Consideration of benefits associated with partial takings without assigning exact benefit amounts can apparently also have some usefulness in those situations where no attention whatsoever is now being paid to this important element of the post-highway situation. In such cases, any recognition of highway benefits whatever should be helpful in establishing more reasonable costs for right-of-way acquisition.

Partial taking studies that merely recognize or estimate benefits in a general way—the benefits approach—have considerable usefulness. However, a number of studies have gone beyond this and have applied a market approach—a measure of effect determined by the market place. These studies have provided comparisons of estimated and actual highway effects on remainder parcels, and some of these estimates have been shown to be fairly accurate. In several instances, estimated and actual damages (generally established by actual sales prices) have been found to be within a few percentage points of one another: for example, estimated damages of 13 percent and actual damages of 7 percent; estimated 37 percent damage and actual damages of 27 percent; and estimated damages of 80 percent compared with actual damages of 70 percent.²⁴

Another accomplishment of these studies which should have general usefulness in determining what may happen to remainder properties is the progress made in evaluating the effect of such factors as having more than one potential purchaser for certain types of remainder parcels. As might be expected, the selling price of landlocked

²² Pryor, "An Adequate Right-of-Way Appraisal," Right-of-Way (December 1959).

²³ Land Economics Study Committee Report to Membership, Buckeye Chapter, American Right-of-Way Association, Columbus, Ohio (September 1959).

²⁴ Washington State Severance Damage Study 9 and 7 (September 1959); and Gilliland, "Land Economic Studies for Appraisal Service," Joint Bureau—State Right-of-Way Seminar, Kansas City, Mo (November 4, 1959).

parcels with two or more potential buyers has been found to be significantly higher than that for remainder properties with only one potential buyer; that is, one abutting owner. Certain parcels in Ohio with one abutting owner were found to have a percentage of recovery of 20 percent (that is, the selling price in the after period was 20 percent of the appraised value before the highway), whereas parcels with two or more abutting owners had a recovery rate of about 80 percent.²⁵ In Michigan, recovery rates for parcels with one potential buyer were found to range from 32 to 57 percent of the former value and from 90 to 113 percent for remainder parcels with two or more possible purchasers.²⁶

Research in partial taking studies has also provided assistance in forecasting highway effects by relating experience with remainder parcels to such factors as size of remaining parcel, size of farm unit before the severance, and type of potential purchase. For example, "The degree of damage sustained [by a 160 acre farm] by the loss of 5 to 10 acres. . . is less. . . than [that experienced by] an 80 acre farm." In at least one investigation, small remainder parcels were shown to have a lower rate of recovery than larger parcels, although preliminary findings from another investigation found "no apparent correlation."²⁷

These are a few of the accomplishments suggesting the help these studies can afford in providing authoritative proof of just what can be expected to happen to the value of the remainder. Another accomplishment of severance damage studies—a sign that progress is being made in the objective determination of highway effects—is the apparent increase in the expectation that appraisals of after values are to be supported by specific written justification and the occasional rejection by State personnel of inadequately supported appraisals.

Collection of Data on Severed Parcels

To develop a file or "bank" of cases from which comparable sales experience of severed parcels may be obtained, the Bureau of Public Roads and State highway departments are sponsoring the use of a standardized study procedure inclusive of a manual of procedures and suggested techniques. This instructional material will make public results and methods available to highway departments which can be useful in solving controversies on valuation. The necessity for such a bank is that experts, appraisers, and others valuing property generally do so in terms of whole parcels, for that is where real estate valuation experience is most prevalent. Few analyzed data are available for determining the experience with severed parcels or partial takes. This bank will furnish the means for developing comparable sales of severed parcels according to the procedures designated by the manual for obtaining this factual information. The manual also provides suggestions for obtaining maximum usefulness from a uniform severance damage form which has been developed by the cooperative efforts of interested persons in the various States, American Right-of-Way Association, and the Bureau of Public Roads.

The recommended procedures for using the severance damage data include a description of the way in which severance damage data are to be collected and processed, a brief description of the types of analyses feasible for mechanizing the recording and sorting of these data. It is hoped that a central bank of information regarding similar severed parcels will be available at the Bureau of Public Roads for the use of State officials. With the mechanical sorting devices to be used, it will become possible to make comparables available to researchers and appraisers in the field.

The uniform schedule used (BPR 1030) consists of the following parts: general information on parcel location, type of highway, type of access, description of tract,

²⁵ "Preliminary Report of Land Economic Studies," Ohio Department of Highways in cooperation with the Bureau of Public Roads (1960).

²⁶ Supra note 19.

²⁷ Supra note 24.

parcel taken, remainder tract, relevant data of taking, size and use of parcel, zoning, visibility, elevation, appraisal value, compensation, court awards, and subsequent sales. All of the elements requested on this form are relevant to the establishment of parcel comparability and market value.

Because of the systematic nature of the collection of severance damage cases, it is expected that comparable sales will be made readily available and courtroom presentation will be facilitated. The comparability will still need to be proved and will still be subject to dispute; but standardization of procedure may eventually determine the use of these cases in all States. The details requested on such forms make it possible to narrow down the comparabilities so that the parcels may be comprehensible to fact-finding bodies.

Evidence for Offsets

Another use of these severance damage studies and case histories of individual severed parcels will be to indicate the amount of benefit as offsets to damages and the value of property taken in cases where such offsets are permitted. Where benefits may be offset, there is always difficulty in establishing the amount of general or special benefits.

It is expected that the bank of severance damage cases previously referred to will be available to the States and to the Bureau of Public Roads, and these cases will make it possible for appraisers in the first instance to estimate the amount of benefits that have historically been associated with similar cases.

Despite the case histories that would be made available from these studies, the usual objection is that the amount of offset to damages (if any) found in such studies does not apply to a parcel under consideration because it represents a property that is different in nature, type, location, etc., from the property under litigation. In the case of the severed parcels, it is hoped that the histories of land parcels of similar types as valued through market sales will be indicative of the value of the parcel in question.

The utilization of land value studies in court work will generally run into objections on the grounds that they are averages (they represent a dispersion of properties), they deal with hearsay, and they do not represent the property involved. In the next two sections of this paper, the current status of the law of proof and the possibilities of meeting the hearsay and other objections are discussed. These discussions point the way toward more effective utilization of such economic studies in the courts and also point out the limitations to their use.

PERTINENT LAWS OF EMINENT DOMAIN AND EVIDENCE

The possible uses of economic evidence in highway condemnation litigation must be considered in light of the pertinent laws of eminent domain and evidence, and in light of the problems involved in applying these laws. With this objective, this section examines (a) the nature of the condemning authority's duty to compensate those whose property it takes, (b) the rules and criteria of value whereby this compensation is measured, particularly where only part of a tract of real estate is taken for highway purposes, and (c) the types of permissible evidence currently used to prove the property value, damages, and benefits designated by these rules and criteria of value as components of the property owner's just compensation.

In this examination of the current law, it is observed how the types of economic evidence heretofore discussed would meet existing inadequacies and thereby facilitate a more accurate measurement of the property owner's just compensation. It is further observed how these types of economic evidence would comply with the rules of evidence. In a later section, the potential challenges raised by the rules of evidence to the admissibility of this economic evidence are discussed.

Constitutional Sources of Duty to Make Just Compensation

Fundamental to the law of eminent domain in the United States and in the several

States are the Federal constitutional provisions²⁸ that require that just compensation be paid to owners of private property taken pursuant to the power of eminent domain. These Federal provisions and a majority of the State constitutions²⁹ only require that such compensation be made to the owner of property taken by eminent domain; but some State constitutions³⁰ extend the right of just compensation to owners of property damaged by the exercise of eminent domain. Taking, in the constitutional sense, entails either actually entering on the land or depriving the owner of substantially all beneficial use of the property.³¹ Damaging, in the constitutional sense, occurs when non-condemned land has either sustained an injury actionable at common law or has been injured more than the general public by the physical disturbance of one of the owner's rights therein.³² Compensation for taking is measured by the property's value at the time of taking as defined³³; compensation for damaging is measured by the value depreciation of the damaged property.³⁴ Thus, the exercise of the eminent domain power requires ascertaining in every instance the value of the property taken and in some instances both the value of the property taken and the value depreciation of property not taken.

Value Criteria for Measuring Just Compensation

It is the judiciary, whose exclusive function is to determine the exact amount of compensation in each case, which has largely formulated the rules and criteria of evaluation in eminent domain cases. Courts have generally held the just compensation constitutionally required for the taking of property to be the property's value at the time of the taking.³⁵ This value has been further defined in most cases as the property's

28 U. S. Const. amend. V, which provides "nor shall private property be taken for public use without just compensation," binds the Federal government. The "due process" clause of U. S. Const. amend. XIV, as construed in *Chicago, B. & Q. R. R. v. Chicago*, 166 U. S. 226 (1897) imposes substantially the same requirement on the States.

29 See Appendix A, Column A

30 See Appendix A, Column B

31 *United States v. Causby*, 328 U. S. 256 (1946); *Portsmouth Harbor Land & Hotel Co. v. United States*, 260 U. S. 327 (1922); *Friendship Cemetery v. City of Baltimore*, 197 Md. 610, 81 A. 2d 57 (1951); *Penn. v. Carolina Va. Corp.*, 231 N. C. 481, 57 S. E. 2d 817 (1950); *Cochran Coal Co. v. Municipal Management Co.*, 380 Pa. 397, 110 A. 2d 345 (1955). This traditional concept of taking has been broadened to render compensable the substantial interference with any of the rights of property ownership in some States. For example, *In re Forrstrom*, 44 Ariz. 472, 38 P. 2d 878 (1934); *Laddick v. City of Council Bluffs*, 232 Iowa 197, 5 N. W. 2d 361 (1942); *State ex rel. McKay v. Kauer*, 156 Ohio St. 347, 102 N. E. 2d 703 (1951).

32 *Chicago v. Taylor*, 125 U. S. 161 (1888); *Jarnagin v. Louisiana Highway Comm'n*, 5 So. 2d 660 (La. App. 1942); *Wolfrom v. State*, 246 Minn. 264, 74 N. W. 2d 510 (1956); *State Highway Comm'n v. Bloom*, 77 S. D. 452, 93 N. W. 2d 572 (1958).

33 *Danforth v. United States*, 308 U. S. 271 (1939); see cases cited *infra* note 35.

34 *Rose v. State*, 19 Cal. 2d 713, 737-40, 123 P. 2d 505, 519-21 (1942); *State Highway Bd. v. Coleman*, 78 Ga. App. 54, 50 S. E. 2d 262 (1948); *Harrison v. Louisiana Highway Comm'n*, 191 La. 839, 186 So. 354 (1939); *Tennessee Gas Transmission Co. v. Maze*, 45 N. J. Super. 496, 133 A. 2d 28 (App. Div. 1957)

35 *De Bruhl v. State Highway & Public Works Comm'n*, 247 N. C. 671, 102 S. E. 2d 229 (1958); *In re Appropriation for Highway Purposes*, 167 Ohio St. 463, 150 N. E. 2d 30 (1958); *White v. State Highway Comm'r*, 201 Va. 885, 114 S. E. 2d 614 (1960). But this uniformly designated valuation date varies according to the different acts that constitute a taking as illustrated by these same cases: *De Bruhl* (an administrative order); *In re Appropriation* (entry on the premises); *White* (initiation of legal proceedings).

market value,³⁶ but where market value has not been reasonably ascertainable, courts have had recourse to what they term the actual or intrinsic value of the property.³⁷

The concept of market value,³⁸ especially as applied to real estate, does not readily admit of concise and practical definition. The practical application of this concept in condemnation proceedings has led to the generally accepted definition of market value; namely,

the amount of money which a purchaser willing but not obliged to buy the property would pay to an owner willing but not obliged to sell it, taking into consideration all uses to which the land was adapted and might in reason be applied.³⁹

The constitutional requirement of just compensation for taking, from which stems the market value criterion, implies full indemnity to the owner.⁴⁰ However, this indemnification extends only to the value of the property taken and does not guarantee that the owner will receive a return for his investment in the land.⁴¹ For purposes of establishing market value, the land is looked upon merely as so much land apart from its sentimental value to the owner of his willingness or unwillingness to sell it.⁴²

Under the market value criterion for establishing just compensation, all the elements of value that contribute to the saleable character of the land are relevant; that is, all facts that an owner would naturally and properly press upon a prospective buyer's attention and that would naturally influence an ordinarily prudent person desiring to purchase.⁴³ Thus, the owner of condemned land is entitled to have it evaluated in light of the highest and best use to which the land can reasonably be adapted, irrespective of its current use or the owner's immediate plans for its use⁴⁴; however, only such highest and best uses as are legally permissible, are not remote or speculative, and would affect the present market value of the land may be considered.⁴⁵

³⁶ *Olson v. United States* 292 U.S. 246 (1934), *Housing Authority v. Lustig*, 139 Conn. 73, 90 A. 2d 169 (1952); *Hoy v. Kansas Turnpike Authority*, 184 Kan. 70, 334 P. 2d 315 (1959); *State Dept. of Highways v. Tolmas*, 238 La. 1, 113 So. 2d 288 (1959); *State Highway Comm'n v. Superbilt Mfg. Co.*, 204 Ore. 393, 281 P. 2d 707 (1955).

³⁷ *Newton Girl Scout Council v. Massachusetts Turnpike Authority*, 335 Mass. 189, 138 N.E. 2d 769 (1956); *Assembly of God Church v. Vallone*, 150 A. 2d 11 (R.I. 1959).

³⁸ The market value concept seems to be synonymous with fair market value and cash market value insofar as they are adapted to eminent domain law. Orgel, *Valuation under Eminent Domain* 817 (1953).

³⁹ *Assembly of God Church v. Vallone*, 150 A. 2d 11, 15 (R.I. 1959). See cases cited *supra* note 36.

⁴⁰ *United States v. Miller*, 317 U.S. 369 (1943); *State ex rel Dep't of Highways v. Barrow*, 238 La. 887, 116 So. 2d 703 (1959); *Schlotman v. Wharton County*, 253 S.W. 2d 325 (Tex. Civ. App. 1953); *Pruner v. State Highway Comm'r*, 173 Va. 307, 4 S.E. 2d 393 (1939).

⁴¹ *United States ex rel. T.V.A. v. Powelson*, 319 U.S. 266 (1943); see cases cited *infra* notes 52 and 56.

⁴² *Wilmington Housing Authority v. Harris*, 47 Del. 469, 93 A. 2d 518 (Super. Ct. 1952); *City of St. Louis v. Paramount Mfg. Co.*, 247 Mo. App. 200, 168 S.W. 2d 149 (1943); *Syracuse University v. State*, 7 Misc. 2d 349, 166 N.Y.S. 2d 402 (Sup. Ct. 1957).

⁴³ *Housing Authority v. Lustig*, 139 Conn. 73, 90 A. 2d 169 (1952); see *Olson v. United States*, 292 U.S. 246 (1934).

⁴⁴ *Department of Public Works & Buildings v. Lambert*, 411 Ill. 183, 103 N.E. 2d 356 (1952); *Hoy v. Kansas Turnpike Authority*, 184 Kan. 70, 334 P. 2d 315 (1959).

⁴⁵ *Olson v. United States*, 292 U.S. 246 (1934); *State Highway Comm'n v. Brown*, 176 Miss. 23, 168 So. 277 (1936); *State Highway Comm'n v. Arnold*, 218 Ore. 43, 341 P. 2d 1089 (1959); *City of Austin v. Canizzo*, 153 Tex. 324, 267 S.W. 2d 808 (1954).

The market value criterion has been bypassed in certain types of cases. The condemned land may have been improved and adapted for such a special usage as not to be readily saleable at anything near its real value,⁴⁶ or other circumstances may preclude the ascertainment of market value.⁴⁷ The landowner's constitutional right to full indemnity for the loss has led courts under these circumstances to adopt the intrinsic value or value to the owner criterion.⁴⁸ Under this criterion, the objective value of the property to the owner, or anyone else, for any special use to which it has been adapted is considered.⁴⁹ It is frequently arrived at by calculating the replacement cost of the improvements on the land less depreciation plus the value of the land.⁵⁰

Only the value of the property taken is to be indemnified under the just compensation for taking provisions of the Federal and State constitutions. Thus, the value of the buildings and fixtures thereon are properly compensable.⁵¹ However, any business operated on such property, including any good will appurtenant thereto and any anticipated profits therefrom, is not considered a property right within the meaning of these constitutional provisions.⁵² The courts have reasoned that the business is severable and distinct from the land; only where the business is taken over by the condemning authority will the owner be compensated for the value of the business.⁵³ The impact of this rule has been alleviated in many States; in some, special legislation authorizes compensation for the taking or damaging of a business by eminent domain⁵⁴; in others, the courts have admitted the profits of a going business concern on condemned property as evidence of its value for its highest and best use.⁵⁵ The restricted scope of this indemnification also precludes compensation for the frustration of contracts related to the condemned property,⁵⁶ and for the inconvenience and expense incident to being dispossessed of the property.⁵⁷

⁴⁶ *Newton Girl Scout Council v. Massachusetts Turnpike Authority*, 335 Mass. 189, 138 N.E. 2d 769 (1956) (summer camp); *Assembly of God Church v. Vallone*, 150 A. 2d 11 (R.I. 1959) (church).

⁴⁷ *State ex rel Dep't of Highways v. Barrow*, 238 La. 887, 116 So. 2d 703 (1959) (by stipulation); *Tigar v. Mystic River Bridge Authority*, 329 Mass. 514, 109 N.E. 2d 148 (1952) (partially built refrigeration plant).

⁴⁸ See cases cited supra notes 46 and 47.

⁴⁹ See cases cited supra note 46.

⁵⁰ See *Assembly of God Church v. Vallone*, 150 A. 2d 11 (R.I. 1959).

⁵¹ *Jackson v. State*, 213 N.Y. 34, 106 N.E. 758 (1914); *State Highway Comm'n v. Super-bilt Mfg. Co.*, 204 Ore. 393, 281 P. 2d 707 (1955).

⁵² *Department of Public Works & Buildings v. Lambert*, 411 Ill. 483, 103 N.E. 2d 356 (1952); *In re Smith St. Bridge*, 234 App. Div. 583, 255 N.Y.S. 801 (1932); *Williams v. State Highway Comm'n*, 252 N.C. 141, 113 S.E. 2d 263 (1960); *State Highway Comm'n v. Vella*, 213 Ore. 386, 323 P. 2d 941 (1958); *Ryan v. Davis*, 201 Va. 79, 109 S.E. 2d 409 (1959).

⁵³ For example, *Kimball Laundry Co. v. United States*, 338 U.S. 1 (1949).

⁵⁴ Fla. Stats. Ann. 1957, Sec. 73.10(4) as construed in *Hooper v. State Road Dep't.*, 105 So. 2d 515 (Fla. App. 1958); Administrative Code, City of New York, Sec. K 41-44.0 as construed in *Application of Huie*, 11 App. Div. 2d 837, 202 N.Y.S. 2d 954 (1960); Vt. Stats. Ann., tit. 19, Sec. 221(2) as construed in *Record v. Vermont Highway Bd.*, 121 Vt. 230, 154 A. 2d 475 (1959).

⁵⁵ See *Housing Authority v. Lustig*, 139 Conn. 73, 90 A. 2d 169 (1952); *State ex rel State Highway Comm'r v. Williams*, 65 N.J. Super. 518, 168 A. 2d 233 (App. Div. 1961).

⁵⁶ *New Jersey Turnpike Authority v. Bowley*, 27 N.J. 549, 143 A. 2d 558 (1958); *Ohio Valley Advertising Corp. v. Linzell*, 168 Ohio St. 259, 153 N.E. 2d 773 (1958).

⁵⁷ *In re Smith St. Bridge*, 234 App. Div. 583, 255 N.Y.S. 801 (1932); *Williams v. State Highway Comm'n*, 252 N.C. 141, 113 S.E. 2d 263 (1960).

Modifications in Partial Taking Cases

Severance Damages. — Computing just compensation for the condemnation of only a part of a tract of land raises a new series of valuation problems. Even under a mere taking provision, the owner of a tract of land is not confined to recovery of the value of the land taken. Besides any increased value that may inhere in the land taken because it is part of a larger tract,⁵⁸ the owner of such a partially condemned tract is further entitled to recover any severance damage to the remainder not taken.⁵⁹ These severance damages include the correlative loss of any value that may have inhere in the remainder as part of the larger tract.⁶⁰ They further include any present or prospective depreciation in the remainder's market value that naturally and proximately results from the proposed use of the condemned part. Any aspect of the proposed use that may detrimentally influence a prospective purchaser of the remainder is properly considered in ascertaining these damages.⁶¹ Severance damage studies, insofar as they trace the subsequent market value history of land severed for highway construction, are especially designed to assist in the computation of severance damages.

Setoff of Benefits. — Integrated with the assessment of severance damages are the various rules governing the setoff of benefits accruing to the remainder parcel from the prospective use for which the land has been condemned. The benefits that frequently accrue from a public improvement to neighboring lands are often the subject of a special assessment on the neighboring land thereby benefited.⁶² Such assessments as serve to defray or cover the cost of the public improvement are a proper exercise of the power of taxation.⁶³ In most jurisdictions and with various limitations discussed later, the same type of benefits are considered in computing the compensation due a landowner for land partially taken by eminent domain. Accordingly, prospective benefits enhancing the market value of land from which condemned land has been severed and attributable to the particular public improvement for which the condemnation has been made⁶⁴ have been set off against the compensation to which the landowner would otherwise be entitled.

Benefits have been classified as either special or general. Special benefits accrue in a peculiar way to a particular tract because of its direct relation to the public improvement. Conversely, general benefits accrue to the general public of the community as well as to directly related lands. In highway condemnation cases, courts have usually distinguished between these two types of benefits on the basis of whether they accrue

⁵⁸ *People ex rel Dep't of Public Works v. Loop*, 127 Cal. App. 2d 786, 274 P. 2d 885 (1954); *State Highway Bd. v. Bridges*, 60 Ga. App. 240, 3 S.E. 2d 907 (1939); *Department of Public Works & Buildings v. Griffin*, 305 Ill. 585, 137 N.E. 523 (1922).

⁵⁹ *MacArthur v. State Highway Dep't*, 85 Ga. App. 500, 69 S.E. 2d 781 (1952); *Case v. State Highway Comm'n*, 156 Kan. 163, 131 P. 2d 696 (1943); *In re Appropriation for Highway Purposes*, 108 Ohio App. 1, 160 N.E. 2d 383 (1959); *State v. Meyers*, 292 S.W. 2d 933 (Tex. Civ. App. 1956).

⁶⁰ *People ex rel Dep't. of Public Works v. Loop*, 127 Cal. App. 2d 786, 274 P. 2d 885 (1954); *Little v. Burleigh County*, 82 N.W. 2d 603 (N.D. 1957); *In re Appropriation of Easement for Highway Purposes*, 93 Ohio App. 179, 112 N.E. 2d 411 (1952).

⁶¹ *State Highway Bd. v. Coleman*, 78 Ga. App. 54, 50 S.E. 2d 262 (1948); *State ex rel. State Highway Comm'n v. Bruening*, 326 S.W. 2d 305 (Mo. 1959); *State Highway Comm'r v. National Fireproofing Corp.*, 127 N.J.L. 346, 22 A. 2d 268 (E. & A. 1941).

⁶² See Economic Research Agency, "Special Assessments in Theory and Practice," Bureau of Public Roads Report (1960).

⁶³ *Roberts v. Richland Irrigation Dist.*, 289 U.S. 71 (1933); see generally Economic Research Agency, op. cit. supra note 62, at 21-37.

⁶⁴ *People v. McReynolds*, 31 Cal. App. 2d 219, 87 P. 2d 734 (1939); *Denver Joint Stock Land Bank v. Board of County Comm'rs*, 105 Colo. 366, 98 P. 2d 283 (1940); *Gilmore v. State*, 208 Misc. 427, 143 N.Y.S. 2d 873 (Ct. Cl. 1955).

only to lands abutting the highway or to nonabutting lands as well.⁶⁵ Thus, benefits that accrue to nearby lands that do not abut the highway are regarded as general benefits⁶⁶; however, benefits that accrue to both those abutting lands, no part of which has been taken for the highway, and those that have been partially condemned are regarded as special benefits.⁶⁷ Severance damage studies, which analyze the market value development of highway severed remainder parcels, are designed to assist in the determination and measurement of special and general benefits; with respect to general benefits, however, a similar service may be provided by other economic impact studies which analyze the market value development of highway-affected communities.

Both general and special benefits may be set off in some States,⁶⁸ but only special benefits are deductible in a majority of States.⁶⁹ Setoff of both types has been held perfectly consistent with the property owner's right of full indemnification, and, accordingly, has been constitutionally sanctioned.⁷⁰ Historically, set off has been justified as an exercise of the power of taxation.⁷¹ Setoff of general benefits has been disallowed primarily for two reasons. Such setoff has been regarded as an unjustly exacted payment from the owner of partially condemned property for benefits equally enjoyed by his neighbors without charge.⁷² Such benefits have also been regarded as too speculative to be assessable as compensation.⁷³

The rules of setoff further differ as to the elements of compensation from which benefits may be deducted. Except in two States, benefits are everywhere set off against severance damages to the remainder.⁷⁴ Under this rule, benefits are regarded as one of the elements enhancing the property's market value, only the depreciation of which is compensable.⁷⁵ On the other hand, several States prohibit the setoff of benefits against the value of the property taken.⁷⁶ It is primarily the requirement of many of these State constitutions that just compensation be made in money which precludes setoff against the value of the land taken.⁷⁷ Conversely, where setoff against the full compensation is

⁶⁵ *Koelsch v. Arkansas State Highway Comm'n*, 223 Ark. 529, 267 S.W. 2d 4 (1954); *Louisiana Highway Comm'n v. Grey*, 197 La. 942, 2 So. 2d 654 (1941); *State ex rel. State Highway Comm'n v. Young*, 324 Mo. 277, 23 S.W. 2d 130 (1929); *State Highway Comm'n v. Bailey*, 212 Ore. 261, 319 P. 2d 906 (1957). See also *McRea v. Marion County*, 222 Ala. 511, 133 So. 278 (1931); *Board of Comm'rs v. Gardner*, 57 N.M. 478, 260 P. 2d 682 (1953).

⁶⁶ *Louisiana Highway Comm'n v. Grey*, 197 La. 942, 2 So. 2d 654 (1941).

⁶⁷ *State v. Smith*, 237 Ind. 72, 143 N.E. 2d 666 (1957); *State ex rel. State Highway Comm'n v. Young*, 324 Mo. 277, 23 S.W. 2d 130 (1929).

⁶⁸ See Appendix B, Columns A and C.

⁶⁹ See Appendix B, Columns B and D.

⁷⁰ *McCoy v. Union Elevated R.R.*, 247 U.S. 354, 365-66 (1918); *Board of County Comm'rs v. Gardner*, 57 N.M. 478, 260 Pac. 2d 682 (1953); *Long v. Shirley*, 177 Va. 401, 14 S.E. 2d 375 (1941).

⁷¹ *Newby v. Platte County*, 25 Mo. 258 (1857).

⁷² *Louisiana Highway Comm'n v. Grey*, 197 La. 942, 2 So. 2d 654 (1941); *Petition of Reeder*, 110 Ore. 484, 222 P. 724 (1924); *Demers v. City of Montpelier*, 120 Vt. 380, 141 A. 2d 676 (1958).

⁷³ *State v. Hudson County Bd. of Chosen Freeholders*, 55 N.J.L. 88, 25 Atl. 322 (1892); *Hempstead v. Salt Lake City*, 32 Utah 261, 90 Pac. 397 (1907).

⁷⁴ See Appendix B, Columns A, B, C and D.

⁷⁵ *Department of Public Works & Buildings v. Barton*, 371 Ill. 11, 19 N.E. 2d 935 (1939). See Appendix B, Columns A, B, C, and D.

⁷⁶ See Appendix B, Columns C, D, and E.

⁷⁷ *Kane v. City of Chicago*, 392 Ill. 172, 64 N.E. 2d 506 (1946); *In re Fourth Ave.*, 125 Misc. 133, 210 N.Y.S. 184 (Sup. Ct. 1925), rev'd on other grounds, 221 App. Div. 458, 223 N.Y.S. 525 (1927); *Wray v. Knoxville, L.F. & J. R.R.*, 113 Tenn. 544, 82 S.W. 471 (1904). See Appendix B, Columns C and D.

allowed, it is regarded as the only just allocation of cost between the public treasury and the private property owner.⁷⁸

Thus, in cases where part of a tract of land is taken by eminent domain, determination of the landowner's just compensation will be affected by the rules of setoff in any one of five different ways depending on the local law: (a) general and special benefits may be set off against both the value of the land taken and the severance damages to the remainder,⁷⁹ (b) general and special benefits may be set off only against the severance damages,⁸⁰ (c) only special benefits may be set off against the value of the land taken and the severance damages,⁸¹ (d) only special benefits may be set off against the severance damages,⁸² or (e) no benefits of any kind may be set off.⁸³ The cost of highway right-of-way acquisition, which necessarily involves much partial taking, is substantially affected by whichever setoff rule applies. This is illustrated by the varying amounts payable in the following hypothetical situation:

Original value	\$200,000
Value of land acquired	80,000
Severance damage	20,000
Special benefit	40,000
General benefit	50,000
Prevailing Rule	Compensation Due Owner (\$)
1. In some States, the amount payable to a landowner for land taken or damages to the remainder can be offset by any special and general benefits ($\$80,000 + \$20,000 - \$40,000 - \$50,000 = \$10,000$)	10,000
2. In a number of States special benefits may be used to offset damages to the remainder only ($\$80,000 + 0 [\$20,000 - \$40,000] = \$80,000$)	80,000
3. In some States, special benefits may be applied against the cost of land acquired and damages to the remainder ($\$80,000 + \$20,000 - \$40,000 = \$60,000$)	60,000
4. In some States, both special and general benefits may be deducted but only from any damage to the remainder ($\$80,000 + 0 [\$20,000 - \$40,000 - \$50,000] = \$80,000$)	80,000
5. In two States no offset of benefits is permitted ($\$80,000 + \$20,000 - 0 = \$100,000$)	100,000

Formulas for Computing Just Compensation

The several considerations incident to ascertaining the condemnee's just compensation in partial taking cases have resulted in two judicially created rules. Under the before-and-after method, the condemnation tribunal always appraises, according to

⁷⁸ See *Bauman v. Ross*, 167 U. S. 548, 574-84 (1897). See Appendix B, Columns A and B.

⁷⁹ See Appendix B, Column A.

⁸⁰ See Appendix B, Column C.

⁸¹ See Appendix B, Column B.

⁸² See Appendix B, Column D.

⁸³ See Appendix B, Column E.

the same principles previously discussed, the value of the entire tract of land before the partial taking.⁸⁴ Then, if no benefits are to be set off, it appraises the remainder without regard to any expected benefits.⁸⁵ However, if any benefits can be considered, the remainder is appraised in light of those anticipated benefits that can properly be set off.⁸⁶ The inherent shortcoming of this formula lies in its inability to segregate the value of the part taken from severance damages to the remainder. For this reason, it would seem inadequate where benefits are to be set off only against severance damages. Although the before value may be shown by comparable sales of similar property, the very nature of the severed remainder which abuts the highway after the taking may severely limit the available comparable sales evidence of the after value. However, severance damage studies, through their classification and compilation of the sales of similarly severed parcels, would provide such badly needed comparable sales evidence.

As an alternative, the value plus damages formula provides a much more complex but theoretically precise method of computing the condemnee's award in partial taking cases. Under this formula, the value of the part taken is separately appraised⁸⁷; then the severance damages to the remainder are determined either as a separate sum⁸⁸ or in light of the benefits properly set off.⁸⁹ Where the damages have been separately computed, any permissible setoff benefits are assessed.⁹⁰ Then, the final award is computed by subtracting from the sum of the value of the land taken and the severance damages, or only from the latter as determined by local law, all properly set off and separately assessed benefits.⁹¹ Severance damage studies, by focusing on the subsequent history of severed parcels, are especially geared to provide reliable indexes of both the damage and benefits resulting to the severed remainder from highway takings.

In a comparative appraisal, each of these formulas appears to have its own distinctive merits. Only the value-plus-damages rule recognizes and theoretically complies with the condemnee's constitutional and statutory rights to be compensated in money for land taken. However, the artificial and complex dichotomies of this formula make it inherently difficult to apply. Under it the same element of damage may be assessed in duplicate under different theoretical guises.⁹² On the other hand, the before-and-after rule stands out for its simplicity of application and its inherent capacity to reflect in appropriate proportions the value of the land taken and the severance damages. Its main drawback is its inability to segregate the value of land taken from severance damages to assure compensation in money for the former.

⁸⁴ *Hamer v. Iowa State Highway Comm'n*, 250 Iowa 1228, 98 N.W. 2d 746 (1959); *Barnes v. North Carolina State Highway Comm'n*, 250 N.C. 378, 109 S.E. 2d 219 (1959); *Johnson's Petition*, 344 Pa. 5, 23 A. 2d 880 (1942).

⁸⁵ *Hamer v. Iowa State Highway Comm'n*, 250 Iowa 1228, 98 N.W. 2d 746 (1959).

⁸⁶ *State v. Stoner*, 271 Ala. 3, 122 So. 2d 115 (1960); *Gabriel v. Cox*, 130 Conn. 165, 32 A. 2d 649 (1943); *Barnes v. North Carolina State Highway Comm'n*, 250 N.C. 378, 109 S.E. 2d 219 (1959); *Johnson's Petition*, 344 Pa. 5, 23 A. 2d 880 (1942).

⁸⁷ See *People ex rel Dep't of Public Works v. Loop*, 127 Cal. App. 2d 786, 274 P. 2d 885 (1954); *State Highway Bd. v. Bridges*, 60 Ga. App. 240, 3 S.E. 2d 907 (1939); *Department of Public Works & Buildings v. Griffin*, 305 Ill. 585, 137 N.E. 523 (1922).

⁸⁸ See *People ex rel Dep't of Public Works v. Schultz Co.*, 123 Cal. App. 2d 925, 268 P. 2d 117 (1954); *State Highway Bd. v. Bridges*, 60 Ga. App. 240, 3 S.E. 2d 907 (1939); *State ex rel. State Highway Comm'n v. White*, 254 S.W. 2d 668 (Mo. App. 1953); *D'Angelo v. Director of Public Works*, 152 A. 2d 211 (R.I. 1959).

⁸⁹ See *Department of Public Works v. Barton*, 371 Ill. 11, 19 N.E. 2d 935 (1939); *In re Appropriation for Highway Purposes*, 93 Ohio App. 179, 112 N.E. 2d 411 (1952); *State Highway Comm'n v. Bailey*, 212 Ore. 261, 319 P. 2d 906 (1957).

⁹⁰ See cases cited supra note 88.

⁹¹ See cases cited supra notes 88 and 89.

⁹² *Sorensen v. Cox*, 132 Conn. 583, 568-87, 46 A. 2d 125, 126 (1946).

Proof of Value

Applicability of the Rules of Evidence.—The concepts of value relating to just compensation and the formulas integrating them can be effectuated only insofar as the rules of evidence permit. Each time the power of eminent domain is exercised to take private property, the quantum of the owner's just compensation must be determined by an arbiter of the facts. State constitutions and statutes variously provide for this function to be performed by either a board of commissioners⁹³ or a common law jury.⁹⁴ The board of commissioners chosen for its peculiar skill and knowledge in property valuation is generally not bound by the rules of evidence.⁹⁵ Rather, its members are simply charged to appraise impartially and to the best of their skill and knowledge according to the substantive rules of valuation.⁹⁶ In contrast, the common law jury, not chosen for any special knowledge or skill, is for the most part bound by these rules.⁹⁷ Hence, in proof of the condemned property's value, the rules of evidence exclude from the jury's consideration any evidence that is not both competent in itself and material and relevant to this issue.⁹⁸ Severance damage studies by the very nature of their subject matter ought to be found both material and relevant to the issue of market value in partial taking cases; the evidentiary status of these studies might be challenged on the basis of competency. However, as discussed later, severance damage studies when properly conducted ought to be found sufficiently competent to be admitted as an exception to the hearsay rule.⁹⁹

The Objective of Market Value Evidence.—Within the scope of these rules, certain types of evidence are commonly used and very strategic in proving the market value of condemned property. Market value is not simply an inherent quality of the property. It is largely a reflection of the state of mind of the public with respect to that property.¹⁰⁰ This state of mind is commonly proven by the opinions of qualified witnesses who testify what value they estimate the public would attach to the particular property taken or damaged by eminent domain. This state of mind is also frequently proven by deduction from the prices paid in recent sales of the same or similar property which are admitted as evidence of the market value. By virtue of the index of this state of the public mind which the severance damage studies are designed to provide, these studies ought to implement opinion testimony on the market value issue and provide a broader scope of sales evidence.

⁹³ For example, Alabama: Ala. Code Ann., tit. 19, §84, 10-16 (1940) (with right to appeal to common law jury in trial de novo); Georgia: Ga. Code Ann., §36-401-36-403 (1933)(with right to appeal to common law jury in trial de novo); Missouri: Mo. Rev. Stat., §523.040 (1959) (with right to appeal to common law jury in trial de novo), Virginia: Va. Code, §33-63 (1950) (without right to appeal to common law jury in trial de novo).

⁹⁴ For example, Arizona: Ariz. Const. art. 2, §23; Ariz. Rev. Stat Ann., §§1146-47 (1956); Florida: Fla. Const. art. 16, §29; Fla. Stat., §73.10 (1957); Illinois: Ill. Const. art. II, §13 (not applicable to the State); Ill. Rev Stat., c. 47, §1 (Supp. 1960) (applicable to the State); Massachusetts: Mass. Gen. Laws Ann., c. 79, §22, c. 80A, §9 (1958).

⁹⁵ See *Shoemaker v. United States*, 147 U.S. 282, 303-06 (1893); *In re Bronx Parkway Comm'n*, 206 App. Div. 526, 202 N.Y.S. 249 (1923). But cf. *Pruner v. State Highway Comm'r*, 173 Va. 307, 4 S.E. 2d 393 (1939).

⁹⁶ *Shoemaker v. United States*, 147 U.S. 282, 303-06 (1893).

⁹⁷ *City of Chicago v. Harbecke*, 409 Ill. 425, 100 N.E. 2d 616 (1951).

⁹⁸ *Hance v. State Roads Comm'n*, 221 Md. 164, 171, 156 A. 2d 644, 647 (1959).

⁹⁹ See page 80.

¹⁰⁰ *Epstein v. Boston Housing Authority*, 317 Mass. 297, 299, 58 N.E. 2d 135, 137 (1944).

Evidence of Other Sales

Actual sales of the condemned property not too remote from the valuation date and voluntarily bargained in good faith are admissible evidence of the property's market value.¹⁰¹ This type of evidence is most strategic. Any prospective purchaser of land is bound to be influenced by the price recently paid for it in a voluntary and bona fide sale. The jury seeking to indemnify a property owner for his loss is naturally influenced by any price recently paid by him for the property. The mere fact that it is the identically same property precludes many of the distracting collateral issues which would otherwise arise.¹⁰² Nevertheless, such evidence is not conclusive of the property's value at the time of taking.¹⁰³

In contrast to evidence of recent sales of the condemned property, evidence of recent sales of property similar to the condemned land is usually much more available, but much less readily admissible. Although evidence of such sales is universally admissible to cross-examine opinion testimony,¹⁰⁴ a minority of four States prohibit its use as direct evidence of market value.¹⁰⁵ However, the law of the great majority favors the soundness of admitting such sales as direct evidence of market value. Thirty States expressly allow such sales as independent evidence of market value¹⁰⁶; those of the remaining States, whose courts have considered this kind of evidence, all tend to give it some affirmative probative value¹⁰⁷ and there has been a noticeable change-over recently in which a number of former minority States have adopted the majority rule.¹⁰⁸

Cogent reasons support the admissibility of such sales either as independent evidence of market value or in support of opinion testimony. Market value, the criterion of just compensation, is the price at which property sells in the open market. Such sales, when made under normal and fair conditions, are by their very nature, a more valid indication of market value than the speculative opinions of witnesses.¹⁰⁹ Thus, when offered in support of such testimony, sales evidence necessarily enhances the testimony, and when offered as independent evidence, provides a firm basis for any condemnation award that may ignore other kinds of evidence. Severance damage studies, insofar as they are based on comparable sales of severed parcels, ought to be accorded equally strong probative value.

The inherent drawback of evidence of recent sales of similar property is the multitude of collateral issues that each such sale raises. For each such sale proffered in evidence, the court often decides as preliminary questions of fact the numerous issues of comparability, proximity, and voluntariness discussed later. Furthermore, for each such sale

¹⁰¹ *Epstein v. City & County of Denver*, 133 Colo. 104, 293 P. 2d 308 (1956); *Mississippi State Highway Comm'n v. Taylor*, 237 Miss. 847, 116 So. 2d 757 (1960); *In re Ohio Turnpike Comm'n*, 164 Ohio St. 377, 131 N. E. 2d 397 (1955) Cert. denied, 352 U. S. 806 (1957), *B & K, Inc. v. Commonwealth*, 398 Pa. 518, 159 A. 2d 206 (1960).

¹⁰² *Mississippi State Highway Comm'n v. Taylor*, 237 Miss. 847, 853, 116 So. 2d 757, 760 (1960); cf. *Eames v. Southern N. H. Hydro-Elect. Corp.*, 85 N. H. 379, 381-82, 159 Atl. 128, 129 (1932); *State v. Peek*, 1 Utah 2d 263, 271, 265 P. 2d 630, 636 (1953).

¹⁰³ *Epstein v. City & County of Denver*, 133 Colo. 104, 108-09, 293 P. 2d 308, 310 (1956).

¹⁰⁴ *State v. Peek*, 1 Utah 2d 263, 273, 265 P. 2d 630, 637 (1953); e. g., *Templeton v. State Highway Comm'n*, 254 N. C. 337, 118 S. E. 2d 918 (1961); *Pittsburgh Terminal Warehouse & Transfer Co. v. Pittsburgh*, 330 Pa. 72, 198 Atl. 632 (1938).

¹⁰⁵ See Appendix C, Column D

¹⁰⁶ See Appendix C, Column A

¹⁰⁷ See Appendix C, Columns B and C.

¹⁰⁸ For example, *County of Los Angeles v. Faus*, 48 Cal. 2d 672, 312 P. 2d 680 (1957); *Redfield v. Iowa State Highway Comm'n*, 251 Iowa 332, 99 N. W. 2d 413 (1959); *Village of Lawrence v. Greenwood*, 300 N. Y. 231, 90 N. E. 2d 53 (1949).

¹⁰⁹ *Stewart v. Commonwealth*, 337 S. W. 2d 880, 884 (1960); *State v. Peek*, 1 Utah 2d 263, 272, 265 P. 2d 630, 636 (1953).

admitted in evidence, the jury must decide wherein and to what extent the recently sold parcel differs from the condemned parcel, and make allowance for such difference in arriving at the latter's value.¹¹⁰ The multitude of these collateral issues, especially when multiplied by the number of comparable sales introduced, may substantially impede the valuation procedure by their digressive effect. For this reason, the number of comparable sales admissible in any one case may be regulated by the court¹¹¹ and in four States such sales are not admissible in direct evidence at all.¹¹² As discussed previously, the admission of statistical surveys would require the court to determine, as a preliminary question of fact, whether the proper methodology had been followed in conducting the survey to establish its reliability as evidence. However, once this collateral issue is resolved, a much broader scope of comparable sales evidence is available to the jury.

Certain requirements of similarity and proximity restrict the admission of all such sales of similar property. The property sold must be sufficiently similar in character and geographically proximate to the condemned property to be useful in reflecting the latter's market value.¹¹³ The exact degree of each qualification required in each case is largely determinable by the trial court within its discretionary power.¹¹⁴ However, certain elements of similarity are almost universally demanded by the courts. Where nearness to schools, churches, transportation, and shopping centers substantially influences the value of property, only sales of property located a similar distance from these public facilities may be admissible as comparable.¹¹⁵ Where the highest and best use of a tract of land is for agricultural purposes, sales of more distant property with soil of a similar character may be deemed sufficiently similar to be admissible.¹¹⁶

Where the condemned property has been adaptable for such a special highest and best use that sales of similarly adaptable property in the same community were not available, the requirement of geographical proximity has been largely abrogated.¹¹⁷ For the same reasons, the market value of severed lands with a special highest and best use due to their adjacency and access to a major highway ought to be provable by the sales price of a comparable remainder in another community. Similarity in the topographical features, size, and shape of the two parcels is also considered.¹¹⁸ If the individual sales compiled in severance damage studies were to be introduced in evidence, each such sale would be subjected to these same tests of comparability. However, if a survey of such sales made in a severance damage study were to be admitted in aggregate form, the comparability of the sales there included would be shown by an examination of those who conducted the survey on their methodology and criteria.

Furthermore, sales of similar land, to be admissible, must be so proximate in time to the date when the condemned property was taken as to furnish an indication of value at

¹¹⁰ *Forest Preserve Dist. v. Kean*, 298 Ill. 37, 131 N.E. 117 (1921).

¹¹¹ *Stewart v. Commonwealth*, 337 S.W. 2d 880, 883 (1960); *State v. Peek*, 1 Utah 2d 263, 273, 265 P. 2d 630, 637 (1953).

¹¹² See Appendix C, Column D.

¹¹³ *County of Los Angeles v. Faus*, 48 Cal. 2d 672, 312 P. 2d 680 (1957); *Department of Public Works & Buildings v. Drabnick*, 14 Ill. 2d 28, 150 N.E. 2d 593 (1958); *Application of Port of New York Authority*, 28 N.J. Super. 575, 101 A. 2d 365 (App. Div. 1953); *State v. Peek*, 1 Utah 2d 263, 265 P. 2d 630 (1953).

¹¹⁴ Cases cited *supra* note 113.

¹¹⁵ See *State ex rel Dep't of Highways v. Barber*, 238 La. 587, 115 So. 2d 864 (1959).

¹¹⁶ See *Gardner v. Brookline*, 127 Mass. 358 (1879).

¹¹⁷ See *Knollman v. United States*, 214 F. 2d 106 (6th Cir. 1954) (suitable for industrial development).

¹¹⁸ *Vann v. State Highway Dep't*, 95 Ga. App. 243, 97 S.E. 2d 550 (1957); *Stewart v. Commonwealth*, 337 S.W. 2d 880 (Ky. 1960).

the latter date.¹¹⁹ The permissible interval depends partly on the stability of market conditions and the availability of more recent sales, but is ultimately in each case determinable by the court within its broad discretionary power.¹²⁰ The timeliness of sales included in severance damage study surveys could easily be shown by the survey director's testimony.

Both recent sales of the condemned property and recent sales of similar property, to be admissible, must have been voluntary and bargained in good faith.¹²¹ The requirement of voluntariness precludes evidence of sales wherein either party acted under any coercion. Thus, where the threat of condemnation or the need to sell out or purchase with undue haste has induced either party to consummate a sale, such a sale is not admissible evidence.¹²² On this basis, a majority of the States exclude all sales to a condemnor or purchaser with the power of eminent domain.¹²³ To assure that such sales evidence reflects market value, only such sales as were bargained in good faith by both parties are admissible.¹²⁴ Thus, only sales made by parties capable and desirous of protecting their own interests are admissible. The voluntary and good faith nature of sales included in severance damage studies is one of the facts ascertained by those who conduct such studies. Thus, the exact degree of voluntariness and good faith common to all such sales included in any survey introduced in evidence could be ascertained by examining those who conducted the survey.

When a sale of similar property has been ruled admissible, it is merely deemed sufficiently similar to be helpful in evaluating the condemned property. Both parties are then entitled to introduce evidence of the differences between the two properties to show wherein and to what extent the condemned property's value is greater or lesser.¹²⁵ A severance damage study survey, when ruled admissible, might also on examination of the study director be shown to be based partly on dissimilar sales. Thus, the admission in evidence of such a survey would not preclude either party from showing wherein the condemned property's value should not be governed by the survey. However, severance damage studies by the breadth of their scope would weigh heavily against any speculative valuation of the condemned property.

When such sales are admitted as independent evidence of value, the sales price must be proven with as much formality as other material facts. Thus, only those who were parties or brokers to such sales, or who in some other manner knew of the price paid of their own knowledge, are competent to testify to the prices paid in such sales.¹²⁶ Accordingly, the mere recital of consideration in a deed and other hearsay sources of price information are not admissible.¹²⁷ However, the Federal revenue stamps affixed to real estate deeds have been admitted as evidence of the amount of consideration.¹²⁸

119 *County of Los Angeles v. Faus*, 48 Cal. 2d 672, 312 P. 2d 680 (1957); *Application of Port of New York Authority*, 28 N.J. Super. 575, 101 A. 2d 365 (App. Div. 1953)

120 Cases cited supra note 119

121 *Epstein v. Boston Housing Authority*, 317 Mass. 297, 58 N.E. 2d 135 (1944) (similar property); *State ex rel. State Highway Comm'n v. Rauscher*, 291 S.W. 2d 89 (Mo. 1956) (same property); *Application of Port of New York Authority*, 28 N.J. Super. 575, 101 A. 2d 365 (App. Div. 1953) (similar property); *Thompson v. State*, 319 S.W. 2d 368 (Tex. Civ. App. 1958) (same property).

122 *Congregation of the Mission of St. Vincent de Paul v. Commonwealth*, 336 Mass. 357, 145 N.E. 2d 681 (1957); *Phelps v. State*, 157 S.W. 2d 955 (Tex. Civ. App. 1942)

123 For example, *Stewart v. Commonwealth*, 337 S.W. 2d 880 (Ky. 1960); *Robards v. State*, 285 S.W. 2d 247 (Tex. Civ. App. 1955). *Contra*, *County of Los Angeles v. Faus*, 48 Cal. 2d 672, 312 P. 2d 680 (1957).

124 Cases cited supra note 121.

125 *Forest Preserve Dist. v. Kean*, 298 Ill. 37, 131 N.E. 117 (1921)

126 *United States v. Katz*, 213 F. 2d 799 (1st Cir.) Cert. denied, 348 U.S. 857 (1954); *City & County of Denver v. Quick*, 108 Colo. 111, 113 P. 2d 999 (1941)

127 *Phelps v. State*, 157 S.W. 2d 955 (Tex. Civ. App. 1942).

128 *Redfield v. Iowa State Highway Comm'n*, 251 Iowa 332, 99 N.W. 2d 413 (1959); cf. *In re Ohio Turnpike Comm'n*, 164 Ohio St. 377, 131 N.E. 2d 397 (1955). *Contra*, *City & County of Denver v. Quick*, 108 Colo. 111, 113 P. 2d 999 (1941).

Thus, the sales price information collected in severance damage studies would be reliable and, therefore, competent evidence so long as, in the conduct of the study, this information be taken from either interviews with parties to the transactions or, in some States, from the Federal revenue stamps on the deeds.

Opinion Evidence.—Historically, market value has been regarded by the courts as merely a matter of opinion.¹²⁹ To assist the condemnation jury in forming its opinion of the market value of property taken or damaged by the exercise of eminent domain, the opinion testimony of those with special knowledge relating to the property's value is admissible evidence.¹³⁰ Such opinion evidence, however, is merely advisory and, accordingly, not binding on the jury.¹³¹

Consistent with the rationale for the admissibility of all opinion testimony, such opinions may be given only by those possessed of some special knowledge or skill deemed valuable to the jury in forming its conclusion.¹³² In condemnation proceedings, real estate experts are everywhere competent to give opinion testimony on the property's market value,¹³³ and in some States neighboring residents and businessmen are also competent to so testify.¹³⁴ Moreover, in addition to their respective special knowledge or skills, all condemnation value opinion witnesses must possess certain factual knowledge. They must all be both personally acquainted with the condemned property and personally familiar with the state of the market in that area.¹³⁵

Those who have bought and sold, valued or managed real estate in the community are deemed to have acquired therefrom such skill in appraisal and such knowledge of property values as to be real estate experts competent to give opinion testimony.¹³⁶ Such experts must also have a personal knowledge of the condemned property and market conditions in the area. Accordingly, they must base their testimony on characteristics and conditions they have actually observed rather than on hypothetical conditions.¹³⁷ Only in the absence of a market value are specialized experts competent to give opinion testimony regarding the property's intrinsic value.¹³⁸ Real estate expert testimony has been regarded as the most practical medium of presenting to the jury the appraisal hypotheses on which either party seeks to have the condemnation award based.¹³⁹

¹²⁹ See *Montana Ry. v. Warren*, 137 U.S. 349 (1890).

¹³⁰ *People v. Al. G. Smith Co.*, 86 Cal. App. 2d 308, 194 P. 2d 750 (1948); *State v. Peterson*, 134 Mont. 52, 323 P. 2d 617 (1958); *Application of Port of New York Authority*, 28 N.J. Super. 575, 101 A. 2d 365 (App. Div. 1953).

¹³¹ *State ex rel. Dep't of Highways v. Hub Realty Co.*, 239 La. 154, 118 So. 2d 364 (1960); *Port of New York Authority v. Howell*, 59 N.J. Super. 343, 157 A. 2d 731 (Law Div. 1960).

¹³² *Blount County v. Campbell*, 268 Ala. 548, 109 So. 2d 678 (1959); *State ex rel. State Highway Comm'n v. Devenyns*, 179 S.W. 2d 740 (Mo. App. 1944).

¹³³ For example, *Shelby County v. Baker*, 269 Ala. 111, 110 So. 2d 896 (1959); *Department of Public Works & Buildings v. Pellini*, 7 Ill. 2d 367, 131 N.E. 2d 55 (1955); *Muzi v. Commonwealth*, 335 Mass. 101, 138 N.E. 2d 578 (1956).

¹³⁴ For example, *State v. McDonald*, 88 Ariz. 1, 352 P. 2d 343 (1960); *Southwick v. Massachusetts Turnpike Authority*, 339 Mass. 666, 162 N.E. 2d 271 (1959); *Taney County v. Addington*, 304 S.W. 2d 842 (Mo. 1957); *South Carolina State Highway Dep't v. Hines*, 234 S.C. 254, 107 S.E. 2d 643 (1959).

¹³⁵ *Shelby County v. Baker*, 269 Ala. 111, 110 So. 2d 896 (1959); *Lazenby v. Arkansas State Highway Comm'n*, 231 Ark. 601, 331 S.W. 2d 705 (1960); *Forest Preserve Dist. v. Krol*, 12 Ill. 2d 139, 145 N.E. 2d 599 (1957); *State ex rel. State Highway Comm'n v. Devenyns*, 179 S.W. 2d 740 (Mo. App. 1944).

¹³⁶ See cases cited supra note 133.

¹³⁷ *Chicago & W.I. R.R. v. Heidenreich*, 254 Ill. 231, 239-40, 98 N.E. 567, 571 (1912).

¹³⁸ See *Eisenring v. Kansas Turnpike Authority*, 183 Kan. 774, 332 P. 2d 539 (1958); *Newton Girl Scout Council v. Massachusetts Turnpike Authority*, 335 Mass. 189, 138 N.E. 2d 769 (1956).

¹³⁹ *Application of Port of New York Authority*, 28 N.J. Super. 575, 579, 101 A. 2d 365, 367 (App. Div. 1953).

Both severance damage studies and other economic impact studies would provide a means of testing such a witness's expertise in appraising highway-affected property.

In a majority of jurisdictions, neighboring residents and businessmen are deemed competent to give opinion testimony.¹⁴⁰ This competence is premised on the special familiarity with local real estate values which they are presumed to have acquired by their long-standing activity and interest in the area.¹⁴¹ Such lay witnesses are not deemed to possess any special appraisal skill; rather, it is their special familiarity with local values that qualifies them to give value opinion testimony.¹⁴²

The speculative nature of such testimony is perhaps best illustrated by a recent Missouri highway condemnation case¹⁴³ in which the only opinion witnesses on value were two neighboring farmers. An award of \$400 was determined by commissioners. Both parties appealed to the Circuit Court for a jury trial. On the before-and-after basis, one farmer's testimony would have warranted a \$4,725 award, and the other's testimony, a \$2,500 award. Apparently influenced by these lay witnesses, the jury awarded \$2,000. Where there are no available real estate experts familiar with the condemned property and values in its surrounding area, such lay witnesses may be the only available means of proving value. In such a situation, severance damage studies ought to provide both a ready selection of sales of comparably severed parcels and a more reliable index of the remainder's value through survey evidence. Furthermore, any economic impact studies relating to the area of the condemned property might be used to cross-examine the lay witness on his knowledge of local real estate values.

The owner of the condemned property is deemed competent to give his opinion of the property's value by virtue of the knowledge of it which he is presumed to have as owner.¹⁴⁴ Although this type of testimony is competent as a matter of law, the condemnee's natural bias has been said to derogate from the weight a jury would otherwise accord to it. For this reason, it has been suggested that such testimony serves little more than to enable the owner to present his claim personally to the jury.¹⁴⁵ Cross-examination on the basis of severance damage studies ought to both substantiate any reasonable claims expressed in testimony by such an owner and delineate the true nature of any speculative claims proffered by him.

All opinion testimony on the condemned property's value must be based on the substantive rules of valuation previously discussed.¹⁴⁶ In support of his opinion, the condemnation value witness should on direct examination give the facts on which it is

¹⁴⁰ E. g., *Shelby County v. Baker*, 269 Ala. 111, 110 So. 2d 896 (1959); *State v. McDonald*, 88 Ariz. 1, 352 P. 2d 343 (1960); *Taney County v. Addington*, 304 S. W. 2d 842 (Mo. 1957); *South Carolina State Highway Dept. v. Hines*, 234 S. C. 254, 107 S. E. 2d 643 (1959).

¹⁴¹ *State v. McDonald*, 88 Ariz. 1, 352 P. 2d 343 (1960).

¹⁴² *Shelby County v. Baker*, 269 Ala. 111, 110 So. 2d 896 (1959); *South Carolina State Highway Dept. v. Hines*, 234 S. C. 254, 107 S. E. 2d 643 (1959).

¹⁴³ *Taney County v. Addington*, 304 S. W. 2d 842 (Mo. 1957).

¹⁴⁴ E. g., *Arkansas State Highway Comm'n v. Covert*, 338 S. W. 2d 196 (Ark. 1960); *Randle v. Kansas Turnpike Authority*, 181 Kan. 416, 312, P. 2d 235 (1957); *Southwick v. Massachusetts Turnpike Authority*, 339 Mass. 666, 162 N. E. 2d 271 (1959). *Contra Green v. State Bd. of Pub. Rds.* 50 R. I. 489, 149 Atl. 596 (1930).

¹⁴⁵ *Besen v. State*, 17 Misc. 2d 119, 130, 185 N. Y. S. 2d 495, 504 (Ct. Cl. 1959).

¹⁴⁶ *Indianapolis & Cincinnati Traction Co. v. Wiles*, 174 Ind. 236, 91 N. E. 161 (1910); see *Mississippi State Highway Comm'n v. Hillman*, 189 Miss. 850, 198 So. 565 (1940); *City of Houston v. Fisher*, 322 S. W. 2d 297 (Tex. Civ. App. 1959).

based.¹⁴⁷ These facts indicate the extent of the witness's familiarity with the condemned property. This familiarity naturally affects the weight the jury will accord to the testimony. Such supporting evidence has been held indispensable to sustain the opinion.¹⁴⁸ The reasons or general principles on which the opinion is based may also be given on direct examination,¹⁴⁹ even though they are frequently left to be extracted on cross-examination. Severance damage study surveys and other economic impact studies help to provide facts on which the expert opinion witness can rely.

The supporting data to which the opinion witness testifies must be relevant and competent.¹⁵⁰ Thus, the opinion witness, with few exceptions,¹⁵¹ can testify on direct examination only to such data as would be admissible as independent evidence. However, the hearsay rule has been somewhat relaxed in its application to the supporting data offered by expert opinion witnesses.¹⁵² The Oregon Supreme Court seems to have fashioned another exception to the hearsay rule. They have held that a real estate appraiser may properly introduce as supporting evidence for his expert opinion reports made by other investigators which he deems reliable.¹⁵³ Other courts have indicated a similar inclination.¹⁵⁴ Severance damage studies and other economic impact studies would seem to qualify under such a hearsay exception. The need for a hearsay exception to allow the use of these studies as evidence is discussed in the next section of this report.

ANALOGIES TO OTHER FIELDS OF LAW

The need to improve the means for ascertaining measures for fair compensation has already been described. The conventional rules governing the admissibility of evidence in such cases have not responded as rapidly as the changes in evidentiary practice in other fields of law. Graphic illustrations of avoidance of the use of many types of economic facts in the courtroom in highway condemnation proceedings are apparent when the court is confronted with making decisions pertaining to compensation for remainders in partial takings, evaluation of benefits or damages resulting therefrom, predictions of possibilities and probabilities of the effects of partial takings on remainders. Ways and means of ascertaining the answers for the problems posed, and related problems, have not been available because of the exclusionary rules of evidence preventing the use of certain kinds of research evidence in highway cases. The difficulties engendered in obtaining the admission of such evidence has probably resulted from a lack or shortage of economic factual data needed to make and support land valuations. What is needed is a simplification and liberalization of the exclusionary rules so as to permit the accessibility to research evidence, thereby allowing more extensive reference to and reliance

¹⁴⁷ Johnson's Petition, 344 Pa. 5, 23 A. 2d 880 (1942); L'Etoile v. Director of Public Works, 153 A. 2d 173 (R. I. 1959).

¹⁴⁸ State Highway Comm'n v. Byars, 221 Ark. 845, 256 S. W. 2d 738 (1953).

¹⁴⁹ People v. Al. G. Smith Co., 86 Cal. App. 2d 308, 194 P. 2d 750 (1948); Hance v. State Roads Comm'n, 221 Md. 164, 156 A. 2d 644 (1959); Fox-Wisconsin Theatres, Inc. v. City of Waukesha, 253 Wis. 452, 34 N. W. 2d 783 (1948).

¹⁵⁰ City & County of Denver v. Quick, 108 Colo. 111, 113 P. 2d 999 (1941); State ex rel. State Highway Comm'n v. Dockery, 300 S. W. 2d 444 (Mo. 1957).

¹⁵¹ In some jurisdictions (see Appendix C, Column B) comparable sales are admissible in support of opinion testimony on market value, even though not admissible as independent evidence.

¹⁵² See Covina Union High School Dist. v. Jobe, 174 Cal. App. 2d 340, 345 P. 2d 78 (1959); Newton Girl Scout Council v. Massachusetts Turnpike Authority, 335 Mass. 189, 138 N. E. 2d 769 (1956); Tennessee Gas Transmission Co. v. Maze, 45 N. J. Super. 496, 133 A. 2d 28 (App. Div. 1957); State Highway Comm'n v. Arnold, 218 Ore. 43, 341 P. 2d 1089 (1959); City of Houston v. Huber, 311 S. W. 2d 488 (Tex. Civ. App. 1958).

¹⁵³ State Highway Comm'n v. Arnold, 218 Ore. 43, 341 P. 2d 1089 (1959).

¹⁵⁴ See Stewart v. Commonwealth, 337 S. W. 2d 880, 885 (Ky. 1960); Tennessee Gas Transmission Co. v. Maze, 45 N. J. Super. 496, 504, 133 A. 2d 28, 32 (App. Div. 1957).

on data obtained by land economic studies, statistical surveys, samples, and opinion polls as aids to courts in ascertaining the economic facts relevant to the determination of land valuations.

Despite the frequent exclusion of research evidence as a device for evaluating land in condemnation proceedings, judicial recognition and acceptance of certain types of research evidence have occurred in various areas of litigation which may be applicable to eminent domain cases. Statistical data, summarized in census and other reports, mortality and annuity tables, are judicially noticed and have been admitted into evidence at times without a showing of the trustworthiness of the report or table. Various fields of commercial law, both private and public, have resorted to the findings of economic research. Market reports and price lists are admitted as evidence determining the value of personal property. Authoritative works of scholarship, traffic surveys, and socioeconomic data are admitted into the courts as independent evidence.

The intention of this section of the report is to point the way toward the admission of similar research evidence in condemnation proceedings. "Law is a progressive thing. It is an expansive thing, adapting itself to new relations and interests of men. They are constantly springing up in the progress of society. But this progress must be by analogy to what is already settled."¹⁵⁵ Analogy, then, is the keystone of this section, for if economic data can be admitted in the form of census reports and statistical tables and used as a yardstick for determining the value of personal property, it is suggested here that these data are usable as independent evidence, and as circumstantial evidence where necessary, on which the expert can rely in determining land valuations.

The emphasis of this section, therefore, is to present the state of the law and practice in the admission and use of research evidence in various types of cases and to advocate its use in condemnation proceedings. In an earlier section of this report, the applicability of various kinds of evidence in condemnation proceedings was discussed. Parallel to a study of this nature are (a) a consideration of the best methods of preparation and presentation of research evidence, (b) a formulation of standards to guide lawyers and courts in the presentation of economic research findings of various kinds, (c) an analysis of widely differing situations where economic research is germane, and their classifications, (d) and the limits of economic research in courts of law. These topics will be touched on only indirectly because they are not the principal subject of this study.

The doctrines of evidence, their applications, and the decisions stating them are as the sands of the sea. It is for this reason that the treatment in this section on the admissibility of research evidence in the courtroom is highly selective and demonstrative, with no pretensions to completeness. The objective is to furnish the appraiser and the lawyer with a starting point in improving measures of determining land values, so that the landowner whose property is taken or damaged will receive fair compensation. The admission of the results of economic research is one direction in which improvement may be made; hence, a study of its use in the areas of law where it is accepted, and an understanding of its application is indispensable to recommending its use in condemnation proceedings.

Admissibility and Use of Research Evidence

Fact finding is the pillar on which all judicial applications of law depend.¹⁵⁶ Ascertaining facts is not always limited to the determination of facts and circumstances within the knowledge of a relatively small group; namely, the parties to the action and their supporting witnesses. Frequently, complex issues in dispute compel recourse to an almost boundless group from which information is collected, analyzed, and summarized in order to make generalizations that are reflected in statistical tables or series. Whether this type of factual statistical data is hearsay,¹⁵⁷ and if so, whether necessity or prac-

¹⁵⁵ Seminar on Protracted Cases, 23 F. R. D. 319, 449 (1959).

¹⁵⁶ See Note, Geo. Wash. L. Rev., 20:211 (1951).

¹⁵⁷ "Hearsay evidence is testimony in court or written evidence of a statement made out of court, such testimony being offered as an assertion to show the truth of matters asserted therein; and, thus, resting for its value upon the credibility of the out of court asserter." McCormick, Evidence 8225 (1954).

tical convenience provides sufficient justification for excepting it to the tenets of the hearsay rule is a matter begging judicial decision.

Admission or refusal of such hearsay data, or the accepting of some hearsay evidence while rejecting other, is based on judicial recognition that hearsay is not all more or less alike, or amenable to being dealt with in a simple or uniform manner. There are many types of hearsay evidence¹⁵⁸; they are as numerous and as variegated as the types of communication, ranging from third-stage rumors to sworn affidavits of credible observers.¹⁵⁹ Correspondingly, its trustworthiness scales from utter worthlessness to the highest reliability, depending on the human frailties of perception, memory, and veracity. Such recognition concedes that evidence is not taboo merely because of its hearsay nature but is contingent for its admission on the court's determination of its reliability.

Only two types of statistical or survey data are unquestionably admitted as independent evidence for the truth of the matter asserted therein.¹⁶⁰ These two surveys are the United States Census reports based on samples as well as complete enumerations,¹⁶¹ and mortality tables¹⁶² used in computing annuities, life insurance sums, dower, and damages for loss of life. In addition to their admission into evidence, they may also be, and frequently are, judicially noticed by the court,¹⁶³ thereby dispensing with all

¹⁵⁸Id. at 301.

¹⁵⁹ Id. at 224.

¹⁶⁰ Zeisel, "The Uniqueness of Survey Evidence," *Cornell L. Q.*, 45: 322 (1959); McCormick, *op. cit.* supra note 157, 8296.

¹⁶¹ 13 U. S. C. 195 (1958).

¹⁶² *Turcotte v. DeWitt*, 332 Mass. 160, 124 N. E. 2d 241 (1955). *Trauttoff v. Dannen Mills, Inc.*, 316 S. W. 2d 866 (Mo App. 1958); *Continental Oil Co. v. Elias*, 307 P. 2d 849 (Okla. 1956).

¹⁶³ State census reports are also judicially noticed in the States of their origin, but reference here will only be made to the United States census reports.

Alabama: *Pickens County v. Jordan*, 239 Ala. 589, 196 So. 121 (1940)

Arizona: *Hernandez v. Frohmler*, 68 Ariz. 242, 204 P. 2d 854 (1949).

California: *People ex rel. Stoddard v. Williams*, 64 Cal. 87, 27 Pac. 939 (1883).

Colorado: *In re Constitutionality of Senate Bill No. 293*, 21 Colo. 38, 39 Pac. 522 (1895).

Florida: *Budget Comm'n v. Blocker*, 60 So. 2d 193 (Fla. 1952).

Georgia: *Tift v. Bush*, 209 Ga. 769, 75 S. E. 2d 805 (1953).

Idaho: *City of Turh Falls ex rel. Cannon v. Koehler*, 63 Idaho 562, 123 P. 2d 715 (1942).

Illinois: *Coal Creek Drainage Levee Dist. v. Sanitary Dist.*, 336 Ill. 11, 167 N. E. 807 (1929).

Indiana: *Goves v. Board of Comm'rs*, 199 N. E. 137 (Ind. 1936).

Iowa: *State v. Braskamp*, 87 Iowa 588, 54 N. W. 532 (1893).

Kansas: *Sparks v. Sparks*, 301 Ky. 576, 1922 S. W. 2d 724 (1946).

Mississippi: *Ross v. Morrimer Veneer Co.*, 129 Miss. 693, 92 So. 823 (1922).

Missouri: *State v. Public Serv. Comm'rs*, 334 Mo. 985, 70 S. W. 2d 52 (1934).

Montana: *Hill v. Rae*, 52 Mont. 348, 158 Pac. 826 (1916).

Nebraska: *Kokes v. State*, 55 Neb. 691, 76 N. W. 467 (1898).

New Jersey: *Michaels v. Johnson*, 33 N. J. Super. 77, 109 A. 2d 452 (1954).

New York: *Taylor v. City of White Plains*, 206 Misc. 946, 135 N. Y. S. 2d 773 (Sup. Ct. 1954)

North Carolina: *Clark v. City of Greenville*, 221 N. C. 255, 20 S. E. 2d 56 (1942).

Oklahoma: *Jones v. Freeman*, 193 Okla. 554, 146 P. 2d 564 (1943), appeal dismissed, 322 U. S. 717 (1944).

Oregon: *Smith v. Jefferson*, 75 Ore. 179, 146 Pac. 809 (1915).

Pennsylvania: *Commonwealth v. Walter*, 274 Pa. 553, 118 Atl. 510 (1922).

South Carolina: *Richards v. City of Columbia*, 227 S. C. 538, 88 S. E. 2d 683 (1955).

evidence to prove those facts contained therein. Even if admitted into evidence, it is usually not necessary for the party proffering them to make a preliminary showing as to their source, methods of compilation, authenticity, or reliability.¹⁶⁴

Census reports have been explained by the courts to hold such status of admissibility, withheld from others, because of the confidence commanded from the disinterested character of its operation, the trustworthiness and reliability in its expertness, and the impossibility of verifying information obtained by interviewers because of such information being privileged.¹⁶⁵

Texas: *L. E. Whitman & Co. v. Allen*, 64 S.W. 2d 1024 (Tex. Civ. App. 1933).

Virginia: *Shelton v. Sydnor*, 126 Va. 625, 102 S.E. 83 (1920).

Washington: *State v. Smith*, 149 Wash. 173, 270 Pac. 306 (1928), judgment adhered to on rehearing, 155 Wash. 173, 284 Pac. 796 (1930).

Wisconsin: *Grimm v. Bayfield County*, 174 Wis. 43, 182 N.W. 466 (1921).

Mortality tables:

Alabama: *Great So. Ry. v. Norrell*, 225 Ala. 503, 143 So. 904 (1932).

California: *Froeming v. Stockton Elec. Ry.*, 171 Cal. 401, 153 Pac. 712 (1915).

Connecticut: *Strakosch v. Connecticut Trust & Safe Deposit Co.*, 96 Conn. 471, 114 Atl. 660 (1921).

Florida: *Harvey v. Rhea*, 152 Fla. 817, 12 So. 2d 302 (1943).

Illinois: *Muhlke v. Tiedemann*, 280 Ill. 534, 177 N.E. 708 (1917).

Indiana: *Dallas & Mavis Forwarding Co. v. Hiddell*, 126 Ind. App. 113, 126 N.E. 2d 18 (1955).

Kansas: *Knoche v. Meyer Sanitary Milk Co.*, 177 Kan. 423, 280 P.2d 605 (1955).

Kentucky: *Morris v. Morris*, 293 S.W. 2d 243, 245 (Ky. 1956): "We think that we may fairly judicially note the Federal Government's preoccupation with a collection of statistics concerning all vital matters, not only mortality, but also pertaining to such subjects as agriculture, mining, cost of living, etc., and we also recognize the general acceptance by all people of the thorough and workmanlike job which has been done over a long period of years by various federal agencies to such an extent that many wage contracts have geared the rise and fall of wages and salaries to the rise and fall of the cost of living indices. We know of no more accurate measurement."

Michigan: *Tandy v. Knox*, 313 Mich. 147, 20 N.W. 2d 844 (1945).

Missouri: *Selle v. Selle*, 337 Mo. 1234, 88 S.W. 2d 877 (1935).

Montana: *Stephens v. Elliott*, 36 Mont. 92, 92 Pac. 45 (1907).

New Jersey: *Berry v. President & Directors of the Bank of Manhattan Co.*, 133 N.J. Eq. 164 (1943).

North Dakota: *Guer v. Ryaden*, 74 N.W. 2d 361 (N.D. 1955).

Oregon: *Shelton v. Lowell*, 196 Ore., 430, 249 P. 2d 958 (1952).

Washington: *McTarran v. Heroux*, 77 Wash. 2d 631, 269 P. 2d 815 (1954).

West Virginia: *Drake v. Clay Hardware & Supply Co.*, 157 S.E. 35 (W. Va. 1931).

¹⁶⁴ *Keast v. Santa Ysabel G. M. Co.*, 136 Cal. 256, 259, 68 Pac. 771, 772 (1902):

"The court may or may not require such preliminary proof of standard acceptance according to its judgment of the need therefor."; *Valente v. Sierra Ry.*, 151 Cal. 534, 91 Pac. 481, 484 (1907): "In some courts it is said that such tables are admissible after proper preliminary proof of their authenticity and standard quality. Such proof in this case was not made, but the general weight of authority is to the contrary, and permits the introduction of such tables as are satisfactory to the court. Such a ruling is founded upon the theory that the court may take judicial notice of standard tables."; *Hann v. Brooks*, 331 Ill. App. 535, 549, 73 N.E. 2d 624, 630 (1947): "A showing that the tables are used by reputable life insurance companies is sufficient to establish their status as standard authorities." But see *Banks v. Braman*, 195 Mass. 97, 80 N.E. 799 (1907).

¹⁶⁵ *Zeisel*, op. cit. supra note 160, at 325.

Mortality tables have been admitted on the general principle that they are founded on "certain and constant" data, and deal with "exact sciences."¹⁶⁶ Such a reason seems to imply that every collection of figures that savors of the exact sciences is sufficient to be admitted, but present day practices discredit such a notion. The more plausible reason for their admission to the exclusion of others is that the admission of this collection of data is demanded by custom and practical convenience, and is relied on by those members of the general public who are interested in such data.¹⁶⁷ Consequently, the judicial mind relented to its use in the absence of a better yardstick for its problem-solving tasks.¹⁶⁸

The admissibility of standard tables or reports of scientific calculations of all sorts as discovered in severance damage studies, economic impact studies, and other research results may in some circumstances be argued for on the analogy of this exception for U. S. Census reports and mortality tables.¹⁶⁹ It is doubtful, however, whether such a general rule can be regarded as established on the basis of the admission of such data, but there are some decisions that seem to suggest that trend.¹⁷⁰

Recognition as being within an exception to the hearsay rule is also given to certain commercial and professional lists and reports; namely, market reports, price lists, and quotations contained in newspapers and trade journals.¹⁷¹

¹⁶⁶ 6 Wigmore Evidence §1698 (3d ed. 1940).

¹⁶⁷ *Ibid.*

¹⁶⁸ See cases cited in note 163.

¹⁶⁹ See 6 Wigmore Evidence §1698 (3d ed. 1940).

¹⁷⁰ See e. g., *Hultberg v. Phillippi*, 169 Kan. 610, 220 P. 2d 208 (1950) (motor vehicle speed chart admitted); *Whalen v. Town Plan & Zoning Comm*, 146 Conn. 321, 150 A. 2d 312 (1959) (traffic reports showing the heaviest traffic in an area admitted without comment as to its admissibility); *Bruner v. McCarthy*, 105 Utah 399, 142 P. 2d 649 (1943), in which exhibit containing a compilation of figures prepared by expert, based on mortality annuity tables for purpose of showing what amount of money it would be necessary to invest at various interest rates to pay an individual specified amounts per year for 35 years, admitted. But see *Sloan v. Carolina Power & Light Co.*, 248 N. C. 125, 102 S. E. 2d 822 (1958) (table of Nat'l Elec. Safety Code issued by U. S. Dept. of Commerce, Bureau of Standards, excluded).

For a discussion of the admissibility of commercial and professional lists, see discussion below; for a discussion of the admissibility of interest tables, etc., see 6 Wigmore Evidences §1642 (3d ed. 1940). See *United States v. Mortimer*, 118 F. 2d 266 (2d Cir.), cert. den., 314 U. S. 616 (1941), in which the court upheld, in a prosecution for using and conspiring to use the mails to defraud, the admission of a number of charts purporting to show defaults in the payment of taxes on a high proportion of certain mortgaged properties which had been prepared by a prosecution witness, an experienced public accountant, and the reliability of which was not questioned, even though the tax records were not themselves in evidence and all those who participated in their preparation did not testify; *San Francisco v. Superior Court of San Francisco*, 38 Cal. 2d 156, 238 P. 2d 581 (1951), in which the court issued a writ of prohibition to restrain enforcement of an order for the inspection of documents and data claimed to be the records of official proceedings conducted by the Civil Service Commission of San Francisco, which included a wage rate survey in which the commission solicited information from private employers on the written promise and agreement with each that the source of all information supplied would be held in confidence and that the wage scales and other data would not be identified except by a code known only to the commission, such survey being made necessary by the municipal employees in accord with the generally prevailing wages for like service conditions in private employment.

¹⁷¹ See generally, 6 Wigmore Evidence §1702, 1704 (3d ed. 1940); McCormick, Evidence § 296 (1954); Comment, 45 Mich. L. Rev. 748 (1947); Note, 39 Harv. L. Rev. 885 (1926)

Alabama: Farm Industries Div. of Quaker Oats Co. v. Howell, 39 Ala. App. 131, 95 So. 2d 808 (1957).

These documents may be described as privately printed documents published for the use of the trade or profession, or public generally, containing statements of contemporaneous facts which are accepted as reliable and acted upon by persons to whom they are furnished, and attaining currency solely because of the accuracy of their statements. 172

Their admission in some cases is based on judicial principles¹⁷³; in others, statutory mandates¹⁷⁴ that, in most instances, have carried out hints originally given by the courts.

- Arizona: *Atlantic Nat'l Bank v. Korrick*, 29 Ariz. 486, 242 Pac. 1009 (1926).
Arkansas: *St. Louis & S. F. R. R. v. Pearce*, 82 Ark. 353, 101 S. W. 760 (1907).
Colorado: *Estes v. Denver & R. G. R. R.*, 49 Colo. 378, 113 Pac. 1005 (1910).
Connecticut: *State v. Pambianchi*, 139 Conn. 543, 95 A. 2d 695 (1953).
Georgia: *Columbian Peanut Co. v. Pope*, 69 Ga. App. 26, 24 S. E. 2d 710 (1943).
Idaho: *State v. Jensen*, 47 Idaho 785, 280 Pac. 1039 (1929).
Illinois: *Nash v. Classen*, 163 Ill. 409, 45 N. E. 276 (1828).
Kansas: *Webbler v. Umbach*, 125 Kan. 117, 263 Pac. 786 (1928).
Louisiana: *Freedman Iron & Supply Co. v. J. B. Beard Co.*, 222 La. 627, 63 So. 2d 144 (1952).
Maine: *Washington Ice Co. v. Webster*, 68 Me. 463 (1878).
Maryland: *Jones v. Ortet*, 114 Md. 205, 78 Atl. 1030 (1910).
Michigan: *Sisson v. Cleveland & T. R. R.*, 14 Mich. 489 (1866).
Mississippi: *Dearborn Motors Credit Corp. v. Henton*, 221 Miss. 643, 74 So. 2d 739 (1954).
Missouri: *Bailey v. St. Louis & S. F. Ry.*, 209 S. W. 630 (Mo. App. 1927).
Nebraska: *Allender v. Chicago & N. W. Ry.*, 119 Neb. 559, 230 N. W. 102 (1930).
New Jersey: *State v. Carrano*, 27 N. J. Super. 382, 99 A. 2d 426 (1953) (criminal case recognizing the rule).
New Mexico: *Johnson v. Nichols*, 66 N. M. 181, 344 P. 2d 697 (1959).
New York: *Whelan v. Lynch*, 60 N. Y. 469 (1875); *Watts v. Phillips-Jones Corp.*, 211 App. Div. 523, 207 N. Y. S. 493 (1925), *FF'd*, 242 N. Y. 557, 152 N. E. 425 (1926).
North Carolina: *Commander v. Smith*, 192 N. C. 159, 134 S. E. 412 (1926).
North Dakota: *Schnitz Bros. v. Bolles & Rogers Co.*, 48 N. D. 673, 186 N. W. 96 (1922).
Pennsylvania: *Bounomo v. United Distiller's Co.*, 77 Pa. Super. 113 (1921).
Rhode Island: *National Cash Register Co. v. Underwood*, 56 R. I. 379, 185 Atl. 909 (1936), which recognized the rule but held that price list prepared and extended by company for exclusive reference by its salesmen, and not in any way to be used as a price quotation to the public for actual sale, was not probative evidence of value of that commodity in an open competitive market.
South Carolina: *Kirkpatrick v. Hardeman*, 123 S. C. 21, 115 S. E. 905 (1923).
Texas: *Houston Packing Co. v. Spivey*, 333 S. W. 2d 423 (Tex. 1960); *Allen v. Payne*, 334 S. W. 2d 607 (Tex. Civ. App. 1960).
Utah: *Baglin v. Earl-Eagle Mining Co.*, 54 Utah 572, 184 Pac. 190 (1919).
Washington: *Cron & Dehn, Inc. v. Chelan Packing Co.*, 258 Wash. 167, 290 Pac. 999 (1930).
Wyoming: *Atlantic Nat'l Bank v. Korrick*, 29 Wyo. 468, 242 Pac. 1009 (1926).
Contra, Massachusetts: *Doherty v. Harris*, 230 Mass. 341, 119 N. E. 863 (1918).
¹⁷² Note, 39 Harv. L. Rev. 885 (1926).
¹⁷³ See cases cited supra note 171; see generally, 6 Wigmore Evidence §1702 (3d ed. 1940).
¹⁷⁴ Code of Ala. ch. 7, 385 (1958); Ky. Rev. Stat. ch. 355, §2-724 (1960); Mass. Gen. Laws Ann. ch. 106, §2-724 (1958) (but see Code Comment at the end of section; 6 Wigmore, Evidence, §1704 (3d ed. 1940). For a statement of Massachusetts law see *Doherty v. Harris*, 230 Mass. 341, 119 N. E. 863 (1918); N. D. Century Code ch. 32, §25-04 (1960); Pa. Stat. ch. 12 A, §2-724 (1954).

Such data are deemed to be competent evidence of the state of the market and sufficient for informing courts of justice as to market value, because they are based on a general survey of the whole market and are constantly received and acted on by persons who transact commercial operations on the faith of them.¹⁷⁵ Their trustworthiness is found in the fact that these commercial lists are prepared for use by the trade or profession, and are, therefore, habitually made with meticulous care and accuracy to make them reliable for business and commercial purposes. Trustworthiness is also found in the considerations that the composers and writers of these reports and lists know beforehand that their work will have no commercial or professional market value unless they are found to have their customary accuracy, and that their inaccuracies will more than likely be discovered. Moreover, there are no motives to deceive its users. The constant use of such reports and lists also test the accuracy of such works and sanction their reliability.¹⁷⁶

Unlike census reports and mortality tables, market reports and price lists have not enjoyed the status of being universally admitted as an exception to the hearsay rule without attached qualifications.

An appreciable number of States follow the Michigan rule¹⁷⁷ requiring some evidence to show either how the trade journal or newspaper obtains its information or that those dealing in the trade or profession rely on such newspaper or journal for information as to market value. A few courts have yet to depart from the application of the strict New York rule,¹⁷⁸ later modified,¹⁷⁹ requiring a prior showing of source and method of compilation. Such a requirement calling for a preliminary showing of source can present almost insuperable problems of proof in cases where the market value at a distant point is in issue, and it becomes necessary to use documents that originated at that point, or when the market report covers a large region or even the whole country.¹⁸⁰ Finally, several jurisdictions have consistently admitted documentary evidence as to market value without a decision as to the necessity of a prior showing of trustworthiness; many of these decisions are accompanied by language that raises the question whether any such foundation was laid or was required to be laid.¹⁸¹

¹⁷⁵ See e. g., *Sisson v. Cleveland & T. R. R.*, 14 Mich. 489 (1866).

¹⁷⁶ See generally 6 Wigmore Evidence §§1702, 1704 (3d ed. 1940).

¹⁷⁷ For a statement of the rule, see *Sisson*, supra note 21, at 496. This approach was formulated best in *Mount Vernon Brewing Co. v. Teschner*, 108 Md. 158, 69 Atl. 502 (1908), accord, *Fairley v. Smith*, 87 N. C. 367 (1882). Instead of giving an option as permitted by the Michigan rule, some courts require a showing that the document is relied on by the trade dealing in the particular article or commodity in question. See e. g., *Johnson v. Nichols*, 66 N. M. 881, 344 P. 2d 697 (1959). See generally 45 Mich. L. Rev. 748 (1947), 6 Wigmore, op. cit. supra note 176.

¹⁷⁸ The New York rule originated in *Whelan v. Lynch*, 60 N. Y. 469, 474 (1875). It is followed in *Fishel v. F. M. Ball & Co.*, 83 Cal. App. 128, 256 Pac. 493 (1927); *Willard v. Mellor*, 19 Colo. 534, 36 Pac. 148 (1894); *Fountain v. Wabash Ry.*, 114 Mo. App. 676, 90 S. W. 393 (1905). *Schnitz Bros. v. Bolles & Rogers Co.*, 48 N. D. 673, 186 N. W. 96 (1921); *Baglin v. Earl-Eagle Mining Co.*, 54 Utah 572, 184 Pac. 190 (1919).

¹⁷⁹ In *Burns Mfg. Co. v. Clinchfield Products Corp.*, 189 App. Div. 569, 178 N. Y. S. 483 (1919), the court adopted a test of general reliance without commenting on *Whelan*. In *Watts v. Phillips-Jones Corp.*, 211 App. Div. 523, 207 N. Y. S. 493 (1925), the court also applied the test of general reliance, and modified *Whelan* by stating that a showing of source and method of compilation was not the only basis for qualifying a document. In *von Rectzenstein v. Tomlinson*, 249 N. Y. 60, 162 N. E. 584 (1928), the court expressed a preference for the test of general reliance.

¹⁸⁰ See e. g., *Chicago, B. & Q. Ry. v. Todd*, 74 Neb. 712, 105 N. W. 83 (1905); *Mount Vernon Brewing Co. v. Teschner*, 108 Md. 158, 69 A. 502 (1908); *Marden, Orth & Hastings Corp. v. Trans-Pacific Corp.*, 109 Wash. 296, 186 Pac. 844 (1920).

¹⁸¹ *Webbler v. Umbach*, 125 Kan. 117, 263 Pac. 786 (1928); *Jordan v. Miller*, 232 Mich. 8, 204 N. W. 708 (1925).

No question is raised here as to whether a prior showing of trustworthiness or some substitute is a proper rule for admitting such documentary evidence. It is doubtful, though, that the methods of qualifying documents have been or should be limited to a preliminary showing of source or general reliance. Rare indeed is the case where failure to require such a prerequisite to the introduction of a document would amount to reversible error. In many cases, such a preliminary showing consisted only of testimony by the party offering the document.¹⁸² It is questionable whether such showing constituted any greater guarantee of trustworthiness than the document itself. If the opposing party has equal access to price information and market data and equal opportunity to introduce evidence on point, he should not, under the adversary theory of procedure, be allowed to win the point without more than to stand up and object. Some cases have ignored the time and money involved in the trial of a law suit and have limited recovery on an admittedly good cause of action to nominal damages for failure of such a showing.¹⁸³

As a corollary to the admission of commercial documents, it would seem that oral testimony based on such documents would be admissible. Such an inference has not been substantiated by case law. Although most States permit an expert to base his testimony on such documents,¹⁸⁴ it has been held by a small minority that such oral testimony was incompetent when based solely on documentary sources on the startlingly incompatible ground that the documents themselves would not be admissible because they were not the best evidence.¹⁸⁵ Seemingly, such decisions leave ample room for the use of documentary sources by experts, but prohibit the mere parroting of documents by the unqualified and place attention on the credibility of the writing itself.¹⁸⁶

An overwhelming majority of decisions on the proof of market value by the use of documentary sources have involved the use of the documents themselves as evidence and not as sources for oral testimony. Such a practice leads to the conclusion that, in practice at least, commercial and professional circles have adopted the better alternative.

The disinterestedness and reliability of market reports and lists of current prices in journals and newspapers used by the trade, as well as census reports, mortality tables, or authoritative works in any field of scholarship would seem equally to warrant their use in the courtroom as evidence of the facts contained therein.¹⁸⁷ The legislators in a few States have tried to establish this tenor by enacting statutes authorizing the use of such works to evidence "facts of general notoriety and interest."¹⁸⁸ Rule 63 (31) of the

¹⁸² See e. g., *St. Louis I.M. & S. R. R. v. Laser*, 120 Ark. 119, 179 S. W. 189 (1915).

¹⁸³ *Kentucky Refining Co. v. Conner*, 145 Ala. 664, 39 So. 728 (1905); *Schnitz Bros. v. Bolles & Rogers Co.*, 48 N. D. 637, 186 N. W. 96 (1922).

¹⁸⁴ See e. g., *Howell v. Hines*, 298 Mo. 282, 249 S. W. 924 (1923), *Fountain v. Wabash Ry.*, 114 Mo. App. 676, 90 S. W. 393 (1905).

¹⁸⁵ *Doherty v. Harris*, 230 Mass. 341, 119 N. E. 863 (1918); *National Bank of Commerce v. New Bedford*, 175 Mass. 257, 56 N. E. 288 (1900).

¹⁸⁶ 45 Mich. L. Rev. 748, 752 (1947).

¹⁸⁷ See 6 Wigmore, *Evidence* §§1690-92 (3d ed. 1940); Note, 19 St. Louis L. Rev. 353 (1934).

¹⁸⁸ California was the first State to enact such a statute: "Historical works, books of science or art, and published maps or charts, when made by persons indifferent between the parties are prima facie evidence of facts of general notoriety and interest." Cal. Code Civil Proc. §1936. Other States have enacted statutes similar to the California statute: Ala. Code Ann. ch. 7, §413 (1958); Idaho Code §9-402 (1948); Iowa Code Ann. 622.23 (1958); Mont. Rev. Code Ann. §93-1101-8 (1947); Neb. Rev. Stat. §25-1218 (1956); Ore. Rev. Stat. §41.670 (Supp. 1959); Utah Code Ann. §78-25-6 (1953).

Uniform Rules also echoes this principle.¹⁸⁹ The courts have generally declined to sanction a broad exception to the hearsay rule for such works.¹⁹⁰

Still amazingly limited has been the court's admission into evidence of statistical surveys, samples, and research opinion evidence.¹⁹¹ Although the admission of census sampling and the averages and probabilities of mortality tables would seem to sanction the admission of other survey data, the courts have not so reasoned. Though the substance of samples, opinion research, and other collections of data possess

... at least equal inductive value being made with equal or greater thoroughness, sifted, arranged, and stated by trained observers, [they are] by the same discriminative authority relegated to the limbo of hearsay and other judicial abominations. The error lies not in looking too leniently upon [census samples and] mortality tables, but in a misconception of the true qualities of other scientific work.¹⁹²

Statistics is a science, the study and application of which require expert knowledge and method; it is the process by which decisions are made, based on incomplete knowledge. It is a process of generalizing from a part to the whole; it attempts to solve a group of problems treated in philosophy by inductive logic. Statistical inferences are inductive by reason that they assign certain traits to large accumulations of objects from knowledge of these same characteristics for only a few of these objects.¹⁹³ Like mortality tables, such statistical data also have their foundation in the theory of probability, and permit measurement of the magnitude of possible error in the result, and a definite probability statement about the uncertainty of the inference.¹⁹⁴

¹⁸⁹ The Uniform Rules of Evidence, Rule 63 (31), adapted from the Model Code of Evidence, Rule 529.

¹⁹⁰ Alabama is the only jurisdiction that has construed such a statute permitting the direct admission of medical books, extracts, and treatise, without qualification as to purpose or case. The other States having such statutes have uniformly construed these statutes as not to allow direct admission of medical works. See e.g., *City of Dothan v. Hardy*, 237 Ala. 603, 188 So. 264 (1934), admitting such works, and the following which deny such admission: *Brown v. L. A. Transit Lines*, 282 P. 2d 1032 (Cal. App. 1955); *Wilcox v. Crumpton*, 219 Iowa 389, 258 N.W. 704 (1935), recognizing the rule; *Osborn v. Gray*, 28 Idaho 89, 152 Pac. 473 (1915). States not having such statutes follow the common-law rule prohibiting the use of medical works as direct evidence in the courtroom, except in certain specified cases authorized by statutes. See e.g., S.C. Code §26-142 (1952); Mass. Gen. Laws Ann. ch. 233 § 79C (1958); and Nev. Rev. Stat. §51.040 (1960).

¹⁹¹ See generally Zeisel, *op. cit. supra* note 6; Sprowls, "The Admission of Sample Data into a Court of Law: A Case History," U.C.L.A. L. Rev., 4: 222 (1957); McCoid, "The Admission of Sample Data into a Court of Law: Some Further Thoughts," U.C.L.A. L. Rev., 4:233 (1957); Note, "Public Opinion Surveys As Evidence," Harv. L. Rev. 66: 498 (1953); Note, "Admissibility of Public Opinion Polls," Minn. L. Rev., 37:385 (1953).

¹⁹² 6 Wigmore Evidence §1698 (3d ed. 1940).

¹⁹³ McCoid, *op. cit. supra* note 37, at 223-24. Interested readers are referred to the following publications for detailed studies on survey and poll methodology: Parten, "Surveys, Polls and Public Opinion" (1949); Cantril, "Gauging Public Opinion" (1947); Blankenship, "Consumer and Opinion Research" (1934); see the reference guide of Smith, Laswell, and Casey, "Propaganda, Communication and Public Opinion" (1946). For a discussion of the courts' attitude towards the methodology of the taking of surveys or public opinion polls, see Annot., 76 A.L.R. 2d 619, 633-40 (1961).

¹⁹⁴ McCoid, *op. cit. supra* note 191.

Presently, statistical surveys, samples, and opinion polls have been used sparingly in judicial problem solving, being limited to admission as an exception to the general rule, not for the truth of the matter asserted, but for the fact that it was made.¹⁹⁵ Additional limitations have subjected such data to use only in certain litigable areas. These areas comprise commercial law, both public and private, patent and trademark infringement, unfair competition, deceptive advertising, misbranding, and related areas¹⁹⁶ where consumer reaction is important. To a limited extent, antitrust cases have given some credence to surveys and opinion polls.¹⁹⁷

The most common problem for which sampling is used explicitly in litigation is for survey of opinion.¹⁹⁸ Such a limitation bespeaks a need for raising the level of economic and statistical literacy among the officers of the court.¹⁹⁸ Courts need the assistance of those engaged in statistical research. In numerous areas, survey and opinion polls may be crucial to the disposition of a case. Possibilities of statistical research have been indicated in commercial litigations where the value of surveys have appeared in boldest outline and where the stakes have been high. But there are other litigable areas where surveys and polls would be extremely useful; for instance, in valuation law.²⁰⁰ Documentation in other fields of law such

¹⁹⁵ *United States v. 88 Cases*, 187 F. 2d 967 (3d Cir.), cert. den. 342 U. S. 861 (1951); *Hermann v. Newark Morning Ledger Co.*, 48 N. J. Super. 420, 138 A. 2d 61 (1958). See Zeisel's discussion, *op. cit. supra* note 6; 66 *Harv. L. Rev. op. cit. supra* note 191.

¹⁹⁶ *Gulf Oil Corp. v. F. T. C.*, 150 F. 2d 106 (5th Cir. 1945); Sorensen and Sorenson, "Responding to Objections Against the Use of Opinion-Survey Findings in the Courts," *J. Marketing* 2: 133-134 (1955); see generally Barksdale, "Use of Survey Research Findings as Legal Evidence" (1957); Caughey, "The Use of Public Polls, Surveys and Sampling as Evidence in Litigation and Particularly Trademark and Unfair Competition Cases," *Calif. L. Rev.* 44: 539 (1956); Hall, "Evidence—Hearsay—Admissibility of Public Opinion Polls," *Mich. L. Rev.* 52: 916 (1954); Howes, "The Role of Public Surveys in Unfair Competition Cases," *Trademark Rep.* 46: 154 (1956); Kecker, "Admission in Courts of Law of Economic Data Based on Samples," *J. Bus.* 28: 118 (1955); Note, *Geo. Wash. L. Rev.* 20: 211 (1951); Note, *Harv. L. Rev.* 66: 498 (1953); Annot., 76 *A. L. R.* 2d 619 (1961).

¹⁹⁷ *United States v. United Shoe Mach. Corp.*, 93 F. Supp. 190 (D. Mass. 1950); *United States v. J. I. Case Co.*, 101 F. Supp. 856 (D. Minn. 1951); but see *United States v. E. I. Dupont de Nemours & Co.*, 177 F. Supp. 1 (D. Ill. 1959).

¹⁹⁸ *RKO Radio Pictures v. Jarrico*, 128 Cal. App. 2d 172, 274 P. 2d 928, cert. denied, 349 U. S. 928 (1954); *Las Vegas Sun, Inc. v. Franklin*, 74 Nev. 282, 329 P. 2d 867 (1958); *Great Atlantic & Pacific Tea Co. v. A. & P. Trucking Corp.*, 51 N. J. Super. 412, 144 A. 2d 172 (1958), modified on other grounds, 29 N. J. 455, 149 A. 2d 595 (1959). Dean, "Sampling to Produce Evidence on Which the Courts Will Rely," *Current Bus. Studies* 19, at 6 (1954).

¹⁹⁹ *Id.* at 11.

²⁰⁰ "Value is nothing more than the price for which property may be sold and the value of other like property is highly probative as to the value of the property in question. . . . In the commercial field there is no more commonly accepted method for ascertaining property values than by comparison with other property and the prices at which it is sold." *City of Los Angeles v. Cole*, 28 Cal. 2d 509, 521, 170 P. 2d 928, 934 (1946) (Dissenting opinion). See 2 Wigmore, *Evidence* §463 (3d ed. 1940). Since comparison of similar property is necessary for valuation, survey methods could be used in accumulating and presenting in aggregate form data of comparable sales.

as immigration, naturalization, and deportation cases,²⁰¹ cases involving change of venue,²⁰² legislative and quasi-legislative proceedings,²⁰³ lend support to the use of such information in highway condemnation cases.

Sampling results have been limited in judicial proceedings because of technical objections to its being hearsay evidence, relying on out-of-court statements as to the characteristics of basic data or sample data; the objection that the conclusion of the statistician is merely opinion as to matters that do not fall within the range of admissible opinion evidence; and the objection that statistical data and its inferences are not the best evidence available of the characteristics of basic data.²⁰⁴ Sampling and polling evidence have also been subjected to the proper suspicions and reluctance of judges who realize the ease with which overzealous lawyers seeking to advance the cause of their clients could be tempted to bias such data, and the difficulty of detecting such bias.²⁰⁵ Reputable research organizations, however, enjoy the same confidential relationship to their clients as do reputable members of the bar.

They will not countenance perjured testimony in their behalf. Their system of analysis, design of experiment and the full results of their efforts are all open to judicial review, the court willing. The legitimate opinion research organization wants its findings to be considered public property in the sense that they cannot be perverted in support of any single "side" and that the full implications, involving qualifications where they exist, be revealed.²⁰⁶

Another factor militating against the use of sampling and polling is the offer by adverse parties of polls purporting to prove inconsistent propositions of fact.²⁰⁷ In such instances, however, it would seem that conflicting testimony as to reliability shown by each opposing party should be considered in connection with the credibility of the evidence and not its admissibility.

To minimize the bases for objection to the admission of statistical data as evidence, the following could be helpful: (a) the use of pretrial conferences, where feasible, for having the parties start with the same set of instructions and the same basic facts²⁰⁸;

²⁰¹ In *Repouille v. United States*, 165 F. 2d 152, 153 (2d Cir. 1947), Judge Learned Hand stated that the courts have no Gallup poll to aid them in discovering the meaning of the "good moral character" required of any applicant for naturalization; a poll is a possible method for verifying a position as to moral justiciability of an act performed by an applicant for naturalization.

²⁰² Survey methods may be used to discover whether there is sufficient local prejudice to justify a change of venue in criminal cases. See Note, 54 Harv. L. Rev. 679, 684 (1941), Sorensen, "The Role of Public Sentiment and Personal Prejudice in Jury Trials of Criminal Cases," Ch. X (unpublished dissertation, Univ. of Chicago).

²⁰³ Woodward, "A Scientific Attempt to Provide Evidence for a Decision on Change of Venue," *Am. Sociol. Rev.* 17: 447 (1952).

²⁰⁴ McCoid, *op. cit.* supra note 191, at 235.

²⁰⁵ *United States v. 88 Cases*, 187 F. 2d 967 (3d Cir.), cert. denied, 342 U. S. 861 (1951); Dean, *op. cit.* supra note 198, at 5.

²⁰⁶ Sorensen and Sorensen, *op. cit.* supra note 196, at 137.

²⁰⁷ See e. g., *Quaker Oats Co. v. General Mills, Inc.*, 134 F. 2d 429 (7th Cir. 1943); *Oneida, Ltd. v. National Silver Co.*, 25 N. Y. S. 2d 271 (Sup. Ct. 1940); cf. *Alexander Young Distilling Co. v. National Distillers Prod. Corp.*, 40 F. Supp. 748 (E. D. Pa. 1941).

²⁰⁸ See Naftalin, "Pretrial Practice in State Condemnation Cases for Highway Purposes," HRB Bull. 294, 15-30 (1961) for a bibliography of articles on pretrial procedure, see Report of Comm. on Condemnation and Condemnation Procedure, Municipi-

(b) the service on the adversary, in advance of trial, of a copy of the statistical report he plans to use, along with a statement of the underlying materials, their location, and availability for inspection²⁰⁹; (c) the qualifying of the official who conducted the research by the party offering the document²¹⁰; and (d) the testimony of the official as an authenticating witness if the adverse party requests it and shows cause.²¹¹

If the hearsay objection is thought to be too serious to overcome in getting evidence of the poll or sample into the record for consideration by the trier of facts, there remains another basis for bringing the results to the attention of the court. Courts are often concerned with public opinion and various trends. In the absence of any evidence of what public opinion and reaction or what various trends are respecting particular matters, courts in their frequent attempts to make such determinations, assume the prerogative of knowing the issue in dispute by taking judicial notice.²¹² Statistical research findings deserve consideration as an alternative to the judge's impressions and opinions substituted for public opinion in matters where the former are assumed to stand for the latter. They can be a great aid to the court when taking judicial notice; then, too, such data thus submitted need not conform to the technical rules of evidence.

Reasons for Use of Research Evidence in Condemnation Proceedings

The uses, objectives, and extent of research evidence in condemnation proceedings have already been described. It would be worthwhile here to present some summary conclusions as to why research evidence whose use in the courts has already been studied should be used in determining the value of land in condemnation proceedings. Economic research would be an additional step in the evolutionary process of obtaining adequate and accurate ways and means of estimating the value of land. Already in the evolutionary process comparable sales of particular parcels are admissible in some States as direct evidence if the foundation for each parcel is separately and individually made.²¹³ As was pointed out, a means of obtaining suitable comparable sales and relevant facts associated with such sales is now available.²¹⁴ The next step of admitting the same type of sale information, but in aggregate or statistical form, should be taken. Assuming one issue in a condemnation proceeding is what a land price trend for a particular community has been over a period of years, the only way to determine precisely what prices have been is to tabulate records of sales which may run into tens or hundreds or thousands. In such a case, survey evidence is essential; it will save time and money while keeping the record clear of the various underlying source materials.

pal Law Section, A B. A., 1960, at 153. In a condemnation proceeding, a number of economic facts may be stipulated; for instance, the severance damage case studies or the economic impact study findings could be stipulated as factual materials to which there would be no objection. Thus, a struggle over the adequacy or inadequacy of the data may be avoided. In this fashion, solid, factual materials may be admitted on stipulation, thereby narrowing wide disparities in land estimates through the mutual agreement in use of research materials

²⁰⁹ Submitting such a report to opposing counsel does not include the "work product" of the proponent of the report. It is discoverable by the other side only if there are special circumstances which make it essential to the preparation of his case and in the interest of justice that the statements be produced for his inspection or copying. See *Hickman v. Taylor*, 329 U. S. 495 (1947); *Walsh v Reynolds Metals Co.*, 15 F. R. D. 376 (D. N. J. 1954); see generally Luttrell, "Some Applicable Rules in the Trial of a Condemnation Case," *Appraisal J* 28: 213, 216 (1960).

²¹⁰ Kennedy, "Law and the Courts," *The Polls and Public Opinion*, at 92, 101 (1949); Comment, 30 *Tex. L. Rev.* 112, 118 (1951).

²¹¹ *Ibid.*

²¹² Kennedy, *op. cit. supra* note at 101; Sorensen and Sorensen, *op. cit. supra* note 196, at 134 et seq.

²¹³ See *supra*, "Pertinent Laws of Eminent Domain and Evidence."

²¹⁴ See *supra*, "Economic Data in Condemnation Proceedings."

"To preserve the vitality of its functions, the law, as it relates to the market place, must keep pace with evolutions in the market place."²¹⁵ Research evidence is the key-stone of all contemporary problem-solving methods. Its use has been pinpointed in the courtroom as well as in commercial and professional circles.

Analytically, the general types of land economic studies and land value surveys discussed may be designated as hearsay because they are based on valuations of property and persons not represented in these proceedings. But, the principles that have supported the admission of census reports, mortality tables, market reports, and price lists will and should allow the use of such economic data to be given as evidence in condemnation proceedings. From this brief specified study of the role of research evidence and the hearsay rule in judicial proceedings, it is apparent that there are two main hurdles that economic research evidence (namely, land economic studies and surveys) must get over in order to be admitted as an exception to the hearsay rule. The first hurdle is necessity. From what has been discussed it is clear that what is urgently needed by public officials, fee appraisers, lawyers, and juries are facts on which land estimates can be substantiated and supported. The courts are sufficiently aware of this need, for in 1960 alone, 16 appeals cases were handed down during the year in which the only issue on appeal was whether the verdict was supported by the evidence.²¹⁶ In four cases the lower courts made awards that so shocked the conscience of the respective appellate courts that they were reversed.²¹⁷ In addition, three cases were reversed on the finding that the awards were not within the range of the evidence.²¹⁸ The results of a scientifically designed sample of sales prices of properties within an area, a properly prepared and conducted opinion survey designed to determine various influences on land values, an impact study, a severance damage study, or other economic data hold the promise of furnishing such material to meet this shortage of factual data.

The second consideration necessary for making an exception to the hearsay rule is the trustworthiness of the document. The guarantee that such economic studies and statistics would be trustworthy and reliable is to be found in the conditions and procedures with respect to their preparation. In addition, the State highway departments or the universities associated with them in these endeavors would be unlikely to stake their reputations on ill-conceived studies. The motive, in other words, is precisely the same in character and is more certain in its influence than that accepted as sufficient in some of the other hearsay exceptions previously discussed; it is, namely, the unwelcome probability of a detection and exposure of errors.

²¹⁵ Barksdale, *Use of Survey Research Findings as Legal Evidence*, at xiii (1957).

²¹⁶ *United States v. Magyar*, 273 F.2d 421 (2d Cir. 1959); *State v. Hunter*, 270 Ala. 57, 116 So. 2d 383 (1959); *Arkansas State Highway Comm'n v. Addy*, 329 S.W. 2d 535 (Ark. 1959); *Arkansas State Highway Comm'n v. Huges*, 328 S.W. 2d 391 (Ark. 1959); *Skinner v. Polk County*, 250 Iowa 1264, 98 N.W. 2d 749 (1959); *Stortenbecker v. Iowa Power & Light Co.*, 250 Iowa 1073, 96 N.W. 2d 468 (1959); *Luecke v. State Highway Comm'n*, 186 Kan. 584, 352 P. 2d 454 (1960); *United Fuel Gas Co. v. Mauk*, 325 S.W. 2d 339 (Ky. 1959); *Mississippi State Highway Comm'n v. Peterson*, 117 So. 2d 452 (Miss. 1960); *Mississippi State Highway Comm'n v. Pittman*, 238 Miss. 402, 117 So. 2d 197 (1960); *Mississippi State Highway Comm'n v. Ellzey*, 237 Miss. 345, 114 So. 2d 769 (1959); *Mississippi State Highway Comm'n v. Taylor*, 237 Miss. 847, 116 So. 2d 757 (1959); *Clark County School Dist. v. Mueller*, 348 P. 2d 164 (Nev. 1960); *Allbro v. Vallone*, 158 P. 2d 571 (R.I. 1960); *State v. Coffield*, 328 S.W. 2d 916 (Tex. 1959); *Utech v. City of Milwaukee*, 9 Wis. 2d 352, 101 N.W. 2d 57 (1960).

²¹⁷ *Arkansas State Highway Comm'n v. Addy*, 329 S.W. 2d 535 (Ark. 1959); *United Fuel Gas Co. v. Mauk*, 325 S.W. 2d 339 (Ky. 1959); *Mississippi State Highway Comm'n v. Taylor*, 237 Miss. 847, 116 So. 2d 757 (Miss. 1959)

²¹⁸ *Clark County School Dist. v. Mueller*, 348 P. 2d 164 (Nev. 1960); *Allbro v. Vallone*, 158 A. 2d 571 (R.I. 1960); *Utech v. City of Milwaukee*, 9 Wis. 2d 352, 101 N.W. 2d 57 (1960).

In addition to their admission as an exception to the hearsay rule, there seem to be good reasons why land economic studies and surveys should come into evidence through judicial notice. Such admission would of necessity be based on their undisputed authenticity, thereby obviating testimony by a witness vouching for such.

The public document rule also seems another vehicle for admitting these land studies. Their admission under such an exception would depend on whether they had been prepared by governmental agencies within the scope of duty imposed on them by law, or whether it was the usual course of business for highway departments to do certain land value studies in connection with condemnation. The important point is that the law of evidence is changing; it is moving in the direction of factual data derived from studies, surveys, and applications of statistical techniques in many fields of law.

CONCLUSION

The materials presented in this paper on the economic orientation of condemnation cases, and the suggestions for the utilization of various types of evidentiary materials in such cases indicate a belief that economic fact should serve the court in establishing legal fact.

Existing legal practices with respect to the admission and use of research evidence in courts of law have indicated that such results and techniques have made definite contributions to the judicial fact-finding and decision-making processes. Such findings have almost invariably been confined to areas of commercial litigations, excepting, however, certain scientific tables and calculations said to be admissible and competent because of the demands of custom and practical convenience making them generally, if not universally acceptable.

This study of the experience of such research findings where judicially acceptable along with the indicated needs emerging from condemnation proceedings for factual data which can best be obtained by such research methods sanction their admission and use in land valuation cases. Such sanctions, if adhered to, demand a reshaping of the rules of evidence which prohibit their entrance in condemnation proceedings as independent evidence. Such change in evidentiary procedure only summons the next step in the evolutionary process set in motion by the admission of comparable sales of particular parcels. As previously mentioned, if evidence of sales of comparable parcels can be introduced in piecemeal form through the prolonged procedure of separately and individually establishing the collateral issue of comparability followed by evidence of the sales prices, the essence of time, and the keeping of good unclouded records, if nothing else, would welcome better procedural methods of introducing evidence pertaining to land values. Land economic studies, severance damage studies, economic statistics, and other research data can provide these needs while also meeting the shortage of land valuation data essential in determining just compensation. The goal of condemnation proceedings is to award such just compensation. Because such an award depends on property value, damages, and frequently benefits assigned to the land in question, it follows that these may be more accurately determined by objective research methods. The products of these methods could serve both as a means for substantiating or cross-examining expert testimony and as independent evidence, especially on issues such as (a) after value where the before-and-after formula is applied; (b) severance damages; (c) special benefits; and (d) general benefits.

The various hurdles over which some of the evidentiary matter may have to go in order to make it fully acceptable have been described. Some of the means of countering judicial objection have also been enumerated. It is believed by the authors that better valuations of damages to property, and especially to remainder parcels will proceed through the means suggested.

Inasmuch as partial takings of property on a wholesale basis is relatively a new item in condemnation law, the research sponsored in highway economic impact, severance damages, and highway law is essential for providing court appraisers and an informed public with the basic decision-making materials. For the governmental entities involved, savings may also be engendered even through the use of out-of-State evidence.

What is required of courts and of legal counsel is a desire to utilize economic data

currently available within their States, and obtained under systematic procedures. Through such use, what may be considered experimental only because of nonusage may become traditional through usage.

Appendix A

STATES WHOSE CONSTITUTIONS REQUIRE COMPENSATION

For Taking Property by Eminent Domain	For Taking or Damaging Property by Em- inent Domain
(A)	(B)
Alabama ¹	Alabama ²
Connecticut	Alaska
Delaware	Arizona
Florida	Arkansas
Hawaii	California
Idaho	Colorado
Indiana	Georgia
Iowa	Illinois
Kansas ³	Kentucky ²
Kentucky ¹	Louisiana
Maine	Minnesota
Maryland	Mississippi
Massachusetts	Missouri
Michigan	Montana
Nevada	Nebraska
New Hampshire ⁴	New Mexico
New Jersey	North Dakota
New York	Oklahoma
Ohio	Pennsylvania ²
Oregon	South Dakota
Pennsylvania ¹	Texas
Rhode Island	Utah
South Carolina	Virginia
Tennessee	Washington
Vermont	West Virginia
Wisconsin	Wyoming

¹Taking provisions applicable to all types of condemnation.

²Taking or damaging provisions applicable to exercise of eminent domain by municipal or other corporation.

³No compensation provision applicable to exercise of eminent domain by State or public corporation.

⁴Compensation requirement merely been deemed to be implied by consent provision.

NOTES

Column A

Alabama: Ala. Const. art. I, §23.

Connecticut: Conn. Const. art. I, §11.

Delaware: Dela. Const. art. I, §8.

Florida: Fla. Const., Declar. of Rts., §12.

Hawaii: Hawaii Const. art. I, §18.
 Idaho: Idaho Const. art. I, §14.
 Indiana: Ind. Const. art. I, §21.
 Iowa: Iowa Const. art. I, §18.
 Kansas: Kan. Const. art. 12, §4. (Not applicable to the State or public corporations)
 Kentucky: Ky. Const. §13.
 Maine: Me. Const. art. I, §21.
 Massachusetts: Mass. Const. Pt 1, art. 10.
 Maryland: Md. Const. art. III, §40
 Michigan: Mich. Const. art. XIII, §1.
 Nevada: Nev. Const. art. I, §8.
 New Hampshire: N.H. Const. Pt 1, art. 12 (by implication as construed, Great Falls Mfg. Co. v. Vernald, 47 N.H. 444, 455 (1867)).
 New Jersey: N.J. Const. art. 1, Pt 20.
 New York: N.Y. Const. art. I, §7.
 Ohio: Ohio Const. art. 1, §19.
 Oregon: Ore. Const. art. 1, §18.
 Pennsylvania: Pa. Const. art.1, §10.
 Rhode Island: R.I. Const. art. I, §16.
 South Carolina: S.C. Const. art. 1, §17.
 Tennessee: Tenn. Const. art. 1, §21.
 Vermont: Vt. Const. ch. I, art. 2.
 Wisconsin: Wis. Const. art. 1, §13.

Column B

Alabama (where a municipal or other corporation is condemning): Ala. Const. art. 12, §235.
 Alaska: Alaska Const. art. I, §18.
 Arizona: Ariz. Const. art. 2, §17.
 Arkansas: Ark. Const. art. 2, §22.
 California: Cal. Const. art. I, §14.
 Colorado: Colo. Const. art. II, §15.
 Georgia: Ga. Const. art. I, §3, par. 1.
 Illinois: Ill. Const. art. II, §13.
 Kentucky (where a municipal or other corporation is condemning): Ky. Const. §242.
 Louisiana: La. Const. art. 1, §2.
 Minnesota: Minn. Const. art. 1, §13.
 Mississippi: Miss. Const. art. 3, §17.
 Missouri: Mo. Const. art. I, §25.
 Montana: Mont. Const. art. III, §14.
 Nebraska: Neb. Const. art. I, §21.
 New Mexico: N.M. Const. art. II, §20.
 North Dakota: N.D. Const. art. I, §14.
 Oklahoma: Okla. Const. art. 2, §24.
 Pennsylvania (where a municipal or other corporation is condemning): Pa. Const. art. XVI, §8.
 South Dakota: S.D. Const. art. VI, §13; S.D. Const. art. XVII, §18 (applicable to municipal and other corporations).
 Texas: Tex. Const. art. 1, §17.
 Utah: Utah Const. art. 1, §22.
 Virginia: Va. Const. §58.
 Washington: Wash. Const. art. I, §8.
 West Virginia: W. Va. Const. art. III, §9.
 Wyoming: Wyo. Const. art. I, §33.

Appendix B

SETOFF RULES WHEN A STATE OR LOCAL GOVERNMENT TAKES PROPERTY FOR HIGHWAY CONSTRUCTION OR IMPROVEMENT

General and Special Benefits Against Value of Land Taken and Severance Damages	Special Benefits Only Against Value of Land Taken and Severance Damages	General and Special Benefits Against Severance Damages Only	Special Benefits Against Severance Damages Only	Setoff Prohibited
(A) Alabama ¹ New Mexico North Carolina South Carolina ¹	(B) Alabama ² Arkansas Connecticut Delaware ⁴ Florida Hawaii ⁵ Kansas Maine Massachusetts Michigan ⁴ New Hampshire New Jersey Pennsylvania ⁷ Rhode Island South Carolina ² South Dakota ⁴ Vermont ⁷ Washington	(C) New York Virginia West Virginia	(D) Alaska ³ Arizona ³ California Colorado Georgia Hawaii ⁶ Idaho Illinois Indiana Kentucky Louisiana Maryland Mississippi Missouri Montana Nebraska Nevada ³ North Dakota Ohio Oregon Tennessee Texas Utah Wisconsin Wyoming ⁴	(E) Iowa Oklahoma

¹In certain cases, only special benefits may be set off (see Column B).

²See Column A for general rule.

³Although not yet so construed, these statutes identical to California provision which is limited to special benefits.

⁴Setoff statutes seem to contain sufficiently broad language to authorize general benefit setoff, if and when they should be construed on this point.

⁵In certain cases, setoff allowed only against severance damages (see Column D).

⁶See Column B.

⁷Setoff against full value implied from use of before-and-after formula in these jurisdictions.

NOTES

Column A

Alabama: Ala. Const. art. I, §23, as construed in *McRea v. Marion County*, 222 Ala. 511, 133 So. 278 (1931); Ala. Code Ann., tit. 19, §14 (1940), but see Column B; New Mexico: Board of Comm'rs v. Gardner, 57 N.M. 478, 260 P. 2d 682 (1953); North Carolina: N.C. Gen. Stat., §136-19 (1958), as construed in *Barnes v. North Carolina State Highway Comm'n*, 250 N.C. 378, 109 S.E. 219 (1959); South Carolina: S.C. Code, 33-127, 33-136 (1952), as amended by §§25-165 (Supp. 1960); see *Smith v. City of Greenville*, 229 S.C. 252, 92 S.E. 2d 639 (1956).

Column B

Alabama (highway improvements by local governments): Ala. Const. art. 12, §223, as distinguished in *McRea v. Marion County*, 222 Ala. 511, 133 So. 278 (1931); Arkansas: Ark. Stat. Ann., §76-521 (1947); Ball v. Independence County, 214 Ark. 694, 217 S.W. 2d 913 (1949); Connecticut: Conn. Gen. Stat., §13-145 (1958); Sorensen v. Cox, 132 Conn. 583, 46 A. 2d 125 (1946); Schwartz v. City of New London, 20 Conn. Supp. 21, 120 A. 2d 84 (1955); Delaware: State ex rel. State Highway Dep't v. Morris, 47 Del. 477, 93 A. 2d 523 (Super. Ct. 1952); Florida: Fla. Stat., §73.10(3) (1957); Hawaii: Hawaii Rev. Laws, §8-21 (1955) (except in road widening or realignment cases): but see Column D; Kansas: Kan. Gen. Stat., §§26-209, 68-706 (1949), as amended; Trasper v. Board of Comm'rs, 27 Kan. 391 (1882); Maine: Boober v. Towne, 127 Me. 332, 143 Atl. 176 (1928); In re Penley, 89 Me. 313, 36 Atl. 397 (1896); Massachusetts: Mass. Gen. Laws Ann., ch. 79, §12 (1958); Michigan: Mich. Stat. Ann., c. 64, §8.189 (1958); New Hampshire: *Whitcher v. Benton*, 50 N.H. 25 (1870); New Jersey: State v. Hudson County Bd. of Chosen Freeholders, 55 N.J.L. 88, 25 Atl. 322 (1892); Minnesota: Chicago, R.I. & P. Ry. v. City of Minneapolis, 164 Minn. 226, 205 N.W. 640 (1925); Pennsylvania: Johnson's Petition, 344 Pa. 5, 23 A. 2d 880 (1942); Rhode Island: D'Angelo v. Director of Public Works, 152 A. 2d 211 (R.I. 1959); South Carolina (condemnation by county government): S.C. Code, §33-840 (1952), as distinguished in *Smith v. City of Greenville*, 229 S.C. 252, 92 S.E. 2d 639 (1956); South Dakota: S.D. Code, §§28.13 A09, 37.4010 (Supp. 1960); Vermont: Vt. Stat. Ann., tit. 19, §221 (1959); Washington: Wash. Rev. Code, §§8.04.080, 8.08.040, 8.12.190 (1961).

Column C

New York: *Hartman v. State*, 5 Misc. 2d 636, 161 N.Y.S. 2d 748 (Ct. Cl. 1957); New York, W & B Ry. v. Siebrecht, 73 Misc. 219, 130 N.Y.S. 1005 (Sup. Ct. 1919); Virginia: Va. Code Ann., §33-73 (1950), as construed in *Long v. Shirley*, 117 Va. 401, 14 S.E. 2d 375 (1951); West Virginia: W.Va. Code, §5380 (1955), as construed in *Strouds Creek & M. R.R. v. Herald*, 131 W.Va. 45, 45 S.E. 2d 513 (1947).

Column D

Alaska: Alaska Comp. Laws Ann., §57-7-13 (1949); Arizona: Ariz. Rev. Stat. Ann., §12-1122 (1956), as construed in *Pima County v. De Concini*, 79 Ariz. 154, 285 P. 2d 609 (1955); California: Cal. Civ. Proc. Code, §1248, as construed in *People v. Schultz Co.*, 123 Cal. App. 2d 925, 268 P. 2d 117 (1954); Colorado: Colo. Rev. Stat., §50-1-17 (1953); Denver Joint Stock Land Bank v. Board of County Comm'rs, 105 Colo. 366, 98 P. 2d 283 (1940); Georgia: Ga. Code Ann., §36-504 (1933), as construed in *State Highway Bd. v. Bridges*, 60 Ga. App. 240, 3 S.E. 2d 907 (1939); Idaho: Idaho Code, §7-711 (1947); Hawaii: Hawaii Rev. Laws, §8-21 (1955) (in road widening or realignment cases only); Illinois: Ill. Const. art. II, §13, as construed in *Kane v. City of Chicago*, 392 Ill. 172, 64 N.E. 2d 506 (1945); Department of Public Works & Buildings v. Barton, 371 Ill. 11, 19 N.E. 2d 935 (1939); Indiana: Burns Ind. Stat. Ann., §3-1706 (1946), as construed in *State v. Smith*, 237 Ind. 72, 143 N.E. 2d 666 (1957); Kentucky: Ky. Rev. Stat. §§177.083, 416.100-416.120, 416.230-416.240 (1960); Freuel v.

Commonwealth, 331 S. W. 2d 710 (1959); Louisiana: Louisiana Highway Comm'n v. Grey, 197 La. 942, 2 So. 2d 654 (1941); Maryland: Md. Ann. Code, art. 33A, §25 (1957); Pumphrey v. State Rds. Comm'n, 175 Md. 498, 2 A. 2d 668 (1937); Mississippi: Mississippi State Highway Comm'n v. Hillman, 189 Miss. 859, 198 So. 565 (1940); Missouri: Mo. Rev. Stat., §227.120 (1959); Montana: Mont. Rev. Code, §§99-9912 (1949), as amended; Nebraska: Crawford v. Central Neb. Public Power & Irr. Dist., 154 Neb. 832, 49 N.W. 2d 682 (1951); Nevada: Nev. Rev. Stat., §37.110 (1960); North Dakota: N.D. Cent. Code, §§35-15-22 (1960), as construed in Lineburg v. Sandoen, 74 N.D. 364, 21 N.W. 2d 808 (1946); Ohio: Ohio Const. art. I, §19; In re Abraham, 121 N.E. 2d 695 (Ohio C. P. 1953); Oregon: State Highway Comm'n v. Bailey, 212 Ore. 261, 319 P. 2d 906 (1957); Tennessee: Tenn. Code Ann., §23-1414 (1955); Texas: Tex. Civ. Stat., art. 3265 (1952), as construed in State v. Carpenter, 126 Tex. 604, 89 S.W. 2d 194 (1936); Utah: Utah Code Ann., §104-61-11 (1943); Wisconsin: Wis. Stat. Ann., §32.09 (Supp. 1961); Wyoming: Wyo. Stat., §1-775 (1957).

Column E

Iowa: Iowa Const. art. 1, §18; Oklahoma: Okla. Const. art. 2, §24.

Appendix C

ADMISSIBILITY OF COMPARABLE SALES AS EVIDENCE OF MARKET VALUE IN CONDEMNATION PROCEEDINGS

Independently Admissible As Evidence of Market Value	Admissible in Support Of Opinion Testimony	Judicial Indication It Would Be Independently Admissible, Though Never So Held	Admissible Only To Impeach Opinion Testimony	No Cases On Point
(A)	(B)	(C)	(D)	(E)
Alabama	District of Columbia	Nevada	Michigan	Alaska
Arizona		Oklahoma	Minnesota	Hawaii
Arkansas		Rhode Island	North Carolina	Idaho
California	Mississippi	South Carolina	Pennsylvania	Maine
Colorado		West Virginia		Montana
Connecticut	Ohio			New Mexico
Delaware				North Dakota
Florida				South Dakota
Georgia				Vermont
Illinois				
Indiana				
Iowa				
Kansas				
Kentucky				
Louisiana				
Maryland				
Massachusetts				
Missouri				
Nebraska				
New Hampshire				
New Jersey				
New York				
Oregon				
Tennessee				
Texas				
Utah				
Virginia				
Washington				
Wisconsin				
Wyoming				

NOTES

Column A

Alabama: Southern Elec. Generating Co. v. Leibacher, 269 Ala. 9, 110 So. 2d 308 (1959); Arizona: Town of Williams v. Perrin, 70 Ariz. 157, 217 P. 2d 918 (1950); Arkansas: Sewer & Water Works Improvement Dist. No. 1 v. McClendon, 187 Ark. 510, 60 S.W. 2d 920 (1933); California: County of Los Angeles v. Faus, 48 Cal. 2d 672, 312 P. 2d 680 (1957); Colorado: Kistler v. Northern Colo. Water Conservancy Dist., 126 Colo. 11, 246 P. 2d 616 (1952); Connecticut: Campbell v. City of New Haven, 101 Conn. 173, 125 Atl. 650 (1924); Delaware: Wilmington Housing Authority v. Harris, 47 Del. 469, 93 A. 2d 518 (Super. Ct. 1952); Florida: City of Tampa v. Texas Co., 107 S. 2d 216 (Fla. App. 1958); Georgia: Flemister v. Central Ga. Power Co., 140 Ga. 511, 79 S.E. 148 (1913); Fulton County v. Cox, 109 S.E. 2d 849 (Ga. App. 1959); Illinois: City of Chicago v. Blanton, 15 Ill. 2d 198, 154 N.E. 2d 242 (1958); Indiana: Northern Ind. Pub. Serv. Co. v. Darling, 239 Ind. 237, 154 N.E. 2d 881 (1958); Iowa: Redfield v. Iowa State Highway Comm'n, 251 Iowa 337, 99 N.W. 2d 413 (1959); Kansas: Wood v. Syracuse School Dist., 108 Kan. 1, 193 P. 1049 (1920); Kentucky: Stewart v. Commonwealth, 337 S.W. 2d 880 (Ky. 1960); Louisiana: State v. Havard, 239 La. 133, 118 So. 2d 131 (1960); Maryland: Patterson v. Mayor & City Council of Baltimore, 127 Md. 233, 96 Atl. 458 (1915); Massachusetts: Epstein v. Boston Housing Authority, 317 Mass. 297, 58 N.E. 2d 135 (1944); Missouri: State v. Bruening, 326 S.W. 2d 305 (Mo. 1959); Nebraska: Langdon v. Loup River Pub. Power Dist., 142 Neb. 859, 8 N.W. 2d 201 (1943); New Hampshire: Eames v. Southern N.H. Hydro-Elect. Corp., 85 N.H. 379, 159 Atl. 128 (1932); New Jersey: Curley v. Mayor & Aldermen of Jersey City, 83 N.J.L. 760, 85 Atl. 197 (E. & A. 1912); State v. Williams, 65 N.J. Super. 518, 168 A. 2d 233 (App. Div. 1961); New York: Village of Lawrence v. Greenwood, 300 N.Y. 231, 90 N.E. 2d 53 (1949); Oregon: State v. Parker, 357 P. 2d 548 (Ore. 1960); Tennessee: Union Ry v. Hunton, 114 Tenn. 609, 88 S.W. 182 (1905); Texas: City of Austin v. Canizzo, 153 Tex. 324, 267 S.W. 2d 808 (1954); Utah: State v. Peek, 1 Utah 2d 263, 265 P. 2d 630 (1953); Virginia: May v. Dewey, 201 Va. 621, 112 S.E. 2d 838 (1960); Washington: Seattle & M. Ry. v. Gilchrist, 4 Wash. 509, 30 Pac. 738 (1892); Wisconsin: Blick v. Ozaukee County, 180 Wis. 45, 192 N.W. 380 (1923); Wyoming: Morrison v. Cottonwood Dev. Co., 38 Wyo. 190, 266 P. 117 (1928).

Column B

District of Columbia: District of Columbia Redev. Land Agency v. 61 Parcels of Land, 98 U.S. App. D.C. 367, 235 F. 2d 864 (1956) (admissible to support appraiser's expert testimony but subject to the court's discretion); Mississippi: Mississippi State Highway Comm'n v. Rogers, 236 Miss. 800, 112 So. 2d 250 (1959); Ohio: In re Ohio Turnpike Comm'n, 164 Ohio St. 377, 131 N.E. 2d 397 (1955). Cert. denied, 352 U.S. 806 (1951).

Column C

Nevada: Clark County School Dist. v. Mueller, 76 Nev. 11, 348 P. 2d 164 (1960) (dictum for such evidence); Oklahoma: Durell v. Public Serv. Co., 174 Okla. 549, 51 P. 2d 517 (1935) (rule stated as dictum); Rhode Island: Hervey v. City of Providence, 47 R.I. 378, 133 A. 618 (1926) (issue of remoteness held properly decided by judge to exclude evidence; Massachusetts rule assumed to be determinative); South Carolina: Wateree Power Co. v. Rion, 113 S.C. 303, 102 S.E. 331 (1920) (seems to assume Mass. rule in holding that sales to condemnor, where only sales of comparable land available, were admissible); South Carolina Highway Dept. v. Hines, 234 S.C. 254, 107 S.E. 2d 643 (1959) (Gen. Rule recognized without indication whether it was S.C. law; evidence excluded because as a mere offer not accepted, it was not within the rule); West Virginia: (No cases dealing with evidence of comparable sales to noncondemnor); Cf. United Fuel Gas Co. v. Allen, 137 W. Va. 897, 75 S.E. 2d 88

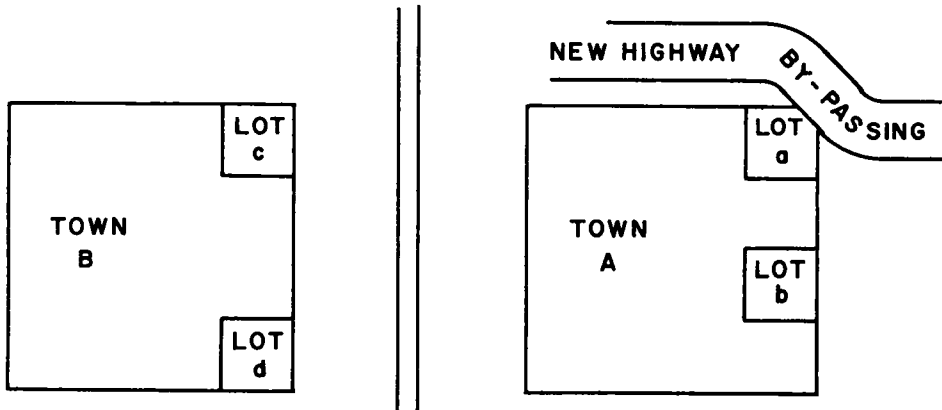
(1953) (sale to condemnor "voluntarily" made is good where severance damages are not involved).

Column D

Michigan: Lockeman v. Dillman, 255 Mich. 152, 237 N. W. 552 (1931); Minnesota: Minneapolis-St. Paul Sanitary Dist. v. Fitzpatrick, 201 Minn. 442, 277 N. W. 394 (1937); North Carolina: Templeton v. State Highway Comm'n, 118 S. E. 2d 918 (N. C. 1961); Pennsylvania: Serals v. West Chester Borough School Dist., 292 Pa. 134, 140 Atl. 632 (1928).

Appendix D

AN EXAMPLE OF THE DETERMINATION OF GENERAL AND SPECIAL BENEFITS



Benefits Accruing From Highway Improvement

Value of residential lots a, b, c, and d before the bypass--\$1,000 each
 Value of residential lots c and d after the bypass--\$1,000 each
 Value of residential lot a after the bypass \$1,400
 Value of residential lot b after the bypass--\$1,200
 Special benefit accruing to lot a--\$200 (\$1,400 minus \$1,200)
 General benefit accruing to lots a and b--\$200 each (\$1,200 minus \$1,000)

This example shows the hypothetical benefits associated with a highway improvement bypassing Town A. Property values in the affected community (Town A) increased about \$200 per lot following the opening of the bypass route. Average residential lot values in a comparable community unaffected by the highway (Town B) remained unchanged. Comparing what happened in the study area (Town A) with what happened in the control area (Town B) indicates that residential lots in Town A realized a value increase of about \$200 each. This is a general benefit.

Within Town A, lot a, which was partially taken for highway right-of-way was affected by the highway to a greater extent than lot b, a comparable lot within the same community. Following the opening of the highway, lot a sold for \$1,400 and lot b for \$1,200. This indicates that a special benefit of \$200 accrued to lot a—the difference between the value of lot a (\$1,400) and the value of a comparable lot nearby (\$1,200).

For the purpose of determining the special benefit accruing to lot a, lot b is the control. For determining general and special benefits experienced by lot a, lot c or d is the control.

Appendix E

STATUS OF SEVERANCE DAMAGE STUDIES¹ (As of June 1, 1961)

State	Research Agency	Nature of Study In Progress	Studies Completed
Alabama ²	Alabama State Highway Department	Case studies of severance damages	
Arizona ²	Arizona Highway Department	Analysis of cost data in connection with the acquisition of right-of-way for highway improvements	
Arkansas ²			"Land Economic Studies, Remainder Parcel Analysis" No. 1—summarizes 10 remainder parcel sales in Vallejo, California
California	California Division of Highways	Continuing case studies of severance damages to remainder properties after partial takings for right-of-way	"Land Economic Studies"—summarizes 20 remainder parcel cases "California Land Economic Studies—Techniques" "Remainder Parcels", a report of the Land Economics Study Section
Colorado	Colorado Department of Highways	Severance damages, right-of-way acquisition, and partial takings, including case studies of same	"Case Studies of Damage Payments," Nos. 1 through 21
Connecticut			
Florida ²			
Georgia ²	Georgia State Highway Department	Analysis of factual evidence with respect to values fixed, payments made, disposition of remainder properties, and use of remainder properties	
Hawaii			
Idaho	Idaho Department of Highways	Analysis of actual damage as compared with damage awards in connection with right-of-way takings	
Illinois	University of Illinois	Case studies of land values and severance damages to remainder properties after partial takings for right-of-way	"Land Economic Studies," Nos. 1-5
Indiana	Indiana State Highway Department	Evaluation of right-of-way appraisal values and determination of a series of basic uniform rules and guides to be used in land appraisals	
Iowa	Iowa State Highway Commission	Effects of farm unit severance resulting from right-of-way purchase	
Kansas	State Highway Commission of Kansas	Severance damage studies as part of larger economic impact study	
Kentucky ²	Kentucky Department of Highways	Investigation and evaluation of damage effects in terms of market value of highway building program on remainders of partial takings in urban and rural areas	
Louisiana ²			
Maine	Maine State Highway Commission	Case study of partial taking and severance damage	
Maryland	Maryland State Roads Commission	Case studies of remainder properties after purchase for right-of-way	
Michigan	Michigan State Highway Department	Guide for right-of-way appraisers in estimating costs for property acquired for highway right-of-way	"Land Economic Studies," Nos. 1-7
Minnesota	University of Minnesota	Relationships between compensation payments and extent of property taken plus damages as direct consequence of highway	"How Farmers Adjusted to an Interstate Highway in Minnesota"
Mississippi	University of Mississippi	Analysis of severance damages as part of economic impact study being made on segment of I-694-S(15) in St. Paul	
		Analysis of effects on land use, land value, and fragmentation	
		Case studies of partial takings of rural	

Missouri	Missouri State Highway Commission	properties Severance damage studies being conducted as part of larger economic impact study	"Severance Study Manual"
Montana ^a Nebraska ^a New Jersey	New Jersey State Highway Department	Develop data to provide more reliable basis for estimating severance and consequential damage	
New Mexico	New Mexico State Highway Commission	Severance damage studies	
New York	New York Department of Public Works	Severance damage studies being conducted as part of Northway economic impact study	
North Carolina ^a North Dakota ^a	North Dakota State Highway Department	Case studies of several sections of highway	
Ohio	Ohio Department of Highways	Studies of land values and relationship of subsequent sales prices of remainder parcels to "before" value, by type of remainder parcels	
Oklahoma	Oklahoma State Highway Department	Collection and interpretation of sales data on severed parcels of land previously acquired. These data expected to provide a basis for right-of-way appraisals to substantiate after values in the before-and-after appraisals for highway right-of-way	"Land Economic Studies Properties Abutting Baldoek Freeway" "Oregon Land Economic Studies," Nos 30-35
Oregon	Oregon State Highway Commission	Case studies of land values and severance damages to remainder properties after partial takings for right-of-way	
South Carolina ^a	University of South Carolina	Severance damage studies being conducted as part of larger economic impact study	
South Dakota	South Dakota Department of Highways	Parcel by parcel analysis of remainder properties adjacent to completed segments of Interstate System to determine effects of the facility on (a) market value of remaining land, and (b) development of remaining land	
Tennessee	University of Tennessee	Severance damage studies being conducted as part of larger economic impact study	
Utah Texas	Texas Transportation Institute, Texas A and M College	Various aspects connected with acquisition of right-of-way for highway use. Including studies of case histories of remainder parcels and effects of displacement of persons and investments resulting from right-of-way acquisitions	A number of case histories have been completed Individual land economic studies Nos 1-28, 34, 36, and 41
Vermont	Vermont Department of Highways	Provide more reliable basis for estimating severance and consequential damage	
Virginia	Virginia Department of Highways	Analyze value of remainder properties after purchase of portion for highway use, case studies	
Washington	Washington Department of Highways		
Wisconsin ^a	Wisconsin State Highway Commission		
Wyoming ^a	Wyoming State Highway Commission		
Nationwide	Agricultural Research Service, U.S. Department of Agriculture		"The Effects on Farm Operating Units of Partial Taking for Controlled-Access Highways"

^aIn most cases, these severance damage studies are being conducted by researchers within State highway departments, although, in a few instances, work is being done under contract. For additional information concerning any study, it is suggested that inquiry be made to appropriate State highway department.

^bIn planning stage, others listed are underway.