Report No. UM-HSRI-80-6-1

ROAD SAFETY RISK MANAGEMENT IN MICHIGAN. VOLUME I: ROAD LIABILITY AND RISK MANAGEMENT

Hal O. Carroll
David G. Baldwin
Kent B. Joscelyn

The University of Michigan
Highway Safety Research Institute
Ann Arbor, Michigan 48109

July 1980

Prepared for
Oakland County Road Commission
Birmingham, Michigan 48010

Contract No. N-2

ACKNOWLEDGMENT

This volume and its companion are the result of the efforts and contributions of many persons. We thank all who assisted in the development, preparation, and production of these materials.

The research that led to these volumes was sponsored by the Oakland County Road Commission. Many of the commission's professional staff assisted us by raising questions and offering comments and suggestions as the work progressed through its various stages. We would like particularly to express our appreciation to John L. Grubba, Managing Director, and Brent O. Bair, Contract Technical Manager.

We have received much assistance from staff at the Highway Safety Research Institute. Our research assistants, who made valuable contributions, were Donald Garlit, Lawrence Rosenstock, Patricia Ramsey (who provided legal research support), and Kurt Richwerger (who researched procedures for the identification of road hazards and the selection of treatments). Acknowledgment is also due to William C. Wheeler, Jr., J.D., and Dennis M. Powers, J.D., for legal research, and Murray Greyson, J.D., for legal research and administration of the project in its early stages.

Other HSRI personnel also made important contributions. James E. Haney provided editorial assistance. Anne L. VanDerworp served as production editor. Draft versions of these volumes were produced by Douglas J. VanDenBerg, Judy Hunter, Kathy Szegedy, Shirley Barnes, and Kathy Nash under the supervision of Jacqueline B. Royal and Janet C. Peters.

We thank all who contributed.

Hal O. Carroll

David G. Baldwin

PREFACE

Risk management is a concept and a practice that is relatively new to the field of road safety. Although the systematic analysis of an organization's operations to identify risks and select treatments for them is common in the world of business, it has only recently begun to be undertaken by road authorities. However, as increasing insurance premiums make it more difficult for road authorities to transfer the risk of loss to an insurer, road safety risk management is likely to expand and develop.

The purpose of these two volumes is to provide a background and a starting point for road safety risk management programs in Michigan. Volume I is intended to provide an introduction to risk management theory as it applies to road safety and an introduction to road liability law, as a background for the development of a risk management program. Volume II provides additional legal background in the form of summaries of cases involving road safety in Michigan.

These volumes have been prepared on the premise that the law of road liability plays an essential role in a road safety risk management program. There are three ways in which this is true. First, as a practical matter, a concern about liability is often the impetus for safety decisions. At the same time, a concern about liability can also inhibit the making of safety decisions. Finally, however, legal considerations should be neither a driving nor a restraining force in a risk management program. Rather, they should be a source of information and a guide for decision-making. Lawsuits can inform the road authority of facts or conditions that involve risks of injury to users of the road. The reported court decisions and the statutes also provide guidelines as to what conduct or results are expected of the road authority in dealing with those risks.

The purpose of these volumes, then, is to provide a general

introduction to the law relating to road authorities and their operations. They are not intended to provide legal advice. That can only be done by counsel as specific legal questions arise. It is hoped that the materials in these volumes will acquaint the reader with general principles of road liability law, thereby providing a basis for sound road safety risk management decisions.

CONTENTS

CHAPTER ONE

CHAPTER TWO

CHAPTER FIVE

CHAPTER ONE
RISK MANAGEMENT AND THE ROAD AUTHORITY

A risk management program involves both an approach or attitude to problem solving and specific procedures and decisions. The attitude is a fundamental part of the program, in that it influences and often determines the specific procedures and the decisions adopted in a risk management program. Therefore, it is necessary to begin with a discussion of some basic risk management concepts before proceeding to specific areas of concern. This chapter discusses two main topics—how risk management concepts apply to road authorities, and how the law of road liability relates to a road authority's risk management program.

DEFINITION OF RISK MANAGEMENT

The concept of risk management originated in the business world and developed there. As a result, most of the theories and practices of risk management relate to the problems of profit-making organizations; many of these do not apply to public agency operations. Specifically, the risk management concerns of public agencies (and road authorities in particular) differ from traditional risk management in two ways--the types of risk to be managed, and the techniques used to manage them.

The Meaning of "Risk"

The definition of risk varies from field to field, and from author to author. For example, insurance managers at one time distinguished "pure" or "true" risk--potential losses incurred simply as the result of ownership or possession—from "speculative" risk—potential losses incurred in the hope of gain (1). Decision theorists and some accident researchers, on the other hand, have distinguished "hazard" from "risk"--hazard meaning the objective probability of a dangerous event's occurring and "risk" meaning

one's subjective perception of that probability (2). Depending on the context, different features of the risk concept come into focus.

The most basic features of risk to be distilled from the literature appear to be as follows. Future events are uncertain to relative degrees. Some of these potential, but uncertain, events involve losses (or relative losses). The type and extent of possible losses are also uncertain. People are forced to make decisions, and ultimately to act, with respect to the uncertain and potentially harmful future, basing their decisions on uncertain and incomplete data. Under these circumstances, we experience risk.

Risk Management Defined

Risk management is an approach to decision-making under risk conditions. It emerges from an unawareness that our decisions and subsequent acts can affect the probability, the type, and the extent of potential losses. The management of risk is based on a comprehensive understanding of systems that interact to produce and affect losses, loss rates, and loss probabilities. It stresses evaluation of the costs and benefits of alternative decisions with respect to their expected effects. The goals of risk management as applied to any endeavor appear to be (a) the reduction of uncertainty or the reduction of the negative results of uncertainty, and (b) the optimization of some set of benefits in the light of uncertainty.

History of the Risk Management Concept Among Insurance Buyers

The term "risk management" appears to have been coined by corporate insurance managers beginning in the 1950s. A search for material under that rubric leads one to articles and texts written by these individuals (3). For this reason, the insurance area is an appropriate starting place for a discussion of risk management.

The early history of the risk management concept is marked by the information of associations of corporate insurance buyers in the 1920s. As an example, in Boston, in 1929, an informal conference of corporate insurance buyers was held for the purposes of education and information.

This was followed by the establishment of the Insurance Division of the American Management Association in 1931. Subsequently, the Risk Research Institute was established during the next twenty years, resulting in the development of the National Insurance Buyers Association and, later, the American Society of Insurance Management, Inc.

During the same period, between 1920 and 1950, there was a trend toward the development of separate insurance management and, for example, fire prevention departments within corporate structures of the railroad, oil, and food industries.

These trends signaled a change in businesses' attitude toward loss. Rather than assuming that losses incurred through fire, accident, and injury were inevitable and simply buying enough insurance to cover projected losses, company managers responsible for the procurement of insurance coverage began to experiment with the idea that a combination of tactics might be used to reduce the overall expenditure on losses. They began to take a more active role in assessing their risks, their insurance costs, and their savings with proper coverage.

Despite the expanded view, a corporate risk manager's function at this time was limited to management of strictly financial risks threatening the company's economic position. This meant that in many cases a risk analysis began and ended with a consideration of those assets revealed in the company balance sheet; personal injuries were relevant risks only to the extent of their economic repercussions (4).

In focusing on the effective use of commercially available insurance policies in combination with the risk-retention techniques of noninsurance and self-insurance, managers further limited their activities to a consideration of so-called "insurable" risks or "pure" risks, that is, those incurred through the ownership or possession of property, those incidental to company operations. Excluded were the various "business" or "speculative" risks--potential losses incurred, for example, in entering a new market area, or in developing and marketing a new product. Such risks, run purely in the hope of gain, were similar to gambling risks and could only be assumed as a cost of doing business (5). Insurance companies did not make coverage available against these risks.

Finally, risk abatement and reduction through safety programs and procedures continued to be functions separate from those of the risk manager and were the special province of the company fire prevention department or industrial safety expert. As a result, risk management at this stage was often disjointed or inadequate.

Development in the Theory of Risk Management

During the 1960s, the scope of the corporate risk management function was expanded through an integration of the insurance and safety management functions. At that time, more formal procedures were developed for assessing and managing a wider variety of risks. The new approach sought a more holistic view of the company's exposure to risk, recognizing the interrelation of relevant factors and acknowledging the nebulous risks involved in a potential loss of time, loss of community good will, or an interruption of services. Articles on risk management also stressed careful analysis and **quantitative** evaluation of risks and alternative management strategies (6). These developments reflect the influence of operation research and the increasing use of systems analysis.

Formal and relatively standardized risk management procedures at this time included: (a) analysis or recognition of risks; (b) evaluation of exposures; (c) abatement or reduction of hazards; (d) risk insurance; and (e) risk accounting or evaluation of management policies. (7).

The first of these, analysis or recognition of risks, required a broad view of exposure and was to be advanced by free-flowing communications among corporate departments. Communication and adequate feedback from all levels of management was considered the best method of ensuring that all risks—due to fire and accidents, threatening community relations or business reputation, and even potentially stemming from product development—would be taken into account.

The next step, evaluation of exposures, required an examination of the qualititative and quantitative features of potential losses. Evaluation was first in terms of the probability of occurrence of a given loss-producing events, and second, in terms of the extent and dollar value of possible losses. There was some effort during the early sixties to seriously and

realistically quantify probability of loss through the use of historical frequency statistics, but statistics were often poor and managers without mathematical backgrounds continued to use subjective measures of probability and assigned degrees of probability to the gross categories of: definite, moderate, and slight risk. Nevertheless, some recognized several applications of mathematics and statistics to risk analysis in actuarial science, statistical decision-making, utility analysis, mathematical models and game theory (8).

In measuring the potential extent of loss, risk managers were increasingly aware of different levels or stages of loss including the immediate and consequential losses in dollar value, nonmeasureable losses whose value can only be estimated, and losses incurred as a result of legal liability. A good deal of work has been done in the safety field on the estimation of value of "nonmeasurable" costs such as the loss of human life, personal injury, and the expense of travel time (9,10). There appears to be little on the valuation of nonmeasurable costs by insurance writers (although one author recently suggested that the nonmeasurable costs of a loss-reduction program would generally reach eighty percent of the measurable costs) (11).

The third step, that of reducing hazards, was thought by some to be the activity that distinguished the "true" risk manager from his predecessors in insurance management (12). In the third step, the risk manager actually tries to reduce the probability and extent of loss from certain types of risk, that is, fire, accident, injury, and generally, hazards to persons and property, by the adoption of safety procedures and educational programs, the use of safer equipment, and the elimination of hazards. This is the point at which the insurance manager merges with the safety engineer to determine what combination of insurance and safety will optimize company benefits. The merger indicates a shift in focus from the manipulation of insurance techniques to minimize financial loss to a concern for prevention and control of the risk itself. It should be noted that at this time quantum improvements were made in safe equipment design due to developments in the discipline of system safety.

Risk insurance, the fourth step listed in our procedure, involves the

management of the financial effects of loss through "risk transfer," that is, the purchase of commercial insurance, and "risk retention"--self-insurance or purposeful noninsurance. There was some emphasis on savings through absorption of certain losses as "cost of doing business" (5).

Finally, risk accounting is the step in which policies are reviewed and evaluated. Although much lip service is given to the idea that proper risk accounting requires accumulation of data on direct and indirect costs of losses, insurance premiums, and safety measures, this aspect of the procedure seems relatively undeveloped in the mid-1960s.

Generally speaking, during the sixties risk management theory developed as a relatively comprehensive systematic and objective process in the budding "systems philosophy" tradition. What remained to take place was a **refinement** in the application of theory.

Insurance Risk Management in the 1970s

Risk management theory as applied by insurance/safety managers has not changed radically during the seventies except possibly in its more technical aspect. There is an increased understanding and insistence upon the use of a systems approach that takes in all relevant elements of the risk situation.

One apparently new tactic for improving the quality of the initial risk analysis stresses "management-by-objectives." This method requires risk managers to make a careful delineation of organizational objectives, such as the **functions** for which an organization or company was created, or specific societal goals and personal goals of management are, at a subsequent level in the hierarchy, broken down into more specific action-guiding objectives. As an example, if the manager's analysis reveals the specific objective of **eliminating** the possibility of a given occurrence, it should indicate the relative amount of time and money to be spent preventing that occurrence. The management-by-objectives approach has an application to problems beyond those of the insurance risk manager. It is clearly of use in the broader range of management decisions concerning investments, inventories, work force, and so on. It is

an error to regard management by objectives (MBO) as a panacea for all management problems. MBO is simply a systematic tool to assist managers.

Measurement problems have also been given attention, directed towards improving probability assessments (13), valuation of potential losses, including those of personal injury and human life (9), and evaluation of management decisions in terms of cost-benefit/cost-effectiveness analyses. (Much of the literature on the latter form of quantitative analysis, though useful to insurance and safety managers, has grown out of aerospace and defense work on research and development.) How often these highly refined quantitative procedures are used is unclear (14).

There has also been some use of **models**, in the insurance area, to determine the proper mix of safety measures and commercial insurance with respect to a given type of risk. For example, one author developed a model to assist in minimizing losses from burglary by estimating the proper amount of insurance coverage and investment in a warning system required for the target premises, or both (15).

In general, insurance managers were the first to approach risk in terms of asking: (a) Where are the losses **likely** to occur? (b) How much loss can we absorb? and (c) How do we best reduce losses to an acceptable level? Even in the technical fields where quantitative analysis reached a far more sophisticated level, the need for determining an appropriate level of risk was for a long time unrecognized. The insurance experience is important for focusing our attention on **cost**-wise evaluation of risk and risk-reduction activities.

There are also some other lessons to be learned from the insurance experience. Insurance companies have accepted the transfer of risk from their insureds. When faced with claims, they have instituted their own risk management approaches, their objective being to minimize their losses for their owners. It is not unusual for an insurance company to make a decision to settle a claim because the cost of settlement may be less than the cost of litigation. This is clearly not done for frivolous claims but is more likely to occur in complex cases where actual damages are extensive and the outcome of litigation is unknown.

This practice has contributed to the somewhat uneven state of the law on the liability of road authorities. As a road authority assumes more of the responsibility for claims management (or loss management), it is likely that a more active role will be required. Decisions to litigate strong cases to clarify the state of the law may be required to reduce longer-range risk potentials. In this context, loss management can be seen as an integral part of an overall risk management program. One manages not only the risk of an event occurring that will produce loss but also the magnitude of the loss once the event has occurred.

Who Manages Risk?

Risk management as a formal, systematic, and scientific procedure designed to reduce or eliminate losses of every type has historically been applied by those with the most to lose **and** with the resources to fund staff devoted solely to that function. Risk management has flourished in business, under the auspices of corporate insurance managers and industrial safety engineers, as well as product reliability and development engineers. The concept and its application have experienced tremendous growth in the military and aerospace industries through the development of operations research, systems analysis, and decision analysis. It is now beginning to be applied to the broader concerns of the public sector, the social and public policy problems. The greatest developments have been in areas that more readily lend themselves to technical analysis--such as waste disposal and energy systems—but there has been increasing interest in the application of broad, systematic analysis to the amorphous problems of urban decay, public education, and highway traffic safety (16).

The growth, development, and present application of risk management theory and procedure in the areas mentioned above have been briefly discussed. The limited scope of the discussion should not blind us to the wider significance of the risk management concept. There are elements of what could be called risk management implicit in much of human behavior--in the decision to purchase one product rather than another, in a choice of careers, in the act of buckling a safety belt. Behind every cost-benefit or cost-effectiveness analysis, performed for whatever

purpose, there is the weighing of probabilities and relative values of given alternatives and possible outcomes, which suggest a risk management process.

Risk Management

Although many of the operational aspects of traditional risk management are not directly applicable to road authority activities, the six basic elements do apply. These elements consist of the six steps in the risk management process, which are:

1. identification of risk,
2. establishment of priorities among risks,
3. determination of allocation of resources,
4. selection of risk management strategies,
5. implementation of risk management actions, and
6. evaluation of outcomes in terms of risk reduction.

The specific activity undertaken in each of these steps will vary according to the situation. In some cases a formalized procedure may be appropriate; in others, the making of decisions may be fairly simple once risks are identified. Whatever form the risk management process takes, its purpose is to provide a framework to encourage orderly and productive discussion and resolution of problems.

A point that is implicit in what has been said so far deserves separate mention. It is that risk management is a process. It is not the job of any one department, but a part of the job of every department and every employee. It is, among other things, an attitude or habit of thought. It does not provide answers, but ways of finding answers (or, more precisely, of arriving at intelligent decisions). The risk management process is dynamic; evaluation of the results and of the process itself is an essential element. Experience gained as the process moves along may indicate the need for changes in the process. Thus, when procedures are suggested here, they are intended as starting points. For example, one suggestion is that litigation records be kept and reviewed to keep track of the effect of the risk management process on litigation experience. A review of those records in later years may reveal patterns or trends not foreseen

today, and thus may suggest the need for new or changed approaches, both in other risk management activities and in recordkeeping itself.

Risk of Litigation or Risk of Loss

Once it is accepted that risks must be managed instead of transferred to an insurer, the definition of risk becomes important. There are two choices. The risk to be managed can be the risk of loss to the road authority itself, or it can be the risk of injury or damage to those who use the roads, whether or not that injury or damage leads to claims against the road authority. In the first case, "risk" becomes litigation risk, and risk management becomes "litigation management." When risk is given the broader definition of loss to the users of the road, the goal of risk management becomes making the roads as safe as possible. The traditional approach of risk management is to take the narrower view and consider only losses to the organization. This is true of risk management generally and is especially true where the risk involves the possibility of litigation. However, when the risk involves extensive exposure to personal injury litigation based on claims of unsafe roads, the other approach deserves serious consideration. Several observations are in order.

First, the two approaches do not always conflict. In fact, the risk management and the litigation management approaches are usually in agreement. This is an important point, because the risk of being sued is often--and incorrectly—seen as interfering with road safety decisions. The relationship between law and risk management will be discussed more fully below; at this point it is sufficient to observe that concerns about liability and concerns about safety much more often work in harmony than in conflict. At the most basic level, the best way to avoid being sued is to build a safe road. On a more practical level, for example, a good system of inspections and records can be useful both in defending lawsuits and in keeping roads in good repair.

Second, when the two approaches are not consistent, it is often possible to make adjustments that will accommodate both. Thus, if the concern is that recording decisions regarding the need for road improvements will create harmful evidence, any adverse effects can be

minimized by attention to the supporting documentation and the way in which the record is written.

Third, if the two approaches do conflict, and both cannot be accommodated, it becomes necessary to assess the precise nature of the conflict and determine how serious it is, so that an intelligent choice can be made. For example, if the concern is that inspecting the roads and keeping records of that inspection will produce evidence harmful to the road authority, it is necessary first to determine how great that litigation risk is in fact and then weigh it against the safety (and therefore long-term litigation) benefits.

On balance, giving "risk" the broader definition, thus making safety the first priority, is clearly preferable. The "litigation management" approach puts safety second. Because risk management is a process and involves an attitude toward problem solving, focusing on litigation as the primary concern can lead to decisions that detract from the total of safety. This is especially true if law is seen as an obstacle to safety decisions, rather than a guide to them. As an example, a concern with litigation might lead to a decision not to inspect the roads at all, so as to improve the legal defense that the road commission did not have knowledge of the defect. The result of such as approach might well be an increase in litigation as problems go unnoticed. Thus, because "litigation management" tends to be concerned with specific lawsuits as opposed to the actual operation of the road system as a whole, it could tend to favor short-term solutions at the expense of long-term goals. In the long run, such an approach could be very costly.

Far from inhibiting a broadly defined risk management program, the law actively encourages it. A road authority's liability is defined by a single standard: whether the road was **reasonably safe.** It does not matter whether a road is as safe as, or maintained as well as, other roads, but only whether it is in fact reasonably safe. If a road is not reasonably safe, there are few defenses left to a road authority. Actively working toward safe roads is therefore in a very real sense the best approach to litigation management. On the other hand, a policy that puts the authority's liability exposure ahead of safety is not only likely to

lead to bad road-management decisions; it is also a policy that could prove embarassing in court.

Summary

Risk management, as applied to a road authority, is concerned primarily with controlling the risk of injury to users of the road. Especially when the road authority is self-insured, the risk is managed rather than transferred. Therefore, the purpose of a road-safety risk-management program is to reduce the actual risk of a loss occurring. Risk management is a process based on six steps: (1) identification of the risk; (2) establishment of priorities among the risks; (3) determination of allocation of resources; (4) selection of risk management strategies and tactics; (5) implementation of risk management actions; and (6) evaluation of outcomes in terms of risk reduction.

A road authority's risk management program should use a broad definition of risk, that is, the risk of loss to the public rather than the risk of litigation loss to the organization. While this is a departure from the traditional risk management approach, there are sound and compelling reasons for it. Road authorities provide services to the public, and their liability is defined by the statutory duty to provide reasonably safe roads; therefore, their best litigation defense, in the long and the short run, is to do what is necessary to achieve that condition. The difference between a "litigation management" approach and a "risk management" approach is largely one of attitude, because law and safety concerns are almost always in agreement. This difference of attitude is an important one, however, because an unwarranted concern about liability exposure can distort safety decisions. Therefore the risk management process should be pursued with the attitude that law is not an impediment but a guide.

RISK MANAGEMENT AND THE LAW

The preceding sections advocate a broad definition of risk and argue that making safety rather than liability the primary concern is consistent with what the law requires of road authorities. The suggestion that the goal of safety take precedence over liability concerns should not be taken

as suggesting that law has no part in a risk management program. On the contrary, the fact that the legal duty to provide reasonably safe roads is an expression of the goal of a risk management program indicates that law has a very important part to play in such programs. It is therefore important to understand how law can be used in a risk management program as a source of information and when law can act as a constraint on the program.

Law as a Source of Information

Because of the close similarity between the risk management program's goal (safer roads) and the legal duty imposed on road authorities (reasonably safe roads), litigation-management concerns are usually consistent with risk management concerns. Therefore, the law should be seen not just as a system for finding fault and awarding damages, but as a source of information. This information can be of two types.

First, the law can provide information on standards of conduct and performance applicable to road authority activities. The engineering profession has a collection of detailed standards relating to such matters as traffic control and road design, construction, and maintenance. In law there is only one standard (that the road be "reasonably safe"), but it has many specific applications. Some of these applications are expressed in statutes (such as the one requiring signs on narrow bridges), but most are expressed in court decisions. Decisions of the Michigan Supreme Court and Court of Appeals are regularly "reported" (published), and they provide a useful source of information on how the concept of a reasonably safe road has been applied. For example, some cases discuss the question of what is required in winter maintenance. Other cases shed some light on the importance of published engineering standards and how they relate to the excercise of engineering judgment in making road safety decisions. Thus, case law is a form of public evaluation of a road authority's performance, and this measure of performance is especially important for a public agency. Because the "reasonably safe" standard is applied in the specific factual situations of individual cases as they arise, the information available is not comprehensive. Not every question about

the application of the duty will have a definite answer. Nevertheless, when there is a case or statute on point, it can be very useful, and because the duty to provide reasonably safe roads goes back to 1879, there is a large number of such cases.

In addition to providing information that can be useful in explaining standards of conduct and performance, cases can also help in identifying specific factual areas of concern. Besides clarifying what the legal duty requires in specific situations, an analysis of the cases can help identify where problems exist. They might, for example, indicate whether maintenance activities give rise to more claims than engineering or traffic control activities or whether barricades give rise to more problems than road surface condition. The reported cases can be of some use here. More important than the reported cases is the road authority's own claims experience. The usefulness of reported cases is limited by the presence of factors peculiar to particular lawsuits that influence a decision to take an appeal. Reported cases cover all of the state, rather than just the road authority's jurisdiction. They also represent a small percentage of claims made against road authorities, since they do not include cases that were settled before trial, or tried but not appealed. Therefore, a road authority should consider whether and how to establish a system for keeping track of its own claims experience.

Thus, the primary role of law (in the form of claims and litigation experience) in a risk management program is that of an information source. Along with other information-gathering activities, such as accident data analysis and road inspections, it helps provide a more complete picture of the condition of the road system.

Law as a Constraint on Risk Management

Although the law's role in a risk management program is mostly positive, the road authority should also be alert for situations in which law can be a constraint on the risk management program.

When a risk management proposal appears to raise the possibility of increased exposure to liability it is first necessary to determine the amount of the increase in liability exposure. It may happen that if the

increase is known, it is then possible to weigh it against the proposal and determine the severity of the conflict between the two. The next step is to consider whether the proposal and the liability concerns can be reconciled. It may be possible, by modifying the proposal, to achieve the desired results while eliminating or reducing the conflict. If it is not possible to eliminate the conflict, it then becomes necessary to weigh the benefits and detriments of the proposal. In doing that, it is necessary to consider whether the worth of the proposal's long-range safety benefits makes the acceptance of certain litigation risks worthwhile.

In some situations, the law may impose contraints on a risk management program, if the safety benefits of a proposal are outweighed by increased liability exposure. Such conflicts, however, are not likely to be common, and most of them can be reduced or eliminated. For the most part, the law is an important aid to a risk management program. The law supplies important information, both as to the standards by which the road authority's activities in specific factual situations will be judged, and as to what activities or conditions are frequent sources of trouble.

SUMMARY

For a road authority, especially one that is self-insured, risk management involves taking steps to reduce the actual risk of loss arising out of its operations. Because a road authority is a public agency, and because statutory law imposes on it a public duty to provide reasonably safe roads, a road authority's risk management activity should seek to control the risk of loss to the public, rather than its own risk of litigation. Because the requirements of the law are themselves directed toward the goal of safety, making safety the first priority does not usually present an increased risk of liability exposure on the part of the road authority. To the contrary, the law plays an important part in a risk management program by providing information on what is expected of the road authority in particular factual situations and on whether particular activities or road conditions often give rise to safety problems.

FOOTNOTES

1. Criddle, A.H. 1964. Evaluation of risks. Risk Management, ed. H. W. Snider, pp. 19-32. Homewood, Illinois: Richard D. Irwin, Inc.

2. Cohen, J.; Dearnaley, E.G.; and Hansel, C.E.M. 1956. Risk and hazard - influence of training on the performance of bus drivers. Operational Research Quarterly 7:67-82.

3. Gyory, R.S. 1964. The future of risk management. In Risk Management, ed. H. W. Snider, pp. 190-206. Homewood, Illinois: Richard D. Irwin, Inc.

4. Gallagher, R.B. 1964. The position of the risk manager in a business organization structure. In Risk Management, ed. H. W. Snider, pp. 1-18. Homewood, Illinois: Richard D. Irwin, Inc.

5. Parrett, J.T. Risk retention. In Risk Management, ed. H. W. Snider, pp. 49-64. Homewood, Illinois: Richard D. Irwin, Inc.

6. Rennie, R.A. 1961. The measurement of risk. Journal of Insurance 28:83-92.

7. Snider, H.W., ed. 1964. Risk management. Homewood, Illinois: Richard D. Irwin, Inc.

8. Green, M.R. 1961. Application of mathematics to insurance and risk management. Journal of Insurance 28:94-104.

9. Hellqvist, B.; Juas, B.; Karlsson, C.; Mattsson, B.; Thompson, S. 1977. Valuation of personal injuries. A comparison of explicit and implicit values. A summary. Karlstad, Sweden: Karlstad University.

10. Stopher, P.R., and Meyburg, A.H. 1976. Transportation systems evaluation. Lexington, Massachussetts: D. C. Heath and Company, Lexington Books.

11. Mehr, R.I., and Hedges, B.A. 1974. Risk Management: Concepts and applications. Homewood, Illinois: Richard D. Irwin, Inc.

12. Miller W.A. 1964. Risk control and prevention. In Risk Management, ed. H. W. Snider, pp. 33-48. Homewood, Illinois: Richard D. Irwin, Inc.

13. Allen, T.C., and Duvall, R.M. 1973. Determinants of property loss ratios in the retail industry. Journal of Risk and Insurance, 40:181-190.

14. Ginzberg, M.J. 1978. Steps toward more effective implementation

of MS and MIS. Interfaces 8:57-63.

15. Prokaska, C.R., and Taylor, W. 1973. Minimizing losses in a hostile environment: The costs of defending one's castle. Journal of Risk and Insurance 40.

16. Joscelyn, K.B., and Jones, R.K. 1977. Management of the traffic crash risk: A conceptual framework. (Preliminary draft). Ann Arbor, Michigan: The University of Michigan Highway Safety Research Institute.

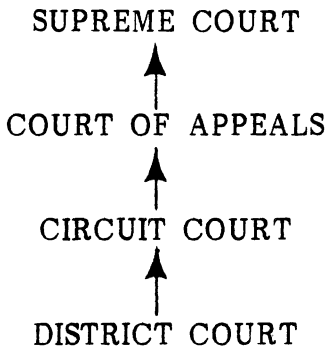
CHAPTER TWO
COURTS AND PROCEDURE

Law is an important factor in any risk management program. It can assist a program by providing information as a standard of performance, and it can impose constraints on a program if the program presents increased risks of litigation. A better understanding of the law can therefore improve a road authority risk manager's ability to use it in making decisions. It is neither necessary nor practical for the risk manager to have a complete understanding of the law, but an understanding of some of the basics of the legal system would enhance the risk manager's ability to make use of legal principles, and should also improve communication between the risk manager and the legal staff.

Although the road authority's legal responsibilities originate in statutes, they are defined by court decisions. Because the law cannot anticipate all fact situations, the statutory statement of the road authority's obligation is a general one: to provide roads that are "reasonably safe and convenient." While this statement of the road authority's duty is the basis for almost all court decisions, it is the decisions themselves that give meaning to it, by deciding whether and how it applies in specific cases. Since court decisions are the primary source of information on the legal duties of road authorities, it will be useful to know something of the court system and how it operates.

MICHIGAN'S COURT SYSTEM

Michigan's courts are organized into four levels. The two lower levels are trial courts; their primary concern is hearing and deciding claims. The two upper levels are appellate courts; their primary function is to hear appeals from decisions of the lower courts. This hierarchy can be illustrated as follows:



There are some variations to this otherwise simple arrangement. There is, for example, a probate court that hears matters relating to wills, mental incompetence, and juveniles; because the probate court is not likely to become involved in a matter involving a road authority, it will not be discussed here. There are also some municipal courts and a court of claims; each of these will be discussed below. The remaining four courts will be discussed separately.

District Courts

The District Courts are the base of the judicial hierarchy. They are a statewide system of courts, each with jurisdiction over a "district." A district is usually a subdivision of a county, although in the northern part of the state a district can include an entire county or even more than one county.

A district court can try criminal cases where the offense is a misdemeanor (i.e., when the punishment cannot exceed one year's imprisonment). District courts can also try civil cases (claims for money damages) up to $10,000. Because its authority (jurisdiction) is limited, the district court is called a "court of limited jurisdiction."

District courts were created to replace justices of the peace and municipal courts. However, the statute creating the district court system permitted cities to elect to keep their municipal courts. A few cities did so, and there are still some municipal courts left, although they are being phased out. For the most part, however, the district court system is statewide, with a uniform system of procedures. An important exception is the court in Detroit, known as the common pleas court; its jurisdiction

in civil cases is similar to that of the district courts, but its procedures are different.

Circuit Courts

The next level above district courts is the circuit courts. Like the district courts, these are trial courts. The circuit courts are organized in general on a county basis, although a "circuit" often includes more than one county in the northern part of the state.

The circuit court is a "court of general jurisdiction," which means that it has jurisdiction over all types of cases that are not specifically designated as belonging to other courts. One such designation has already been described: misdemeanors and civil cases involving less than $10,000 are handled in district courts. Some other types of cases, as described earlier, belong to probate courts. The jurisdiction left to the circuit courts is extensive; it includes all felony criminal cases (where the penalty can include imprisonment for more than one year), all civil cases where more than $10,000 is claimed, and all civil cases involving "equitable" (i.e., special) relief--such as injunctions (orders compelling someone to do or stop doing some specific act). Because of its broad jurisdiction, the circuit court is very much the center of the judicial system in Michigan; most cases of general significance begin in the circuit courts.

Like the district court, the circuit court is a trial court. It tries (either with or without a jury) and decides claims presented to it in the form of lawsuits. The circuit court also has some "appellate jurisdiction," that is, it hears appeals from decisions of the district courts. This however, is a very small part of a circuit court's business; it is primarily a trial court.

Although circuit courts exist statewide, and their procedure is for the most part uniform, there is one significant exception to this uniformity. One of the basic rules of law is that a state cannot be sued without its consent. It follows from this that it can impose conditions on any consent it gives. In Michigan, the state requires that any suits against it be brought in a "court of claims." The court of claims was in fact much

like a circuit court, except that jury trials were not permitted. Beginning in 1979, the court of claims was made a division of the Ingham County Circuit Court.

Court of Appeals

The next step in the hierarchy is the court of appeals. As its name implies, it is not a trial court, but an appellate court, hearing appeals from decisions of circuit courts, and from district courts. The function of an appellate court is to promote uniformity among legal decisions and to correct errors of law made by the lower courts.

The appeal process is described in more detail below, but two points deserve mention here. First, the law grants an automatic right to one appeal. Any additional appeals must be granted by the appropriate appellate court. Thus, the court of appeals must hear an appeal from a circuit court decision, but the supreme court can decide whether to hear a further appeal. Similarly, a circuit court must hear an appeal from a district court decision, but the court of appeals can decide whether it wishes to grant a second appeal.

Second, an appeal is an appeal "on the record." This means that the case does not get a second trial. Instead, the written record of the trial is sent to the appellate court for review.

The state is divided into three court of appeals districts, each consisting of three or more counties and each having its own set of judges. The judges sit in groups of three to hear and decide cases. Decisions are reached by majority vote, and are expressed in written "opinions," which are "reported" (printed and bound in book form) periodically. These reported opinions then become the "precedents" on which future court decisions are based.

Supreme Court

The supreme court is at the top of Michigan's judicial system. It hears appeals from decisions of the court of appeals. As noted above, the supreme court selects the cases it will decide. It consists of seven justices, who decide questions by majority vote. These decisions are

usually expressed in written opinions, which are reported. Because only decisions of the courts of appeals and the supreme court are reported, it is these courts that make the law for the state.

Federal Courts

The preceding discussion has covered only the state court system. There is a parallel system of federal courts, but they are not very important in the context of road liability law. The federal courts have jurisdiction only in two situations: where the plaintiff is not a resident of the state, and where a "federal question" (arising out of a federal statute or the United States Constitution) is involved. When a federal court hears a federal question case, then it follows the federal law; a road liability case is not likely to create a federal question. However, when a federal court hears a case because the plaintiff is a nonresident, it generally applies the state's law. Thus, if an Ohio resident were to sue a Michigan road authority in a federal court, that court would apply the law as set down by the Michigan appellate courts. Therefore, while a federal court might hear a case against a road authority, it is ultimately the state courts that define the law in the area.

As far as civil liability is concerned, there is no federal court equivalent to the state district courts. The federal trial court equivalent to the circuit court is called a district court. There are federal courts of appeals and a Supreme Court of the United States, and these operate in a way that is similar to the Michigan appellate courts.

COURT PROCEDURE

To understand the reported opinions of Michigan's appellate courts, it is helpful to understand the procedures that lead to them. It is not necessary to understand the intricacies of trial and appellate procedure or strategy, but some basic concepts should be kept in mind. The purpose of the following discussion, therefore, is to provide an explanation of some of the fundamentals of trial and appellate procedures. The discussion is of the state court system, but the principles apply to the federal courts as well.

Trial Court Procedure

Procedure in the two trial courts (circuit and district) is very similar. Each of them can best be described in terms of the stages of the proceedings.

Starting the Case. A lawsuit is started by filing a complaint. The complaint contains a written statement of the plaintiff's claim; it must describe the facts that the plaintiff says make the defendant liable to him. Apart from the payment of a modest fee, a written complaint is the only procedural requirement for starting a lawsuit. There is no procedure at this stage for screening out claims that lack merit. When the complaint is filed and the fee paid, the court clerk will issue a summons. The summons and complaint are served on the defendant, thereby notifying him that he has been sued (and the reasons for it) and that he must respond within a certain period of time (usually twenty days).

Dismissing the Case Before Trial. If the defendant believes that there is no basis for the case to go to trial, he may respond to the summons and complaint by asking the court to dismiss the case (grant summary or accelerated judgment). There are two types of reasons for a court to dismiss a case without trial. One involves certain special defenses. For example, if a government is sued and is immune, or if the plaintiff has waited too long (so that the statute of limitations has run out), the defendant would usually ask the court to dismiss the case.

The second reason for dismissing a case involves the claim itself. It may be that even if everything the plaintiff says is true, the defendant is not legally responsible. For example, if the only basis for the plaintiff's claim is that a road authority failed to prevent "preferential icing" on a bridge, the case should be dismissed because under Michigan law a road authority is not liable for preferential icing. Two important factors come into play when a court is considering a request (motion) to dismiss a case on this basis. First, all of the facts that the plaintiff alleges are treated as true; second, any doubt is resolved in favor of the plaintiff. Thus, if

the plaintiff's complaint in the example above could be interpreted as claiming that the defendant failed to give warning of the possibility of icing, the court would not dismiss the case.

In summary, the purpose of the motion to dismiss is to screen out cases that do not merit a full trial. It is not intended to settle disputed questions of fact; when facts are in dispute, the case is sent on for trial.

Preparation for Trial. If the defendant's motion to dismiss is not successful, both parties must prepare for trial. Each will conduct its own investigation of the facts and prepare its own witnesses. In addition, each party has the right of "discovery." As the term implies, discovery is a process that permits each party to learn the evidence that the other has accumulated. Each party must inform the other of the witnesses it intends to call. Each party is entitled to interrogate the other party and his witnesses in a "deposition," where the witness must answer questions under oath and in the presence of a stenographer (who makes a record of the testimony). Each party can also require the other to answer written questions ("interrogatories"), and finally, each party is entitled to inspect the relevant records in the possession of the other. The scope of these discovery procedures is broad, although there are some things that are protected from discovery (such as an attorney's impressions and tactics, or settlement or trial strategy).

Trial. Most cases are settled before they reach trial. For those that are not, the trial provides the parties with their "day in court." In most cases, the parties have a right to a trial by jury (except in the court of claims). If there is a jury, the judge decides matters of law and instructs the jury on the law and the jury then decides (by a five-sixths vote) quesions of fact. If the parties have not asked for a jury, the judge decides both matters of fact and of law and states his decision in written opinion.

The relationship between the judge's and the jury's functions at a trial is a common source of confusion. The judge decides questions of law and instructs the jury. During the trial itself, the judge decides such legal

matters as what evidence must be excluded. When the testimony is complete and the jury is about to begin its deliberations, the judge will instruct them, that is, he will explain for them what the law is and how it relates to the case. For example, in a case involving a flooded road, he might tell the jury that the road authority is not liable for unusual flooding, but that it must design roads so as to be able to accommodate ordinary rainfalls. Questions of fact are decided by the jury. In the flooding case, the jury would decide whether the road had been designed with adequate drainage and whether the flooding was unusual.

Occasionally, the judge will believe that the facts are sufficiently clear that only one conclusion is possible. He may then decide, for example, that "as a matter of law" the defendant was not negligent. He would then decide in favor of the plaintiff, either without sending the case to the jury or "setting aside" their decision if they have made one. Such decisions are rare. The great majority of cases involve disputes of fact, and there is a great reluctance on the part of the judge to take a case from the jury, except, of course, when the parties have not asked for one.

Except when the case is decided as a matter of law, the decision of the judge or the jury must be based on a "preponderance of the evidence," which means that it must be more likely than not that the plaintiff is correct in his claim. This standard of proof should be contrasted with that in a criminal case, where guilt must be proved by the stricter standard, "beyond a reasonable doubt."

The Appeal Process

As was said earlier, only a small percentage of the cases filed ever go to trial. Likewise, only a small percentage of the cases that go to trial are appealed. In spite of this, the appealed cases are particularly important, because they determine the law by applying the road liability statute to specific cases. It is the appellate courts that decide, for example, what a "reasonably safe" road means in terms of snow removal or shoulder maintenance or traffic control. To appreciate the significance of these decisions, it is necessary to understand the purpose and the

limits of the appellate process.

Procedure. The appeal procedure is fairly simple. Within twenty days of the trial court's decision, the party wishing to appeal (the appellant) files a "claim of appeal." In the usual case, where the trial was in the circuit court, the claim of appeal is filed in the court of appeals. The next step is for the appellant to prepare and file with the court a brief (a written argument of the reasons the appellant believes the circuit court's decision was incorrect). The other party (the appellee) then files his brief, responding to the appellant's arguments. The case is then scheduled for "oral argument" in which the attorneys for each party have an opportunity to summarize their arguments for the court and answer any questions the judges may have. After oral argument, the judges confer with each other and decide whether to affirm the lower court's decision, reverse it, or modify it. The decisions of the court and the reasons for it are expressed in a written "opinion," which is reported (published).

The party that lost in the court of appeals can ask the supreme court to review the case. However, while the court of appeals must hear the appeal, the supreme court is not required to do so. If the supreme court does grant permission to appeal, the rest of the procedure is like that in the court of appeals.

Appellate Court Decisions. The above description of appellate court procedure gives some indication of how the court of appeals or the supreme court decides a case. Perhaps the most important characteristic of appellate decision-making is that it does not involve a trial. An appellate court does not hear testimony to determine what the facts were. Instead it decides a case "on the record," that is, it reviews a written record of the trial. In reviewing that record, the appellate court is mostly interested in determing whether any mistakes of law were made at trial. If, for example, evidence that should have been admitted was excluded, or if the judge incorrectly stated the law to the jury, the appellate court would consider whether the error was serious enough to

merit some remedy. The appellate court also reviews questions of fact, but only in a limited way. It gives the benefit of the doubt to the lower court, and especially to the jury's decision since they saw the evidence firsthand and were therefore better able to assess the reliability of the witnesses. Thus, an appellate court will reverse a decision of fact made by a jury only if it believes the decision was incorrect "as a matter of law," and will reverse a trial judge's decision of fact (where there was not jury trial) only if it is "clearly erroneous."

When the appellate courts apply the law to a case, they generally find the applicable law in two places: statutes and court decisions. Often a statute is so clear that it alone is sufficient to answer a question; the statute requiring that bridges less than seventeen feet wide be posted as one lane bridges is an example. Often, though, there is no statute or the statute speaks only in general terms (such as the requirement that a road be "reasonably safe"). When that happens, the law is made by the appellate courts in the course of deciding individual cases. The written opinion becomes a "precedent," to be referred to in deciding later cases.

As the number of cases in an area of law grows, the law gradually becomes clearer. But determining what the law is on any issue is not a mechanical process. The primary purpose of an appellate court decision is to decide the case before it; in the course of making that decision the court also makes some law. Each case, therefore, contains only a limited statement of law, and it is often necessary to consider the facts of a case, and how it is related to other cases, in order to determine its meaning. The process of making law by court decision tends to leave gaps. Estimating how these gaps are likely to be filled by future decisions requires the exercise of an attorney's professional judgment.

This kind of judgment in analyzing precedents is exercised by the judges of the appellate courts when they decide a case, as well as by a trial court judge in determining the law applicable to the case. In analyzing the precedents, the courts follow the rule of "stare decisis," which requires that earlier decisions of a higher court be followed. Thus, the trial court is bound by the decisions of the court of appeals and the supreme court. The court of appeals is not required to follow its own

decisions, but must follow the decisions of the supreme court. The supreme court can change a rule of law that it has made in an earlier case, although such changes are not common. All courts must follow the rules created by statute.

Sometimes, when the law in Michigan is not clear, a court will refer to court decisions from another state. If, for example, another state has a statute similar to the one being interpreted by the Michigan court, that state's interpretation of its statute may be helpful. However, decisions in other states (or in any federal court when the question involves state law) have no binding authority as precedent. They may be useful as guides, but they are not authoritative.

In summary, the scope of appellate review is limited. Appellate courts review lower courts' decisions primarily to find errors in the law. They also review decisions of fact, but give the benefit of the doubt to the trial judge or the jury. The appellate courts do not hold trials, but base their review entirely on the written record of the trial proceedings and the briefs prepared by the attorneys in the case. Appellate court decisions are based on precedents established by earlier cases decided by the state courts. Since these precedents are created by individual decisions based on the fact situations of specific cases, applying them is not a mechanical process but often requires considerable judgement.

Relief Granted. When an appellate court has decided how the law should be applied to a case, it reaches a "decision." As was explained earlier, the opinion is the written statement of reasons for the decision; the decision itself is a statement, usually at the end of the opinion, of what is to be done with the case.

Although appellate court decisions can take many forms, there are basically two types. First, if the appellate court believes the lower court's decision was correct, it will "affirm" it. In that case, nothing more needs be done; the trial court then proceeds to carry out its decision. If the appellate court finds that the lower court's decision was incorrect, it will "reverse" it. When a decision is reversed, the appellate court must also decide what must be done to correct it. Generally, there

are two choices. If it believes the trial was unfair (if, for example, improper evidence was used), the appellate court will "remand" the case for a new trial. If it concludes that the trial was procedurally correct, but that the result was incorrect, the appellate court will itself decide the case in favor of the other party; in this situation it will remand the case to the trial court with directions that a judgment be entered for the other party.

These three decisions--affirmance, reversal with remand for new trial, and reversal with remand for entry of judgment--are the most common. However, the appellate court can tailor its decision to fit the needs of the case. If it concludes that the trial court was correct in finding that the defendent was liable, but was incorrect as to the amount of damages awarded, the appellate court can affirm the decision as to liability and remand the case for a new trial limited to the question of damages. The appellate court can even increase or decrease the amount of the damages awarded, although it seldom does so. Other variations are possible, depending on the needs of the case, but for most cases the decision is a simple statement that the case is affirmed, or reversed for new trial or for entry of judgment.

SUMMARY

To make the best use of legal materials in a risk management program it is necessary for a risk manager to understand how court decisions are reached and how they are used within the legal system. For this purpose, the functioning of the legal system can be discussed in terms of trial and appellate courts.

The primary trial court is the circuit court, which has extensive jurisdiction. Circuit court procedure is typical of trial court procedure in general. That procedure is intended to preserve an open court system, one in which the opportunity to have grievances heard--to have a "day in court"--is freely available. Therefore, there is no provision for screening a case at the time it is begun. There is a screening procedure by which cases can be dismissed before trial, but the case must, at this stage, be viewed in the light most favorable to the plaintiff. Thus, while the

system is structured so as to screen out frivolous cases, it focuses on the trial itself for the settlement of disputes.

The parties to a lawsuit prepare for the trial through the discovery process, by which each party, through written questions and oral interrogation of witnesses, learns the strengths and weaknesses of his and the other party's case. At the trial itself each party presents his case, through the testimony of his own witnesses and by cross-examining the opposing witnesses. If the trial is before a jury, the jury decides the questions of fact, following the judge's instructions as to the law. If there is no jury, the judge decides questions both of fact and of law.

The appellate courts (the court of appeals and the supreme court) become involved after the trial. Each case can be appealed, as a matter of right, to the next higher court. Beyond that the permission of the appellate court is required.

The appellate court is primarily concerned with questions of law, such as whether the lower court applied the law correctly. It also reviews the lower court's decisions of fact, but it gives the benefit of doubt to the lower court, since it was better able to assess the reliability of the evidence.

The decision of the appellate court usually takes one of three forms: affirmance of the lower court's decision, reversal with remand for new trial, or reversal with remand for entry of judgment. The reasons for the appellate court's decision are usually explained in a written opinion. The opinions of the court of appeals and the supreme court are published on a regular basis. Each case then becomes a precedent for later cases. Because courts decide cases on the basis of the facts of each case, the court's written opinion must be interpreted in the light of those facts. Therefore, applying precedents to new cases requires the exercise of considerable professional judgment.

CHAPTER THREE
THE ROAD AUTHORITY'S LIABILITY—THE GENERAL RULE

The road authority's liability for injuries related to use of its roads can be stated very simply: the authority is liable for injury to a person or property caused by its failure to provide reasonably safe roads. The purpose of this and the following chapters is to explore the meaning of the concept of "reasonably safe," and its application to specific situations.

The starting point for this discussion must be with the law of negligence. Although the statutory liability of a road authority is not the same as liability for negligence, it is very close to it--so close in fact, that in most cases they are treated as being the same. Therefore, it is important to understand the concept of negligence as a basis for understanding statutory liability.

NEGLIGENCE

Liability for negligence is much older than the statutory liability of road authorities. The legal concept of negligence was originated by the courts and has been developed by them over the years. Its development continues as new cases involving different conditions come before the courts for decision.

The negligence concept is broad, and is intended to cover widely different fact situations. Liability for defective roads is, for most purposes, an application of the law of negligence and the rules applied in road liability cases are much the same as those applied in all other negligence cases.

In general terms, negligence is conduct that falls below a legal standard of care for the safety of others or their property. The legal theory of negligence is composed of four elements: duty, breach, cause, and damage. The duty is to avoid the unreasonable risk of injury to others. The duty is breached when the defendant fails to meet the

standard of care required by the duty. That breach must be a cause of loss to a person or property; the loss must be actual--negligent conduct that almost causes a loss cannot be the basis of a lawsuit. Each of these four elements will be discussed separately.

Duty

A duty is a legal obligation to another to do a certain thing or act in a certain way. Unless there is a preexisting duty to another, there is no liability, even if one's actions are "bad." For example, there is no duty to come to the aid of a stranger in mortal danger, even if there is no risk to oneself. Thus, one who chooses to let an unconscious man drown in a shallow puddle, is not liable for the man's death. Therefore, the existence of a legal duty is the first and most basic element of a negligence claim.

The duty imposed by the law of negligence is often described as a duty of reasonable care. It requires that care be taken to avoid an unreasonable risk of harm. Obviously the duty rests on the concept of "reasonableness," which is quite general. It is sometimes phrased in terms of a comparison of the defendant's conduct to the conduct of a "reasonable man under the same or similar circumstances." This is an objective standard; that is, it does not view the defendant's actions in the light of his own abilities, but with reference to the conduct of a hypothetical "reasonable man."

For the concept for reasonableness to be useful in individual cases, it must be made more specific. For this purpose, a set of subrules has been developed to relate the general duty of care to specific situations. Some of these subrules come from statutes, and others are developed by the courts themselves. For example, if there is any question whether the duty of reasonable care requires special treatment for a bridge eighteen feet wide, there is a statute that answers the question by stating that a "narrow bridge" sign must be posted on any bridge less than nineteen feet wide. There are other statutes that discuss a standard of care for such activities as signing no passing zones, closing roads for repair, load limits on bridges, installation of traffic control devices, and designation of road

work areas. When a standard of care is established by statute, it has a special status. Because the legislature has required certain conduct, failure to comply with the requirement will greatly increase the likelihood that the defendant will be found liable. It has often been said that failure to comply with a specific statutory duty is automatically negligence—"negligence per se." The rule is in fact not that harsh, but is still quite strict. Failure to comply with a specific statutory requirement creates a presumption of negligence; that is, the defendant will be found negligent unless he can justify his failure to comply with the statute. This rule applies where the statute requires some specific conduct. The general statutory requirement that a road be "reasonably safe" is merely a restatement of the requirement of reasonable care. It does not specify any conduct that is required, and therefore can not create any presumptions.

Duties can also be specified by regulations. These are rules or guidlines enacted not by the legislature, but by the government agency under the authority of a statute. An example of this is the Michigan Manual of Uniform Traffic Control Devices (manual), which is promulgated by the Department of Transportation and the Department of State Police. Because it is not enacted by the legislature itself, it does not create a presumption of negligence. Instead it can be used as evidence of negligence, that is, the judge in a trial will tell the jury they can consider a road authority's failure to comply with the manual as evidence tending to show the authority was negligent.

While statutes and regulations are sources of more specific--subrules--of the duty of reasonable care, most specific statements of duty have been developed by the courts. In a case involving a road under repair, for example, the court's instructions to the jury might include a statement that the road authority's duty to provide a reasonably safe road does not change because the road is under repair, so long as it is open. The court might also tell the jury that the plaintiff is not necessarily negligent because he drove on a road he knew was under repair, but that he is required to take into account any visible defects, whether he in fact saw them or not. In a case involving a

flooded road, the court might tell the jury that the road authority is not liable for unusual, unforeseen floods. In each situation, as the case is tried, the judge will translate the duty of reasonable care into a set of subduties related to the facts of that case.

The duty of reasonable care can be stated simply. It requires that a defendant use reasonable care to avoid exposing others to an unreasonable risk of damage. This duty is general, and extends to all forms of activity. It is made more specific by statutes and regulations, and more often by courts, as they translate the duty into the factual context of the case to explain what the duty requires. It is up to the jury then to decide whether the defendant's conduct met the requirements of the duty.

Breach

The second element of negligence is the breach of the duty. Duty establishes an obligation to the injured party. Breach occurs when the defendant's conduct falls short of the legal obligation to act reasonably. What that obligation requires depends on the circumstances. A breach can arise either from acting or failing to act. As was said above, the nature of the duty is defined by the judge; whether the defendant breached the duty is decided by the jury. There are a few cases in which the judge will believe that the defendant's actions clearly are or clearly are not, a breach of his duty. In such cases he will decide the case himself as a matter of law, rather than let the jury decide. Those cases are rare, however. In most cases whether a defendant was or was not negligent will be decided by the jury.

Proximate Cause

The third element of a negligence case is causation. It might be that the defendant had a duty to use reasonable care and failed to do so, but that the plaintiff's injury was caused by something else. For example, suppose a person is driving across a bridge that is required by state law to be posted as a narrow bridge. If the bridge has not been posted and the driver is killed when his car strikes the side of the bridge because of a tie-rod failure, the road authority would not be liable because the

absence of a sign did not cause the accident.

The legal requirement is that the breach of duty be in fact a cause of the injury and also a proximate cause of the injury. The term proximate (which literally means "near") is intended to screen out effects that society considers too remote from the cause to merit liability. The manufacturer of a car is not responsible for a negligent act committed with it, even if the negligence could not have happened without it. On the other hand, one who provides a car to another knowing it is likely to be used negligently may well be liable. Where to draw the line between what is near enough and what is too remote can be a difficult question. In practice, however, problems of proximate cause are rare. The relationship of cause to effect in most cases is so clear that it is not seriously raised as an issue.

Damage

The final element of a negligence case is damage. There must be a tangible loss (damage) in order for the defendent to be liable. Carelessness that results only in a near miss is not basis for a negligence claim.

It is useful to distinguish among injury, damage, and damages. The term "injury," in its strict sense, means the infringement of a legal right. "Damage" refers to the loss, such as a damaged car or a broken leg, caused by the injury. In practice injury and damage are used interchangeably, since the distinction between them is seldom important. The third term, "damages," is distinguished from the first two. It refers to the money awarded to compensate the plaintiff for his injury and damage. In a negligence case actual loss--damage--is required before a plaintiff can sue to recover damages. Damage can include damage to property or to a person, and can also include pain and suffering, expenses incurred, and wages lost.

STATUTORY LIABILITY

The preceding description of negligence is intended to provide a background to the discussion in the remainder of this and in the following

chapters on road authority liability. That discussion must begin with an explanation of why a road authority's liability is not based on negligence.

Governmental Immunity

One of the oldest rules of law is the rule that the government can not be sued for its wrongful acts. The rule began in England and still exists in this country, with various modifications, today. Various reasons have been given in support of this rule, including the theoretical one that the one who creates the law is not subject to it, and the practical one that judgments against the government might impair its financial stability. As social conditions have changed, support for governmental immunity has waned and the doctrine has receded somewhat. Today, courts are generally hostile to the rule, while legislatures seek to preserve it. The result is often a general rule that government is immune from suit, with certain enumerated exceptions.

The law in Michigan follows this pattern. In the area of road liability, the state has abolished immunity by statute. However, the statute abolishing immunity also states the only basis on which a road authority can be liable. Although the basis of road authority liability is quite similar to negligence, it is not the same. Therefore, the doctrine of governmental immunity protects road authorities from being sued for negligence, but the statute permits them to be sued for breach of the duty imposed on them by the statute.

Road Authority Liability

The law of road liability in Michigan is expressed in two statutes. One of them relates specifically to county road commissions. It defines their duty as follows:

> It is hereby made the duty of the counties to keep in reasonable repair so that they shall be reasonably safe and convenient for public travel, all county roads, bridges and culverts that are within their jurisdiction and under their care and control and which are open to public travel.

The other statute is a part of the act defining the extent of

governmental immunity. It applies to all road authorities. Its definition of their duty is similar to the first statute:

> Each governmental agency having jurisdiction over any highway shall maintain the highway in reasonable repair so that it is reasonably safe and convenient for public travel. Any person sustaining bodily injury or damage to his property by reason of failure of any governmental agency to keep any highway under its jurisdiction in reasonable repair, and in condition reasonably safe and fit for travel, may recover the damages suffered by him from such governmental agency.

The substance of the duty is expressed in several phrases: reasonable repair, reasonably safe and convenient, and reasonably safe and fit. This duty is expressed at another point in the first statute in a reference to liability for "any defective county road, bridge or culvert." It might be possible to interpret the phrase "reasonable repair" in each of these statutes as creating only a maintenance duty, so that there would be no liability for a design defect. However, it has been clear for a long time that courts have treated the "reasonably safe" concept as the test.

It is the nature of the statutory duty that makes a road authority's liability different from negligence liability. The negligence duty is to use reasonable care to avoid unreasonable risk of injury to another. In terms of road operations, this would be a duty to use reasonable care to make the roads safe. The statutory duty is more direct. It requires that the roads in fact be reasonably safe. The difference betweeen the two duties is that one inquires into conduct, while the other looks at a condition. The negligence test is whether the road authority's activity showed the use of reasonable care; the statutory test is whether the result of its activity is a "reasonably safe" road. The road need not be perfectly safe; that would be an impossible standard. Therefore, not every defect in a road will make a road authority liable. It is liable only when the defect makes the road not "reasonably safe."

Although the distinction between the negligence duty and the statutory duty is clear, in most cases it is not significant. In most cases, if a road is in fact unsafe, the road authority could be shown not to have used reasonable care. If, for example, a stop sign is knocked down and

the road authority, having been told it is down, does not replace it for a week, it is as easy to say the authority was negligent as to say the road was unsafe. Because negligence and statutory liability are so similar and because they overlap in so many cases, courts tend to treat them as being the same. Most cases in fact describe the liability in terms of negligence.

However, there are some cases where the distinction is important, and in those cases courts are careful to preserve it. For the most part these are cases where the road authority seeks to raise certain defenses. One is the "state of the art" defense, that a road was safe when built and that the authority would not be liable merely because changing conditions have made it unsafe. The other is a "lack of funds" or "lack of personnel" defense, which argues that the road authority in fact was unable, for reasons beyond its control, to take care of the road in question. Another version of this defense is the "allocation of resources" defense, which argues that the authority has a well-thought out system for making the best use of its limited resources in funds and personnel. Each of these defenses will be discussed in more detail in Chapter Five below. In brief, however, the fact that the statutory duty focuses on the condition of the road rather than the conduct of the defendant makes these defenses difficult to sustain.

This discussion of a road authority's statutory duty may give the impression that a road authority's liability is greater under the statutes than under the rules of negligence. This is true--it is in fact greater—although the difference in most cases is theoretical rather than practical.

Because the statutes make a road authority liable for a defective road, another statutory provision becomes especially important. This is the provision that a road authority must have either known, or had reason to know, of a defect and have had a reasonable time to repair the defect. Without this provision, a road authority would in effect be liable as an insurer of its roads; it would, for example, be required to compensate someone injured by a defect that had just come into existence and of which the authority could not have known. The notice

provision mitigates that problem and, in a sense, brings a road authority's liability closer to ordinary negligence. Its mitigating effect is limited by a modifying provision that the road authority will be considered to have had knowledge of the defect and time to repair it if it has existed for at least thirty days. Still, despite its limitations, the thirty-day rule does provide significant relief from the otherwise strict standard by giving the road authority an opportunity to discover and remedy unsafe conditions. Because the lack of knowledge of a particular defect would be used as a defense by a road authority, it is discussed more fully below.

The road liability statutes also impose a procedural requirement on anyone seeking to sue a road authority. The claimant must notify the authority within 120 days of the injury of: the occurrence of the injury, the exact location and nature of the defect, the injury sustained, and the names of witnesses known at the time by the claimant. Because failure to comply with this requirement can be used as a defense, it will be discussed in more detail below. At this point it is sufficient to note that the claimant's failure to comply with this requirement will defeat his claim only if the road authority is "prejudiced," that is, if its ability to defend itself is impaired.

Another limit on a road authority's liability is a part of the statement of duty itself. Road authorities are liable for defects in roads under their jurisdiction. For road commissions, the rule is that they are liable for all "roads, bridges and culverts that are within their jurisdiction and under their care and control and which are open to public travel." Thus any road authority's liability is limited to certain roads. Because these limitations serve as defenses, they are also discussed below.

Finally, the statute provides, as to the state and the county road commissions, that their liability extends "only to the improved portion of the highway designed for vehicular travel and shall not include sidewalks, crosswalks or any other installation outside of the improved portion of the highway designed for vehicular travel." This limitation (and especially the part referring to the "improved portion of the highway") has been used by the state and the county road commissions in an attempt to exclude some of their activities from the statutory duty. While these attempts enjoyed

some success in earlier cases, the courts have come to the view that anything that affects the safety of the highway is within the scope of the duty to provide safe roads. Thus, while the exclusion of sidewalks still stands, the courts have held that road authorities cannot avoid liability for defects in the shoulder, and for improper traffic control, on the theory that each is outside the "improved portion" of the highway designed for vehicular travel.

SUMMARY

In summary, the statutory duty to provide "reasonably safe" roads is similar to the duty that is the basis of negligence. It differs in that it requires a certain condition (reasonably safe roads) rather than certain conduct (reasonable care), but in most cases the difference is not significant. The difference does, however, mean that certain defenses that might be available in a negligence action are not available under the statute. The road authority's liability is subject to some limitations that provide it with defenses in certain cases. These include the opportunity to learn of and correct the defect within a reasonable time; the requirement that the authority be notified of the accident within 120 days; the requirement that the road be open, within its jurisdiction, and under its care and control; and the exclusion of sidewalks and crosswalks. Despite these limitations the basic duty of a road authority remains intact—to provide reasonably safe roads.

CHAPTER FOUR
ROAD LIABILITY LAW—SPECIFIC SITUATIONS

The road authority's statutory duty to provide reasonably safe roads applies to all of its road-related activities. It provides a consistent theoretical basis for courts to use in deciding cases arising across the broad range of a road authority's operations. Occasionally, the requirements of the statutory duty are clarified by another statute, such as the one requiring signs on narrow bridges (1). Most of the time, though, the general statutory duty is given meaning by the courts in individual cases as they arise.

For most of a road authority's activities, the cases do not go beyond the general rule. Perhaps the best example is guardrail installation and maintenance. Although there has been a substantial number of cases involving guardrails (2), all but two of them simply reaffirm the principle that whether a guardrail was necessary or sufficient to make a road reasonably safe is a question of fact to be decided by the jury. The two cases in which the courts have said as a matter of law that a guardrail was not required, do not state any principles that can be used by a road authority in deciding whether to install guardrails. In addition, they are relatively old; they are therefore of doubtful validity today, when courts seem to tend more strongly to permit cases to go to the jury for decision (3). Therefore all that can be said of the law of guardrails today is that the question whether a guardrail was needed or was sufficient to make a road reasonably safe will almost always be a question of fact to be decided by the jury.

The area of road design and construction is another example of how courts often use general rules of law. Whether a road was designed and built so as to be reasonably safe is generally a question of fact, and there are few cases that elaborate on this. It has been held that a road authority must, when it designs a road, consider seasonal problems such as

flooding (4), and perhaps snow and ice (5). Road authorities are also required to anticipate that vehicles and pedestrians might depart from the travelled way (6). Apart from these principles, however, design cases tend to be submitted to the jury as questions of fact to be decided by reference to the general statutory duty to provide reasonably safe roads.

There are, however, some areas where the cases, and occasionally some specific statutes, create some relatively detailed and useful principles of law. Those areas are discussed in this chapter. One of them—problems of winter maintenance—is unique in that it creates what is in effect an exception to the statutory duty. The other two--construction zones and signing decisions—involve applications of the general rule, but with the addition of some specific statutes and rules.

As each of these three topics is discussed in this chapter, it is important to keep in mind that the discussions are limited by the nature of case law. Each case involves a decision based on a specific set of facts. A comprehensive treatment of the law in any area requires that each of these cases be analyzed and blended with the others and with any statutes to form a coherent whole. It sometimes happens that two or more cases are in conflict on a question, or that a particular question is not addressed by any cases. When that happens, the law on that point is less clear, and predicting the result if the question were raised today becomes a matter of judgment.

The point was made in Chapter Two, and bears repeating here, that most of the cases on any question hold that whether the defendant was liable is a question of fact for the jury. In terms of road liability law, it is for the judge to decide whether a condition **might** be a defect and for the jury to decide whether **it is** in fact a defect. Therefore, the statement that a certain condition was found to be in fact a defect in one case does not mean that it would be found a defect by another jury in another case. Nevertheless, the cases do give a good indication of the types of road condition that can give rise to liability.

LIABILITY FOR SNOW AND ICE

A substantial part of a road authority's budget is devoted to treatment of problems caused by snow and ice. Because a road authority in Michigan can be sure there will be snow, but cannot be sure when it will come or how much there will be, winter weather presents a particularly difficult problem for road maintenance. Because road safety problems involving snow and ice can occur so frequently, it is important to understand the road authority's liability exposure in this area.

The appellate cases indicate that the courts are very much aware of the practical problems road authorities face in dealing with snow and ice. In the first case in Michigan involving snow and ice, the court said:

> It would be a great hardship and involve ruinous expense if all of the multitudinous ways that are subject to be affected by winter storms are to be constantly watched and diligently kept in thoroughly good condition. Most communities may be relied on to do what is necessary and feasible. But no amount of diligence can supply an adequate force and adequate means to detect the inevitable accumulations of snow trampled into hardness on every cross-walk and in every roadway. (7)

The court's awareness of the practical problems of winter maintenance led to the rule that road authorities are not liable for "natural accumulations" of snow and ice. That rule remains in force today. The rule applies both to sidewalks and to roads (8).

The "natural accumulations" rule creates a standard that is different from the one usually applied to road authorities. Courts usually interpret the statutory language--to provide "reasonably safe" roads—fairly strictly. Thus, it is not a defense for a road authority to show that it lacked the resources to correct a problem (9). In addition, when there is an obstruction in a road, it is not usually a defense that it occurred "naturally" (10). In the area of winter maintenance, however, the courts have recognized the general difficulty of snow and ice control, and have created the rule that a road authority is not liable for injuries caused by natural accumulations of snow and ice.

The exclusion from liability extends only to natural accumulations.

The road authority's general liability--for a defect of which it has or should have knowledge and that makes a road not "reasonably safe"--applies when the accumulation is unnatural. This distinction between natural and unnatural accumulations has come before the courts on several occasions, and, while the distinction is not entirely clear, some principles do emerge from the cases.

It is clear that the normal falling of snow and rain on a sidewalk or road creates a natural accumulation. The normal flow of water, which later freezes, also gives rise to a natural accumulation. This is true whether the water comes from normal runoff from land (11), from a building (12), from a road onto a sidewalk (13), or from snow shoveled into a pile next to a sidewalk (14). "Preferential ice," which forms on bridges under certain conditions, is also a natural accumulation (15). The fact that snow becomes ice by the passage of traffic over it does not make the ice an unnatural accumulation (16). In addition, if a plow removes some, but not all, snow, so that what remains is a slippery ridge, the ridge is not an unnatural accumulation and the road authority is not liable (17).

As to accumulations of ice, when some condition other than the mere flow of water is involved, the law is not as clear. The fact that water accumulates because of a backup in a catch basin does not make the road authority liable, at least where there is no proof that the catch basin was defective (18). In addition, the accumulation of snow and ice at a point where the sidewalk is inclined is not a basis for liability, since inclines are unavoidable (19). Similarly, it has been held that the accumulation of ice in a depression in a sidewalk does not make the road authority liable, when the depression itself was not a defect (20).

On the other hand, where there was an upheaval in a sidewalk (which the court did consider a defect) and it became slippery when water flowed over it and froze, the road authority was liable (21). Also, when the water came from a leaking tank (which the city could require the owner to fix) and the normal flow of water was diverted onto the sidewalk by a depression in it, so that ice was formed in "unusual quantities," the road authority was liable (22). It is not possible to

extract a completely clear principle from these cases. The rule seems to be that since there is no liability simply for ice and snow, liability depends on persuading the court that there was an independent defect, so that the ice or snow merely increased the danger (23). What will constitute a defect is not clear. It is easy to understand why an incline, as a road or sidewalk crosses a hill, is not a defect. It is not as easy to explain why an "upheaval" is a defect and a depression is not, or why one depression is a defect and another is not. Still, the principle is that unless there is a defect apart from the ice and snow, the road authority is not liable.

Another set of cases involves the moving of ice and snow by the road authority or by other persons. As we have seen, most cases base liability on the existence of a defect separate from ice and snow. In other cases, the ice or snow itself is the only defect, and liability is based on how it got where it was. In some cases, the road authority itself is responsible for the accumulation, usually by plowing. Most cases hold that the accumulation resulting from the road authority's moving of snow or ice is an unnatural accumulation. Thus, it was held that the road authority was liable when its employees, in digging a trench, piled snow and ice in a crosswalk (24). Liability was also found when a road authority plowed snow from a road onto a sidewalk (25). It has been said, as a general principle, that the authority is liable for an accumulation which it is an "active agent" in creating, that is, one which it puts on a road, or one which is put there by its "express authority" (26). On the other hand, it has been held that ridges of snow along the side of a road, resulting from plowing, are not "unnatural" accumulations and do not create liability in the road authority (26). Thus, ordinary roadway plowing does not appear to present any liability problems.

When the snow or ice is placed on the road by someone other than the road authority, the rule is not clear. The case referred to above-basing liability on "active agency" (26)--suggests that the road authority is not liable when others create the hazard. However, two later cases seem to disagree with this. In one, the authority was found liable for an accident caused by a pile of snow created when snow was

shoveled from railroad tracks onto a street (27). In another, a broken water main created a barrier of ice across a road, and the road authority was held liable to the driver of a car that struck the barrier (28).

The cases discussed above deal with the operation of the "natural accumulation" rule. In those cases, the courts reached their decisions by interpretation of the rule. There are three cases, however, that seem to create exceptions to the rule. While the exceptions are limited in their scope, they are nonetheless significant. One of them is a recent decision of the court of appeals involving "preferential icing" on a bridge. The court held that such icing was a natural accumulation, but that the road authority would be liable, not for the ice itself but for failure to warn of its possible existence (29). The other two cases treat snow as a factor to be considered in determining whether there was a design defect. One is a relatively early case arising out of an accident in which a horse-drawn sleigh slid off a narrow, crowned road that had no guardrails and was covered with ice. The court observed that the road authority was not liable for natural accumulations, but said that it could be liable for building it in such a way that it was safe only when free of snow and ice, and was "unsafe whenever it is covered with a natural accumulation of either" (30). The other, more recent case involved the failure to erect a snow fence along a highway. The court held that failing to erect snow fences could be negligence (31). These two cases are similar to the cases involving flooding, in which the rule is that road authorities are not liable for unusual floods, but must design roads so as to accomodate normal rainfall and seasonal floods (32).

In summary, the road authority's liability for ice and snow is generally restricted to unnatural accumulations. This means that it is not liable for hazards caused by the normal fall and flow of snow and ice, nor is it liable for the effects of traffic on them, for snow and ice left behind by plowing, or for snow piled alongside a road by plowing. The authority is not liable when snow or ice becomes a hazard when combined with another condition (such as an incline or depression) unless that condition is itself a defect. The road authority can be liable when an accumulation of snow or ice is placed in a public way by the authority itself or at its

express authorization, or if the accumulation becomes a hazard because of a defect created by the road authority or within its power to correct (such as a leak or a defective drain). Road authorities can probably be liable for accumulations placed in a public way by others, although the law is not entirely clear on this point. Finally, road authorities can be liable, even when the accumulation is natural, if they fail to warn of a hazard or fail to consider ordinary snowfall in designing a road. In each of the situations where a road authority can be liable, the general rule of liability applies, so that the authority will be liable if the jury decides that the condition made the road not reasonably safe and that the authority knew or should have known of the condition and had an opportunity to correct it.

Because winter maintenance is such an important part of road safety, and because the cases involving winter maintenance are not always entirely consistent with each other, it is important to consider whether the cases in this area provide any indications of how the law might develop in the future.

The distinction between natural and unnatural accumulations is not as clear as the words themselves may suggest. Many of the cases in this area seem, in fact, to be concerned with whether the accumulation was in some way attributable to the fault of the road authority. This approach is consistent with the main principle that no liability exists where the accumulation is natural, because that principle itself, an exception to the statutory duty to maintain reasonably safe roads, is based on what it is reasonable to expect of road authorities. If the concept of "reasonably safe" has any objective meaning, it cannot be said that a road covered with glare ice is reasonably safe; yet that is, in a sense, what the cases have said since the first case involving with snow and ice. In the beginning, it was easier to find a road authority not liable, because the statutory duty itself was interpreted to be one of reasonable repair; since road authorities then did not have the means to repair all icy or snow-covered roads, it made sense to limit their liability. However, very early in the law of road liability, the courts began to consider the duty to be the stricter one of keeping the roads "reasonably

safe" (33). Yet, the special rule for snow and ice was continued, and is still in force today as an exception to the general statutory duty.

The point of this is not to suggest that the rule is a bad one. On the contrary, it was a sensible response to a real problem. It is, however, an exception to the statutory duty, and not really consistent with it; this fact may be significant in assessing the future of the rule.

It is also worth noting that, while the rule seems in fact to be based on a consideration of what it is reasonable to expect of a road authority, the cases themselves seldom say that. The early cases, in which the rule was developed, speak of the reasons for it, but after that courts have tended to try to apply the rule more or less mechanically. This has led, as mechanical rules often will, to some cases that seem not to be consistent with each other, but (except for one early case) not until recently have courts begun to find new approaches to winter maintenance liability questions.

The snow removal statutes also deserve mention. There are two of them. One merely defines the method by which snow removal funds are allocated to counties (34). The other is more direct. It provides that the "maintaining of state trunk line highways shall include . . .snow removal" (35). Curiously, there are no reported cases in which plaintiffs have tried to use either of these statutes as a basis for establishing a duty to use reasonable care in winter maintenance.

All of these factors suggest that the law cannot be safely treated as settled in this area. The rule originated long ago; it was appropriate to its time, but the road authorities' abilities to cope with snow and ice have improved since. The rule tends to be mechanical in its application, in a time when the tendency to allow more cases to be decided by the jury makes courts uncomfortable with mechanical rules. This tendency has been manifested in two ways. First, working within the rule itself, a recent decision has taken the position that when ice accumulates in a depression, whether that depression is a defect is a question of fact for the jury (36). This has the effect of preserving the rule (that unless a depression is a defect itself, the road authority is not liable for an accumulation in it), in theory, while seriously weakening it as a defense,

since the case will in fact go to the jury. Perhaps more important, two exceptions to the natural accumulations rule itself have been created. One of them is that failure to install a snow fence can be a design defect (37). While there was an early case that said a road authority must take winter conditions into account in designing a road (38), it may be significant that the snow fence case is the only recent case to base liability for snow and ice on a design defect. The other exception is the "preferential icing" case, in which the court repeated the rule of nonliability for natural accumulations, but added a rule that **failing to warn** of a possible accumulation could be the basis for liability (39). Again the rule remains theoretically intact, but in fact there is now an additional situation in which a road authority can be liable when the accumulation is natural.

Another indication of a change in the courts' attitude toward winter maintenance is in a case in which some residents of a county sued for a court order to require the county to maintain a certain street. The court granted the order, saying that one should not have to wait for an injury to occur before being able to enforce the statutory duty to maintain roads in reasonable repair. The court also observed in passing that "reasonable maintenance and safety require regular snow plowing" (40). This statement is hard to reconcile with the long line of cases holding that road authorities are not liable for natural accumulations of snow and ice. Certainly it does not overrule them, but it does seem to indicate a change in the judicial attitude toward winter maintenance.

The courts' change in attitude toward winter maintenance can be illustrated by asking whether a road authority would be liable if it elected not to plow at all. If the natural accumulations rule is taken literally, it would mean that the road authority would not be liable, even if it makes no attempt to keep the road clear, since the accumulations would be natural. Although there are no cases directly on point, it is hard to believe that this would in fact be the case. If there are no cases basing liability on a failure to plow any roads, it is almost certainly because in fact winter maintenance is routinely carried out. The case discussed above, in which the court specifically ordered that a road be

maintained, clearly indicates that some plowing is expected. It is not a large step from requiring some winter maintenance to requiring reasonable care in winter maintenance.

If the cases do indicate the beginning of a trend away from the special rule regarding snow and ice, the theoretical basis for a more complete departure already exists. First, there are the more recent statutes regarding winter maintenance; while they do not require a court to find a duty to use reasonable care in removing snow and ice, they do permit it. Second, the road liability statutes themselves have long since been interpreted, in all other areas of road authority activities, to require that roads in fact be reasonably safe. In addition, there is a general rule in law that when someone undertakes some activity, he must use reasonable care in doing it, even though he had no duty to act at all. This rule has not yet been applied to winter maintenance activities, but it could be. Finally, even the first case to consider the question--the one that created the natural accumulations rule--laid a foundation for a change in that rule: "where it is customary to treat the removal of snow and ice as a regular part of highway management, the failure to look after it may be properly regarded as wrongful and negligent" (41).

If a change in the rule does come about, the new rule would most likely take the form of a reasonable care standard. Under such a standard, liability would not be quite as strict as it is under the current general rule (reasonably safe). The reasonably safe rule looks only at the condition of the road and not the reasonableness of the road authority's activities. Liability under the reasonable care standard would depend on the general road situation at the time and on the road authority's response to it. Such a standard could be established under the current road liability statutes by relying on the statutory provision that the road authority will not be liable unless it has a "reasonable time to repair the defect," (42) since what is a reasonable time will depend on all of the circumstances. A change of this sort would be more significant on the theoretical level than on the practical level, and would probably not greatly increase the liability of the road authority.

The purpose of this analysis is not to suggest that the natural

accumulations rule is in imminent danger of being overruled. On the contrary, it is still the general rule and the exceptions to it are few, so that it still provides considerable protection to the road authority. If the cases discussed above do indicate a trend toward weakening the rule, the trend is still in the early stages. The rule remains that a road authority is not liable for injuries caused by natural accumulations of snow and ice. Still, the rule should not be taken for granted as providing a broad, inclusive protection for road authorities, and the possibility of future changes in the rule should not be dismissed.

CONSTRUCTION ZONES AND CLOSED ROADS

The Road Authority's Duty and Liability

A road authority's construction activity spans a wide range of complexity, from the layout and construction of a new road system to relatively minor patching operations. Most of these activities involve the performance of work on a road while traffic continues to flow over it; this raises the possibility of injury to someone using the road, which could lead to a claim against the road authority.

The general rule on road authority liability applies to construction zones. The rule is that as long as a road remains open, it must be "reasonably safe" (43). The road authority's liability extends not only to work that it performs itself, but also any work performed for the authority by a contractor (44). Whether the road was reasonably safe in any particular case will usually be a question of fact for the jury (45).

When a road is closed because of repairs, the situation is different. The general road liability law provides that a road authority is liable only for injuries on roads that are "open to public travel" (46). A separate statute specifically authorizes the closing of roads for construction or repair (47). However, it is clear that it is not sufficient that a road be "legally" closed. It must also in fact be physically closed to traffic. The statute authorizing closure of a road requires that "suitable detours" be arranged and posted with "plainly legible signs" (48). It also requires that "suitable barriers" be erected at the end of the road or the point at

which it is closed and at its intersection with other roads. The statute goes on to specify that the barriers must conform to the Michigan Manual of Uniform Traffic Control Devices (manual) (49).

The cases involving construction area barricades and closed roads follow the rules created by the statute. In one case, a road had been discontinued and a quarry dug across it by a private contractor. Two men were killed when their car fell into it. The court said that it was the road authority's duty to "effectually exclude public travel from that particular portion" of the road. Whether its barricades were sufficient to do that, the court said was for the jury to decide (50). In another case involving an excavation for a drain, the court said the sufficiency of the barricades was a question of fact, and noted that the driver was entitled to assume that the road was reasonably safe (51). A road is "closed" when traffic is diverted from it. Thus, when traffic was detoured from a bridge that had been washed out to a temporary one next to it, the road is closed at the point of the detour (52).

Although the sufficiency of a road closing is usually a question of fact, if the barriers do not conform to the requirements of the manual, the rule is somewhat different. Ordinarily, failure to comply with the manual is evidence of negligence (because the manual is a regulation promulgated under a statute). However, the statute that permits road closures specifically states that the barricades must conform to the manual. This raises the possibility that failure to comply with the manual, in this situation as a violation of the statute itself, creates a presumption of negligence. In an earlier version, the statute required that red lights be placed on barriers. In a case interpreting that statute, the court held that the failure to use lights on a barricade where a bridge was out "was negligence" (52). The rule today is that failure to comply with a statute is not automatically negligence, but creates a "presumption of negligence," so that the defendant must justify its actions (53). Therefore, it is especially important that barricades conform to the manual, unless there are clear and compelling reasons for departing from it.

Summary

The road authority's duty with regard to construction zones is the same as for ordinary roads. As long as the road is open, it must be reasonably safe. If a road is closed, the road authority is not liable for injuries occurring on it. However, to close a road, the authority must provide detour signing and must provide barricades sufficient to close the road in fact. By statute, the barricades must comply with the Michigan Manual of Uniform Traffic Control Devices. Failure to comply with the manual may create a presumption that the road authority was negligent, so that it would be required to justify its failure to comply with the statute. Therefore, particular attention should be paid to construction zone barricades, and the manual should be followed unless there are clear and compelling reasons not to do so.

SIGNING DECISIONS

Introduction

A road authority's decisions to install or not to install signs are an important part of its road maintenance activities. Signing decisions can raise questions in two areas. The first consideration is practical: whether the signs are in fact effective. On one level, the question is whether a specific sign will in fact make an intersection or a roadway segment safer. Related to this is the broader question, whether the generalized use of warning signs, especially where the danger is apparent, leads to disrespect for all signs.

Signing decisions also raise legal questions, specifically whether installing warning signs will improve the position of the road commission as a defendant in a lawsuit.

Effectiveness of Warning Signs

The Michigan Manual of Uniform Traffic Control Devices (manual) contains standards for the design, construction, and use of traffic control devices. Among these devices are warning signs. The introductory paragraph to the chapter on warning signs contains the following

statement: "Ths use of warning signs should be kept to a minimum, since their unnecessary use to warn of conditions which are apparent tends to breed disrespect for all signs" (54). If this statement is valid, it can have a significant effect on a road commission's signing decisions.

A review of the literature dealing with the validity of this statement has failed to identify empirical support for it (55). While there has been considerable research on warning signs, there appears to be no research on the specific question of the effect of overuse of warning signs.

As one would expect, much research deals with effectiveness of certain types of signs. Thus, there has been considerable research into such considerations as the most effective shape, size, color, lettering or symbols, and location for signs (56).

There has also been substantial research into the effectiveness of specific warning signs in specific highway situations. This research has produced considerable support for the proposition that warning signs alone do not produce safer driving. Thus, one study concluded that a driver's "response to signs along the roadway is conditioned by what else he sees of the roadway (now and in the past), by his estimate of his vehicle's roadworthiness, and by many factors which relate to him as an experienced driver" (57). With respect to the speed a driver selects for a curve, another study found that it was the result of "a complex interrelation between personal, vehicle, and roadway variables" (58). An analysis of "slow" signs produced two conclusions:

1. Slow signs are, in themselves, generally not effective.

2. Slow signs should not be used without additional signs stating the nature of the danger involved. Even then, slow signs are probably not warranted unless the need to decrease speed is extremely great (59).

One study went beyond the question of the effectiveness of signs in general and investigated their effectiveness over a period of time. The study involved school zone speed limit signs with flashing yellow lights. It concluded that "excessive flashing periods may cause disrespect for the flashers" (60).

None of the studies addressed the question of the effect of the overuse of warning signs on a driver's respect for signs in general. There are, however, two published reports which state that overuse of signs breeds disrespect. One said:

> Information calling for specific responses which the driver is not actually required to make should be removed. If not, the driver will learn to ignore these items and this attitude will carry over to situations where they should not be ignored, and an unsafe condition will exist. (61)

The other said: "Signs should be installed only where the information is needed. Overuse of signs breeds disrespect" (62). Neither of these reports, however, is based on a study or refers to any other studies in support of its statements about sign overuse. The second report, in fact, appears to base its statement on the manual itself.

The absence of studies to confirm or deny a link between excessive use of warning signs and disrespect for all signs does not prove that the statement is false. While it is fairly easy to establish that a certain sign was ignored, it is more difficult to design a test that will establish a link between general disrespect and the excessive use of warning signs. Therefore, all that can be said is that the proposition that the overuse of warning signs breeds disrespect for all signs is at least plausible and generally believed by practitioners in highway safety, but is neither proved nor disproved by objective evidence.

The absence of evidence to support or refute the proposition that overuse of signs breeds disrespect underscores the importance of making signing decisions on an individual basis. Whether a particular sign should be installed largely depends on whether it will be effective; whether it will be effective is a matter of engineering judgment based on the criteria contained in the manual.

Legal Effect of Signing Decisions

For the most part, the law treats signing decisions like any other road authority activity. The law requires that a road authority provide reasonably safe roads (63) and the presence or absence of a sign is one

factor the jury will consider in deciding whether a road was reasonably safe (64). Thus, a road authority's signing decisions will, for the most part, be treated the same as any other road authority activity. There are, however, some special provisions of the law that relate more directly to signing decisions. These are the manual, and certain specific signing statutes.

Manual of Uniform Traffic Control Devices. The manual establishes standards for the design, construction, and use of traffic control devices, including warning signs. These standards are adopted for use throughout the state by the statutory authority of the Director of the Department of State Police and the Department of Transportation (65).

Failure to comply with the manual does not establish that a road authority was negligent. Likewise, even a strict compliance with the manual will not disprove negligence. For example, when a city was sued for negligence in failing to properly adjust the timing of a traffic signal, it replied that it had set the timing within the limits contained in the manual. The court noted that there was heavy truck traffic at the intersection and that the city had not taken this into account, and said that "mere compliance" with the manual was not sufficient, where no attention was paid to "the particularities of the intersection involved" (66).

Although the manual cannot be used as proof of negligence or lack of it, it can be used as evidence of negligence or of reasonable care. This is so not because it is a regulation but because it expresses standards of the profession. Thus, when a road authority was sued for negligence in locating a speed sign incorrectly, the court held that its failure to comply with the manual was evidence of negligence (67). Similarly, compliance with the manual is evidence that tends to show that an authority was not negligent. For example, when the state was sued for injuries caused when a driver entered a freeway by way of the exit ramp, the court, in finding that the state had not been negligent, noted that the state "complied with the adopted manual" (68).

The manual therefore plays an important part in a road authority's liability for its signing decisions. Compliance with it does not eliminate

liability, nor does failure to comply with it establish liability, but compliance and noncompliance can be used as evidence. Therefore, the manual should be used as a guide and whenever the peculiarities of an intersection or a road segment require a departure from the standards contained in the manual, the reasons for the departure should be documented.

Specific Signing Statutes. A road authority's general duty to maintain safe roads is not affected only by the provisions of the manual. There are also some statutes that require that signs be erected in specific situations.

Because the manual has the status of a regulation, the failure to comply with its provisions is evidence of negligence. In contrast, the failure to comply with a specific statute creates a "presumption" of negligence (69). The difference is that evidence of negligence merely permits the judge or jury to find that there was negligence, while a presumption of negligence requires the jury to find negligence unless the defendant shows a justification for failing to comply with the statute. Thus, once the plaintiff shows that a road commission failed to comply with a specific signing statute, the commission must justify its departure from the statutory standard.

There are two types of specific signing statutes. One type requires that signs be erected in certain well defined areas. For example, one statute requires that every bridge that has less than nineteen feet of clear roadway width be posted as a narrow bridge, and that every bridge with less than seventeen feet of clear roadway width be posted as a one-lane bridge (70). Another such statute requires that stop signs or traffic signals be installed on every highway or street where it intersects a state trunkline highway (71), unless the decision not to erect a sign is made after conducting an engineering study. Thus, this first type of statute imposes specific duties that can, for the most part, be carried out without the exercise of engineering judgment. Because these statutes require specific actions and do not require much, if any, judgment, failure to comply with them would be very difficult to justify.

The second type of statute requires that the road commission exercise its judgment in deciding whether to erect a sign. One such statute permits the appropriate road authority to investigate the structure of bridges and, based on that investigation, establish reduced speed and load limits (72). This statute does not require that the road authority make the investigation, nor does it establish standards by which the decision to reduce the speed or load limit is made. Only when the road authority, in the exercise of its judgment, decides to take such action is it required to post the appropriate signs.

Another statute that requires the exercise of judgment by the road authority in erecting signs relates to no-passing zones. This statute requires that the road authority conduct a traffic survey and engineering study to determine those portions of highways where it would be "especially hazardous" to pass, and to mark the beginning and end of these zones by "appropriate signs or markings on the roadway" (73). Any traffic control devices used to mark the zones must conform to the manual, but the statute requires that the road authority exercise engineering judgment in identifying the "especially hazardous" areas, and also gives the road authority discretion in deciding whether to use signs or roadway markings, and whether to use no-passing penannts. This statute does not require that signs be installed on every curve or hill, but only in those places that the road authority, in the exercise of engineering judgment, considers especially hazardous.

As was said earlier, when a road authority fails to comply with a specific statutory duty, its failure to comply will create a presumption that the authority was negligent. This rule applies to any statutory duty, but its operation is different where the statute requires the exercise of judgment. The statutory requirement that a sign be posted when a bridge has a roadway width less than seventeen feet imposes a specific standard of care. On the other hand, the requirement that a road authority determine hazardous zones by traffic surveys and engineering studies and install "appropriate signs and marking", establishes a more general standard of care. This standard of care is similar to the general statutory duty to provide "reasonably safe" roads (74). The statute is

specific and nondiscretionary in requiring that the road authority conduct the survey and study and make the determination based on them, but, unlike the narrow bridge statute, it does not prescribe any standards by which to make the determination. The statute also leaves to the discretion of the road authority the decision whether to use signs or roadway markings, so long as those used conform to the standards of the manual. Therefore, the road authority's liability under this statute and other statutes that impose a general duty requiring the exercise of judgment is similar to its general liability when the roads are not reasonably safe.

Signing Decisions and Liability. It is important to keep signing decisions in perspective, so that they are not treated as having some special significance from the point of view of liability. In part, this may happen because signs appear to be an inexpensive safety device; clearly it is cheaper to post a no-passing zone sign than to flatten a hill. More fundamentally, the importance attached to signing decisions also seems to be based on a belief that the presence or absence of a sign is of special importance to litigation.

There can be no doubt that there have been cases where a road authority, as defendant in a lawsuit, wished it had put up a sign in a particular location. There will continue to be such cases. However, it does not follow that a road authority's funds are best spent erecting and maintaining signs. There are two reasons for this. First, and most fundamentally, to allow litigation concerns to dominate risk management decisions misses the point of the goal of the risk management program--to make a safer road system. Second, even if litigation concerns were paramount, signing decisions do not merit special treatment.

From the point of view of a defendant in a lawsuit, signing decisions raise two general thoughts. First, if a sign is absent, it will either make the road authority liable, or significantly increase the chance that it will be found liable (by giving the plaintiff an additional arguing point). Second, if a sign were present, it would free the road authority from liability (by making the road "reasonably safe"), or would significantly

improve its position (by improving the safety of the road or perhaps by allowing the authority to argue that the plaintiff was negligent). Each of these points is discussed in turn.

The absence of a sign does not automatically make the road authority liable. There do not appear to be any cases in which a court has said that the absence of a sign was negligence as a matter of law. The question is always whether the road was reasonably safe. There are virtually no shortcuts to the answer to this question. Depending on the circumstances, the absence of a sign may be evidence that the road was or was not reasonably safe, but it has no greater weight than any other piece of evidence--except in those few instances where signs are specifically required by law.

On the other hand, the presence of a sign does not automatically eliminate the road authority's liability. The question is still whether the road was reasonably safe, and the presence of a sign is merely one factor for the jury to consider in making that decision. If a curve has been constructed so that it is unsafe, posting a sign does not eliminate liability, for the reason that it does not eliminate the defect. To the extent a sign reduces the danger, by conveying useful information, it also reduces the liability. Nor does the presence of a sign have any special significance in supporting a road authority's argument that the driver was negligent. It may provide information to the driver (which it might be negligence to ignore) but so do other facts relating to the road's condition. It is merely a factor to be considered in deciding whether the plaintiff's conduct was reasonable. The law is clear that knowledge that a road is defective does not make the driver negligent in useing the road. The conduct required by the driver's duty of reasonable care varies according to the nature and extent of the danger, but it will nearly always be a jury question whether his conduct was reasonable.

There appears to be one small class of cases that is an exception to the rule that a sign will not automatically avoid liability. If the failure to install a sign was the only defect, then it follows that installing one would have avoided liability entirely. Two examples will illustrate this. In one case, the plaintiff was injured when she lost control of her car on

an icy bridge. The court held that the road authority could be liable if, as plaintiff claimed, it had failed to warn of the possibility of ice on the bridge. The court also noted that the road authority would not be liable for the icing itself (75). The other case involved a T-intersection. Plaintiff approached it at night, unaware the road did not continue, and struck a tree when he passed through the intersection. The court held that the defendant could be liable for failure to warn of the fact that road ended, even though there was no defect in the intersection itself apart from the absence of a sign (76). In each of these examples, there was no underlying defect separate from the absence of the sign. These two examples are the only cases we have found in which the presence of a sign would have avoided liability. In the great majority of cases, therefore, the plaintiff will claim a defective condition of which the absence of a sign is only a part. As in the case of an unsafe curve, the presence or absence of a sign would be one factor among several that the jury would consider.

Once the road authority has exercised its judgment and decided that a sign is required, however, it is in a different position. A delay in carrying out the action that the authority itself has decided is necessary will support a finding of negligence. For example, in one case, the highway department had conducted a traffic count of an intersection and decided that additional traffic control devices were needed. The work order was issued one week before the accident, but was not carried out. The highway department relied on its statutory discretion regarding traffic control devices. The court replied that discretion was not the issue, since it had been exercised and work orders issued. The court instead found the highway department negligent because it "failed to carry out its own work orders" (77). Thus, the road authority's exposure to liability is particularly great after it has decided that work needs to be done and until it is in fact done. This type of work deserves a correspondingly high priority.

The question of the effect of signing decisions on the road authority's liability must be viewed in the context of the general statutory duty, the specific signing statutes, and the manual. Where a statute specifically

requires a sign (as in the case of narrow bridges), the road authority should follow the requirements of the statute unless there are very compelling circumstances requiring that it depart from those requirements. Compliance with the manual need not be as strict as compliance with specific signing statutes, but its guidelines should be followed unless it is clear that they are inappropriate to the specific situation. Whenever a decision is made not to follow a specific statute or the manual, the reasons for that decision should be set out in writing.

While the specific signing statutes and the manual are intended to influence the road authority's judgment, the more general statutes (such as the no-passing zone statute) are not. They require that the road authority make a decision, but do not provide any guidelines or impose any constraints on its exercise of judgment. The presence or absence of a sign in this situation would therefore not have special significance for the road authority's liability.

Liability concerns and safety considerations are not in conflict but in harmony in the area of signing decisions. Signing decisions play a part, in common with other types of decisions, in determining how safe a road will be, just as the presence or absence of a sign may be one factor in determining liability. Signs have no special significance in liability cases beyond that of any other factor that affects the safety of the roads. Therefore, the law does not impose any requirements that distort road management decisions. Determining the most effective use of available funds remains the proper approach, and is entirely consistent with the statutory duty of maintaining reasonably safe roads.

This consistency between litigation and safety concerns applies even in those situations where a statute specifically addresses signing questions. For example, the requirement that narrow and one-lane bridges be posted as a guide for conduct as much as a basis for liability. The basic reason for posting narrow bridges—safety—would apply even without the statute. Similarly, the requirement that especially hazardous curves be posted suggests a sensible use of signs—to warn of points of special danger. It does not require that every curve be signed, but only those where passing is especially hazardous.

Just as liability considerations should not lead to a decision to put up a sign where safety does not require it, neither should they prevent a decision to put up a sign where one is needed. If studies identify a situation where a sign would increase the safety of a road, the fact that other similar situations have not yet been located should not prevent installation of the sign.

SUMMARY

Liability concerns need not distort safety decisions. In fact, in most cases liability concerns and safety concerns work in harmony. This is true of signing decisions. Apart from a few limited situations, the law does not require anything other than the exercise of engineering judgment in making signing decisions on the basis of safety considerations.

The underlying liability concept--reasonably safe--is a constant. All road management decisions are measured against this standard. Signing decisions are a part of road safety, and they are an important part. However, the law does not give them any special significance or make them more important than any other road management decision. Specifically, this means that, in general:

- the presence of a sign will not eliminate liability, except in rare cases;
- the absence of a sign will not guarantee liability;
- if installing a sign will not in fact improve safety, it should not be installed out of concern for liability exposure;
- if installing a sign will in fact improve safety, the road authority should not avoid installing it because of a concern for liability exposure.

In those areas where the manual provides guidelines for signing or specific statutes apply, the road authority can take some steps to improve signing decisions and consequently improve its litigation position. These include:

- any departure from a specific statutory duty should be

made, if at all, only in the clearest of cases, and the reasons for the departure should be set forth in routinely kept records;

- any departure from the standards in the Michigan Manual of Uniform Traffic Control Devices should be made only where there are specific reasons for doing so, and those reasons should be set forth in routinely kept records;

- once a decision is made to do certain work to correct an unsafe condition, that work should have the highest priority, so as to minimize the length of the increased liability exposure;

- continuing or periodic traffic surveys and engineering studies of possible no-passing zones should be conducted to determine which are especially hazardous.

FOOTNOTES

1. M.C.L.A. 254.20, M.S.A. 9.1190.
2. There are some 25 such cases in Volume I of this set.
3. Canfield v. Township of Gun Plains, 175 Mich. 379, 141 N.W. 379; Vose v. Richland Township, 242 Mich. 46, 217 N.W. 784 (1928).
4. Peters v. State Highway Department, 400 Mich. 50, 252 N.W.2d 799 (1977).
5. Stanton v. Webster Township, 170 Mich. 428, 136 N.W. 421 (1912).
6. Van Liere v. Michigan State Highway Department, 59 Mich. App. 133, 229 N.W.2d 369 (1975); Hargis v. City of Dearborn Heights, 34 Mich. App. 594, 192 N.W.2d 44 (1971); Jablonski v. City of Bay City, 248 Mich. 306, 226 N.W. 865 (1929).
7. McKellar v. City of Detroit, 57 Mich. 158, 23 N.W. 621 (1885).
8. Greenleaf v. Department of State Highways and Transportation, 90 Mich. App. 277, 282 N.W.2d 805 (1979).
9. Grand Rapids v. Wyman, 46 Mich. 516, 9 N.W. 833 (1881); Sable v. City of Detroit, 1 Mich. App. 87, 134 N.W.2d 375 (1965).
10. Holland v. Allegan County, 316 Mich. 134, 25 N.W.2d 375 (1946).
11. Gavett v. City of Jackson, 109 Mich. 408, 67 N.W. 517 (1896).
12. Gavett v. City of Jackson, note 11 above; Mayo v. Village of Baraga, 178 Mich. 171, 144 N.W. 517 (1913).
13. Kannenberg v. City of Alpena, 96 Mich. 53. 55 N.W. 614 (1893).
14. Woodworth v. Brenner, 69 Mich. App. 277, 244 N.W.2d 446 (1976).
15. Greenleaf v. Department of state Highways and Transportation, 90 Mich. App. 277, 282 N.W.2d 805 (1979). Since preferential icing is a natural accumulation, Greenleaf holds, liability can be based only on the failure to warn of the possibility of ice. A more recent case, Salvati v. Department of State Highways 92 Mich. App. 452, 285 N.W.2d 326 (1979), holds that the "watch for ice on bridge" sign is inadequate. This opinion is poorly reasoned and because it is recent cannot yet be safely relied on as authority.
16. Rolf v. City of Greenville, 102 Mich. 544. 61 N.W. 3 (1894).
17. Jefferson v. City of Sault Ste. Marie, 166 Mich. 340, 130 N.W. 610

(1911).

18. Kannenberg v. City of Alpena, 96 Mich. 53, 55 N.W. 614 (1893).
19. Wesley v. City of Detroit, 117 Mich. 658, 76 N.W. 104 (1898).
20. Hopson v. City of Detroit, 235 Mich. 248, 209 N.W. 161 (1926).
21. Johnson v. City of Pontiac, 276 Mich. 103, 267 N.W. 795 (1936).
22. Navarre v. City of Benton Harbor, 126 Mich. 618, 86 N.W 139 (1901).
23. Pappas v. City of Bay City, 17 Mich. App. 745, 170 N.W.2d 306 (1969).
24. Bowen v. City of Detroit, 150 Mich. 546, 114 N.W. 344 (1907).
25. Hampton v. Master Products, Inc., 84 Mich. App. 767, 270 N.W.2d 514 (1978).
26. Hutchinson v. City of Ypsilanti, 103 Mich. 12, 61 N.W.2d 279 (1894).
27. Johnson v. City of Marquette, 154 Mich. 50, 117 N.W. 658 (1908).
28. Brown v. Oakland County, 279 Mich. 55, 271 N.W. 550 (1937).
29. Greenleaf v. Department of State Highways, note 8, above.
30. Stanton v. Webster Township, 170 Mich. 428, 136 N.W. 421 (1912).
31. Weckler v. Berrien County Road Commission, 55 Mich. App. 7, 222 N.W.2d 9 (1974).
32. Fidler v. Lafayette Township, 226 Mich. 635, 198 N.W. 652 (1924); Peters v. State Highway Department, 400 Mich. 50, 252 N.W.2d 799 (1977).
33. Joslyn v. City of Detroit, 74 Mich. 458, 42 N.W. 50 (1889).
34. M.C.L.A. 247.662, M.S.A. 9.1097(12).
35. M.C.L.A. 247.651b, M.S.A. 9.1097(1b).
36. Pappas v. City of Bay City, note 22, above.
37. Weckler v. Berrien County Road Commission, note 30, above.
38. Stanton v. Webster Township, note 29, above.
39. Greenleaf v. Department of State Highways and Transportation, notes 28, 8, above.
40. DeVoe v. Cheboygan County Road Commission, 68 Mich. App. 176, 282 N.W.2d 59 (1976).
41. McKellar v. City of Detroit, note 7, above.
42 M.C.L.A. 691.1403, M.S.A. 3.996(103).
43. Speck v. Bruce Township, 166 Mich. 550, 132 N.W. 114 (1911); Walsh v. Consumers Power Company, 365 Mich. 253, 112 N.W.2d 448 (1961).

44. Walsh v. Consumers Power Company, note 42 above; Barker v. City of Kalamazoo, 146 Mich. 257, 109 N.W.2d 427 (1906), Martin v. Mercier, 255 Mich. 587, 238 N.W. 131 (1931).
45. Lang v. Ingham County, 277 Mich. 345, 269 N.W. 197 (1936).
46. M.C.L.A. 224.21, M.S.A. 9.121.
47. M.C.L.A. 247.291 et seq., M.S.A. 9.1421 et seq.
48. M.C.L.A. 247.292, M.S.A. 9.1422.
49. M.C.L.A. 247.291, M.S.A. 9.1421.
50. Jewell v. Rogers Township, 208 Mich. 318, 175 N.W. 151 (1919).
51. Walsh v. Consumers Power Company, 365 Mich. 253, 112 N.W.2d 448 (1961); Martin v. Mercier, note 43, above is similar.
52. Jones v. Brookfield Township, 221 Mich. 235, 190 N.W. 733 (1922).
53. Zeni v. Anderson, 397 Mich. 44, 243 N.W.2d 244 (1976).
54. Michigan Manual of Uniform Traffic Control Devices, p. 73.
55. The literature review that forms the basis for this report was conducted at the HSRI Library. The search, while extensive, should not be viewed as exhaustive. Additional literature contrary to that cited may exist but this is viewed as unlikely. Expert opinion on the subject is likely to vary because of the limited nature of empirical research directly on point.
56. A review of some research in this area can be found in Forbes, T.W.; Snyder, T.E.; and Pain, R.F. 1964. A study of traffic sign requirements: An annotated bibliography. East Lansing: Michigan State University, College of Engineering.
57. Ritchie, M.L.; Howard, J.M.; Myers, W.D.; and Nataraj, S. 1972. Further experiments in driver information processing. In Proceedings of the sixteenth annual meeting of the Human Factors Society, eds. W. B. Knowles; M. S. Sanders; and F. A. Muckler, pp. 34-39. Santa Monica: Human Factors Society.
58. Ritchie, M.L. 1972. Choice of speed in driving through curves as a function of advisory speed and curve signs. Human Factors 14(6): 533-38.
59. Hackman, W.T. 1957. Driver obedience to stop and slow signs. In Highway Research Board Bulletin no. 161, pp.9-17. Washington, D.C.:

National Academy of Sciences, National Research Council.

60. Zegeer, C.V. 1975. The effectiveness of school signs with flashing beacons in reducing vehicle speeds p. 20. Lexington: Kentucy Department of Transportation.

61. Ellis, N.C. 1972. Driver expectancy: Definition for design p. 16. College Station: Texas A&M University, Texas Transportation Institute.

62. Dewar, R.E. 1973. Psychological factors in the perception of traffic signs. p.5. Ottawa: Transport Canada.

63. M.C.L.A. 691.1402; M.S.A. 3.996 (102).

64. National Bank of Detroit v. State of Michigan, 51 Mich. App. 415, 215 N.W.2d 599 (1974).

65. M.C.L.A. 257.608; M.S.A. 9.2308.

66. Fraley v. City of Flint, 54 Mich. App. 570, 221 N.W.2d 394 (1974).

67. Martin v. Ann Arbor R.R. Co., 76 Mich. App. 41, 255 N.W.2d 763.

68. National Bank of Detroit v. State of Michigan, 51 Mich. App. 415, 215 N.W.2d 599 (1974).

69. Zeni v. Anderson, 397 Mich. 44, 243 N.W.2d 244 (1976).

70. M.C.L.A. 254.20, M.S.A. 9.1190.

71. M.C.L.A. 257.651, M.S.A. 9.2351.

72. M.C.L.A. 257.631, M.S.A. 9.2331.

73. M.C.L.A. 257.640,M.S.A. 9.2340.

74. One court went so far as to say that a similar statute (M.C.L.A. 257.628, M.S.A. 9.2328, dealing with speed signs) "merely affects the procedure the road commission must utilize to fulfill its statutory duty of reasonable prudence." Cryderman v. Soo Line R.R. Co., 78 Mich. App. 465, 260 N.W.2d 135
(1977).

75. Greenleaf v. Department of State Highways and Transportation 90 Mich. App. 277, 282 N.W.2d 805 (1979). A more recent case, Salvati v. Department of State Highways, 92 Mich. App.. 452, 285 N.W.2d 326 (1979), holds that the "Watch for ice on bridge" sign is inadequate. This opinion is poorly reasoned and because it is recent cannot safelybe relied upon as authority.

76. Mullins v. County of Wayne, 16 Mich. App. 365, 168 N.W.2d 246 (1969).

77. Tuttle v. Highway Department, 397 Mich. 44, 243 N.W.2d 244 (1976).

CHAPTER FIVE
ROAD LIABILITY LAW—DEFENSES

The preceding chapters have discussed the legal duties and liabilities of road authorities. The general rule—that road authorities are liable for roads that are not reasonably safe—has been explained, and its application in specific situations has been explored.

The purpose of this chapter is to discuss defenses that a road authority might raise. The term defense is used in a broad sense here, to include any matter that the road authority might raise in a lawsuit in an effort to avoid or reduce its liability. In its strict legal meaning, a defense is a matter that the defendant is required to claim and prove. Disproving matters that the plaintiff has claimed and is required to prove (such as the road authority's jurisdiction over the road) is not, strictly speaking, a defense. However, because defendants usually devote much attention to such matters, and in fact treat them as though they are defenses, they are discussed here. However, one such "defense"—in fact, the most common one—is not included in this chapter. In most cases, the road authority will argue that the road in question was in fact reasonably safe. Because the question of what is reasonably safe has been discussed at length in the two preceding chapters, it will not be discussed here.

The defenses discussed in this chapter can be roughly divided into two groups. Some may be thought of as "legal defenses" and some as "factual defenses." Legal defenses are those that, if established, avoid liability whether or not the road was safe, or the road authority was negligent. The first two defenses discussed in this chapter—jurisdiction over the road and statute of limitations—are legal defenses.

Factual defenses usually go to the question of negligence (or defective condition) itself. They are essentially arguments of fact presented to the jury to persuade it to find the defendant not liable. The rest of the defenses discussed in this chapter fall into this category.

The distinction between factual and legal defenses is not rigid. The third defense discussed here, plaintiff's failure to notify the road authority of his injury, illustrates this point. Initially, virtually any defect in plaintiff's notification was sufficient to defeat his claim, so that failure to notify was a legal defense. The rule today, however, is that failure to notify will not defeat a claim unless it causes actual prejudice to the defendant; thus, it has become more of a factual defense. In spite of its lack of precision, the distinction between legal and factual defenses can be a useful tool in understanding the various types of defenses available to a road authority.

JURISDICTION

The term jurisdiction, as it is applied to courts, means "legal authority and power." A court has jurisdiction over a case when it has the authority to make a decision and the power to enforce it. The meaning of jurisdiction in the context of a road authority's activities is similar. A road authority has jurisdiction over a road when it has the authority to maintain it.

For a road authority, jurisdiction carries not only the authority to maintain a road, but the **duty** to do so. Jurisdiction also creates liability in the road authority for a road that is not reasonably safe. In general, it is quite clear that a road authority is not liable for injuries incurred on a road over which it has no jurisdiction. The lack of jurisdiction over a road may therefore be raised by a road authority as a defense. Thus, it is important to understand how jurisdiction is created and what it means in various situations.

Statutory Basis of Jurisdiction

Each of the statutes dealing with road liability refers to jurisdiction as a basis for liability. The more recent statute, which applies to road liability in general, provides:

> Each governmental agency having jurisdiction over any highway shall maintain the highway in reasonable repair so that it is reasonably safe and convenient for public travel. (1)

This statute goes on to provide that the agency is liable for failure to keep a highway under its jurisdiction reasonably safe. The term highway is defined to exclude alleys but to include "bridges, sidewalks, crosswalks and culverts on any highway" (2). However, sidewalks and crosswalks are specifically excluded from the state's and the county road commissions' duty to repair, so that the result is that sidewalks and crosswalks are within the jurisdiction of the cities, townships and villages (3). This jurisdiction over sidewalks is subject to the paramount jurisdiction of the state or county responsible for the road itself.

The other statute applies specifically to county road commissions and makes them liable for all "county roads, bridges and culverts that are within their jurisdiction." (4)

The existence of jurisdiction is clearly basic to any road authority's liability. Courts tend to adhere strongly to the concept that only one road authority can have jurisdiction over a road. In most cases where jurisdiction questions have been raised, courts have proceeded on the assumption that only one authority has jurisdiction, while not explicitly stating it (5). In one case the question of dual or "two-tiered" jurisdiction over a road was squarely raised and the court said:

> We reject plaintiff's argument . . .of "two-tiered" or "layered" jurisdiction and liability involving both the city and the County Road Commission. (6)

Thus it is the general rule that only one road authority can be held liable for a defective road.

The rule is also clear that liability is based on jurisdiction rather than the performance of work. That is, jurisdiction is not transferred by a maintenance contract. This is true whether the contract is with a private company (7) or with another road authority. If, for example, a county maintains a state road under contract with the state, and someone is injured by the county's negligence, the state is liable because it has jurisdiction over the road. The county is not liable for its negligence because, as a government, it is immune from suit (8).

When jurisdiction is formally transferred from one road authority to

another, the rule is somewhat different. In general, the authority accepting jurisdiction is thereafter liable for the condition of the road (9). This is true even if the road continues to be maintained, under contract, by the authority that first had jurisdiction over it (10). However, one case suggests that a different rule applies in certain situations (11). In that case, a bridge was found to be unsafe because of a gap in a pedestrian barrier. The bridge had been designed and built by the county and jurisdiction had thereafter been transferred to the city. The court held that both road authorities could be liable for the defect. The court said that they both had a continuing obligation to correct the defective design. The court's ruling is not limited to design defects, but extends to any "lapse in the performance of the County's statutory duty which occurred before jurisdiction was relinquished." This case can be interpreted as an exception to the rule that only one road authority can have jurisdiction, but is better interpreted as merely providing that a road authority's liability for a defect it created is not terminated by transferring jurisdiction. It is clear that the authority's liability does not extend to defects arising after it transfers jurisdiction.

Geographical Limits on Jurisdiction

For county road commissions and any other municipal road authority, the question of the geographical limit of its jurisdiction can arise. The problem is best expressed by the meandering county line road. Such roads are usually maintained by one of the counties in which it lies, by agreement with the other county. This arrangement adds another element to the question, because the statute that applies specifically to county road commissions makes them responsible for roads within their jurisdiction and under their "care and control". A county thus might argue that it had no liability for a county line road that was maintained entirely by the neighboring county. Two arguments in support of this position could be made. First, it might be argued that the statute imposes liability only when both of two conditions are met: the road must be under the defendant's jurisdiction, and it must also be under its care and control. Second, it might be argued that "care and control" is a

component of jurisdiction, so that jurisdiction exists only when care and control also exist. These two arguments are very similar, and can be discussed together.

There are no cases that define jurisdiction where a road is in two geographical units, so the answer must be found elsewhere. The rule seems to be that jurisdiction is limited strictly to a municipality's geographic limits, and that liability is not avoided because the care and control of a road have been given to the neighboring municipality. There are several reasons for this, which are best expressed in terms of neighboring county road commissions. The statutes concerning relations between adjacent counties do not speak directly to the question of liability for county line roads. However, the Michigan Constitution provides that counties "may take charge and control of any highway **within their limits**". (12) The phrase "within their limits" suggests that a county's jurisdiction (charge and control) cannot extend beyond its geographical limits. It follows that a county cannot give up jurisdiction over a county line road, because the adjacent county cannot accept it. Note that the constitution does not refer to "care" (maintenance) of a road, but to "charge and control" (jurisdiction) over it. In the road liability statutes, the phrase "care and control" is not defined, but appears to be another way of defining jurisdiction. In the two statutes, there are six sentences in which liability is discussed. The first contains the phrase quoted above ("within their jurisdiction and under their care and control"). The second simply refers to "roads under their control." The four remaining references are simply to jurisdiction (13). Three of these are in the more recent statute, which bases liability solely on jurisdiction and makes no reference at all to care and control (14). Thus, "care and control," appears to not have any independent meaning but rather to be an aspect of jurisdiction.

In addition to the constitution and the statutes, the cases must also be considered. As described earlier, the law is clear that jurisdiction is not transferred from one road authority to another because of a maintenance contract (15). Since this is clearly the rule as to a road lying wholly within a county, it should also be the rule as to a road lying partially

within a county.

If this analysis is correct, then "care and control" has nothing to do with establishing liability, and jurisdiction is strictly defined in terms of geographic limits. It is then fair to ask what meaning "care and control" has. The phrase appears in the earlier road liability statute, which, in its present form, goes back at least to 1909. Because of the relative informality of road authority operations at that time, it may be that "care and control" was intended as an indicator of whether a county road commission had taken jurisdiction over a road. If records are unclear, the actual maintenance of a road is a good indication that the road commission has taken jurisdiction. If for example, the question is whether the state or the county is responsible for a certain road within a county, the actual care and control of it would tend to settle the question.

There is another argument in favor of the proposition that jurisdiction is defined geographically and "care and control" is not a separate test. Only the older statute, which relates only to county road commissions, contains the phrase. The more recent one, which applies to all road authorities (specifically referring to the earlier statute as to road commissions), speaks only of jurisdiction. Therefore, any rule that actual "care and control" determines liability must acknowledge that the rule applies only to counties, while the liability of the other municipalities is limited to their geographic boundaries. While such a discrepancy is possible, it is not likely, particularly in view of the provision in the Michigan Constitution, and in view of the cases involving maintenance agreements.

Summary

A road authority's jurisdiction over a road is one of the elements in its liability for injuries caused by a defect in the road. Jurisdiction refers to the road authority's legal authority to maintain the road. Jurisdiction is limited to the geographical boundaries of the county or other municipal road authority. Neither jurisdiction over a road, nor liability for it, is transferred by a maintenance agreement with another road authority. Only one road authority can have jurisdiction over a

road. However, since counties and the state are not responsible for sidewalks and crosswalks, jurisdiction over them belongs to the local municipality through which the state or county road runs. The general rule is that the road authority with jurisdiction over a particular road is liable for defects in that road.

STATUTE OF LIMITATIONS

A statute of limitations is a statute that limits the time after a legal claim arises in which a lawsuit can be filed. There are many different statutes of limitations, for the different types of claim that can arise. For claims for personal injuries and property damage, the general statute of limitations is three years (16). For claims against a road authority, however, the statute of limitations is specified in the act creating the liability; the time limit is two years (17).

The effect of a statute of limitations is drastic. If a plaintiff waits even one day beyond the prescribed time, his claim is barred. Thus, the statute of limitations is a very good defense in those cases where it applies, although the cases in which the plaintiff will have waited too long are few.

Because statutes of limitations can completely bar a claim that might in fact have merit, they have often been attacked by plaintiffs. The road liability statute of limitations is no exception. It has been argued that it is unconstitutional because it establishes a shorter period for a road authority's negligence than for the negligence of an ordinary defendant. However, the courts have held that it is constitutional (18).

In other cases, plaintiffs have argued that the general three-year statute of limitations should be applied. The courts have rejected this argument (19). The state, approaching the problem from the other side, has argued that a one-year statute of limitations applying generally to claims against the state should be applied (20). The court again held that the two-year statute of limitations in the road liability act applied (21).

There remains only one way to avoid the effect of a statute of limitations. It is called "estoppel." If a defendant conceals from the plaintiff that he has a right to sue, or if it misrepresents the amount of

time he has to sue, or induces him to delay filing suit until the statute has run, then the defendant is not permitted to raise (is estopped from raising) the statute as a defense (22). In practice, there are likely to be few cases in which the road authority's conduct can be used to avoid the statute on the theory of estoppel.

The statute of limitations itself contains some exceptions. Two of these are called "savings provisions." One of them provides that if a plaintiff dies before the statute runs out or within thirty days afterwards, the period can be extended up to an additional three years (23). Another applies to persons unable to bring a legal action because of being a minor, insane, or imprisoned at the time the claim arises. As to them, the statute of limitations does not expire until one year after the disability ends (24). The other exceptions involve the "tolling" of the statute; a statute of limitation is tolled when the counting of elapsed time is suspended. One provision states that the statute of limitations is tolled as to any defendant who is absent from the state, and cannot be served with a summons, for a period greater than two months (25). Another provides that the running of the statute of limitations is suspended when the lawsuit is filed and served on the defendant or when it is filed and given to an officer for immediate service (in this case the tolling of the statute ends after 180 days if service is not made) (26). The purpose of these statutory exceptions is to avoid the harsh effect of the statute of limitations in specific situations where it would be unjust to deprive the plaintiff of his right to sue. While these exceptions are important, they reach only a small portion of the cases. The statute of limitations, when it applies, is a very strong defense.

Summary

A statute of limitations is a law that limits the time after a claim arises that a lawsuit can be started. In the case of road authorities, the statute of limitations is two years. Unless a lawsuit is started within two years after the accident occurred, the plaintiff's right to sue is forever barred. There are a few provisions in the law that modify the effect of the statute in certain cases, but the statute of limitations

remains a very strong defense in the cases in which it applies.

FAILURE TO NOTIFY ROAD AUTHORITY OF INJURY

Introduction

The first statutes creating liability for defective roads included a requirement that anyone who claimed damages because of a defective road must notify the road authority of his injury and certain facts relating to it. The statute has required that the notification be quite detailed, stating the exact location and nature of the defect, the injury sustained, and the names of witnesses. As a result, there has been much litigation involving the requirement and whether the plaintiff has met it.

Background

The doctrine of governmental immunity holds that a government cannot be sued without its consent, and the law has traditionally held that the government could attach any conditions it chose to that consent. The requirement of notification of the injury and the defect was one such condition (27). Originally this notification was required to be given within sixty days of the accident. Because the statutes required that the notification be quite detailed, there has been much litigation over the years concerning the requirement, whether the plaintiff has complied with it, and the effect of failure to comply with it. This litigation has led to much change in the law in the area, so that a rule that once provided a strong legal defense has become a much less strong factual defense.

In the early days, almost any defect in the notification of injury was sufficient to make it void and bar the suit. Notifications have been held defective when given to the board of road commissioners instead of their clerk (28), for failing to state on which of the four corners at an intersection the sidewalk was defective (29), when not verified (signed under oath) by the claimant (30), or when describing the defect as a "depression" in a sidewalk and the testimony at trial described it as a "trap" (31). The inquiry into the sufficiency of the notification tended to be mechanical. If there was any defect, whether it actually affected the

road authority's ability to defend itself or not, the plaintiff had failed to comply with the statute and could not sue. The courts even held that if the injury was severe enough that the claimant was unable to notify the road authority within sixty days, the suit was still barred (32).

Changes in the Rule

As judicial attitudes changed, courts began to mitigate the harshness of the rule. One way this was done was simply to review the notification more leniently, by requiring only "substantial compliance" within the statute (33). In addition, courts began to find that certain defects were not fatal to the plaintiff's claim. Thus, the lack of verification was no longer held to be fatal (34), and the failure to state the place of the accident was also held not to bar the claim (35).

Eventually, the changing attitude toward the rule led to an attack on the rule itself. The first such case involved a minor who had failed to notify the road authority because he had been incapacitated by the accident. The court, in a split decision, held that barring the claim of an incapacitated plaintiff violated his right to due process of law (36). This case was soon followed by another that held the notification provision unconstitutional as to all claimants, whether minors or adults, and whether incapacitated or not (37). The legislature responded by enacting the statute which is in force today.

The Rule Today

The current statute, which was enacted after the sixty-day provision was declared unconstitutional, addressed many of the criticisms directed at its predecessor by the courts. It provides that the notification must be given within 120 days of the injury and must specify the exact location and nature of the defect, the injury sustained and the names of the witnesses known at the time by the claimant. For road authorities other than the state, the notification can be served on any person who could accept service of a summons for the road authority, and can be served personally or by certified mail. As to the state, service must be made in triplicate to the clerk of the court of claims. If the claimant is a

minor, he has 180 days to give the notification, and it can be served by a parent, attorney, or legally appointed guardian. If the claimant is incapable of giving notification, he has 180 days after the end of the incapacity to do so.

The courts have held this provision constitutional, but have significantly reduced its effectiveness, from a defendant's point of view. They have held that since the purpose of the provision is to avoid prejudice to the defendant (i.e., putting it at an unfair disadvantage in preparing its defense), the failure to give proper notification will bar a claim only if it results in "actual prejudice" to the defendant. That is, the defendant must show that its ability to defend itself has in some way been impaired. This rule applies even if no notification at all is given within 120 days (38).

Summary

The statutory requirement that a claimant notify the road authority of his injury has undergone considerable change over the years. Today the statute requires in general that notification be given within 120 days of the injury (180 days from the end of the minority or disability if the claimant is a minor or disabled). The notification must state the location and nature of the defect, the injury sustained, and the names of witnesses. As a matter of constitutional law, the courts have added a provision that the failure to comply with the statute will not bar the claim unless it causes actual prejudice to the road authority, that is, impairs its ability to prepare a defense to the claim.

LACK OF NOTICE OF THE DEFECT

One of the limits on a road authority's liability for defective roads relates to its knowledge of the defect. Since the road authority is, generally speaking, liable for any defect in a road, regardless of how the defect arose, its liability is potentially very great. The statute reduces that exposure by a notice provision requiring some knowledge of the defect. The statute says:

> No governmental agency is liable for injuries or damages caused by defective highways unless the governmental agency knew, or in the exercise of reasonable diligence should have known, of the existence of the defect and had a reasonable time to repair the defect before the injury took place. Knowledge of the defect and time to repair the same shall be conclusively presumed when the defect existed so as to be readily apparent to an ordinarily observant person for a period of 30 days or longer before the injury took place. (1)

This provision states that the road authority is only liable if it had actual notice (knowledge) or constructive notice ("in the exercise of reasonable diligence should have known") of the defect and had a reasonable time to repair it. The effect of this provision is to give the road authority some protection from liability. That protection is limited by the further provision that notice of the defect and time to repair it will be conclusively presumed when the defect has been readily apparent for at least thirty days. When a fact is "conclusively presumed," it is no longer treated as a disputed fact. If a plaintiff in a case offers evidence tending to show that a defect had been readily apparent for thirty days, the judge will tell the jury that if they agree that the defect was readily apparent for thirty days they must find that the road authority knew about it and had time to correct it.

The lack-of-notice defense is an important one and has been raised frequently. There are many appellate cases in which the issue is discussed, and it is presumably raised frequently at trial. The large number of appellate cases provide much information on how the notice requirement has been applied and how useful it is as a defense.

Notice as a Question of Fact

Perhaps the clearest principle to emerge from the cases is that whether the road authority had notice of the defect is almost always a question of fact. Only in four cases since the basic road liability statute was enacted in 1879 have the courts found as a matter of law that the road authority did not have notice (40). Three of those cases are more than fifty years old. In the first, the court said that the fact that a condition had existed for four days was not enough to show notice, where

there was no proof that the condition was "notorious" (i.e., a matter of general public knowledge) or that road authority officials had traveled the street in question (41). The next case found that the road authority could not be charged with notice of a defect that was not visible (42). The third case involved an "inconspicuous defect" (a nail in a plank of a wooden sidewalk), that had existed for only two days (43). The fourth case is much more recent. The defect alleged in that case was an uneven sidewalk. The only testimony as to notice was that of the plaintiff, who said that the defect was plainly visible, although she did not see it until she tripped over it. The court held that this was not sufficient, and noted the absence of testimony from residents of the area (44).

These few cases in which the court found a lack of notice as a matter of law are exceptions that illustrate the force of the general rule. Only in very clear cases will a court find a lack of notice as a matter of law. The amount of evidence required to put the question to the jury for its decision is not great. This does not mean that the lack-of-notice defense is not a good one. It does mean that it is a factual defense the value of which will usually be decided by the jury in each case. How well the defense works for any road authority can best be determined by a review of that authority's own litigation experience.

The Road Authority's Duty to Inspect

The notice provision of the road liability statute refers to both actual and constructive notice. Constructive notice is defined in the clause: "or in the exercise of reasonable diligence should have known." The phrase "reasonable diligence" gives rise to the question whether a road authority must actively inspect the roads under its jurisdiction.

The law is clear that a road authority does not have a general duty to inspect its roads. Routine or regular inspections are not required (45). Inspection is required only when the road authority has knowledge of facts that are sufficient to put it on inquiry, that is, if it has notice of facts that "would lead an ordinarily prudent man to make an examination." If it has such facts and fails to investigate, then it will be treated as

having notice of whatever it would have learned from the investigation (46). A road authority was required to inspect an entire wooden bridge when it knew that one portion of it was defective (47). In another case, a defect in a sidewalk had been reported to the village street commissioner, and it was held that the village then had a duty to inspect and to use due care in doing so (48). Similarly, when the defective condition of a wooden bridge was reported to the appropriate officials, the court held that the road authority was required to inspect it. The court also said that when "it is generally known that a bridge has become decrepit, or when a bridge has stood so long that there is much suspicion of it, the officers of the township may not disregard the warning conveyed to take action on the ground of having no actual notice of the dangerous infirmity." (49)

In summary, there is no legal requirement that a road authority undertake regular or routine inspections. The duty to inspect arises only in specific situations where the authority has reason to believe a defect exists.

Persons Whose Knowledge is Attributable to the Road Authority

As was said earlier, in the great majority of cases it will be a question of fact whether the road authority had notice of a defect. Since the road authority is an organization it cannot, by itself, have any knowledge. It is therefore necessary to identify the persons whose knowledge of a defect will give notice to the authority. It is clear that the knowledge of any "highway official" is notice to the authority (50). In the case of a city, it was held that neither the clerk nor the mayor was such an official (51). However, a township highway commissioner (52), an overseer of highways (53), or a superintendent of city streets (54), is a highway official. The rule is not limited to supervisory personnel, but extends at least to all those employees of a road authority who are involved in road work (55). One case can be read as saying that the knowledge of any city employee can establish notice on the part of a city; however, it is a doubtful authority because the statement is indirect and conflicts with earlier cases, discussed above, regarding the knowledge

of responsible officials (56). It is not clear whether the rule extends to all employees of a road commission, including support personnel, but it is likely that their knowledge would be attributed to their employer. It appears that the knowledge of the employees of a public agency not responsible for roads, such as police officers, will not be attributed to the road authority (57).

A road authority is charged not only with the knowledge of its own employees but also with the knowledge of any contractor hired by the authority. This is true whether the contractor is a private company (58) or another road authority operating under a maintenance agreement (59). Two of the cases attributing the knowledge of the contractor to the road authority refer to the fact that the road authority retained control of the work (60), but more recently it has been held that contractor's knowledge will establish notice to the road authority even when there is no communication between them (61).

In summary, a road authority will be found to have notice of a defect if any of its employees, or any contractor hired by it, has actual or constructive notice (should have known) of it.

Factors Relevant to Establishing Notice

Whether a road authority will be found to have notice of a defect will depend on the facts of each case. The appellate cases considering the question of notice cover a wide variety of situations, and they do not give rise to any unifying theme. Although each case must be evaluated on its own merits, there are some useful principles that emerge from the reported cases. The cases suggest some factors that tend to establish notice. As was said at the beginning of this section, most of the cases are concerned not with whether there was in fact notice but with whether there were enough facts in a case to permit the jury to decide that there was notice. Therefore, any statement below that certain facts were sufficient to establish notice does not necessarily mean that the same facts will result in liability in another case; it will still be a matter for the jury's decision.

Plaintiffs frequently seek to use evidence of prior accidents to show

that the road authority had notice of a defect. The rule is quite clear that evidence of prior accidents is admissible for this purpose (62). It is not admissible for the purpose of proving that the road was unsafe, although it is not possible to guarantee that the jury will use it only for one purpose and not the other. Therefore, when there is no real dispute as to whether the road authority had notice, and the plaintiff is prepared to offer evidence of prior accidents, the road authority might be well advised to admit notice of the defect.

On the question of using the absence of accidents as proof that the road authority did not have notice, the cases seem to be in conflict. In one, the road authority tried to ask a witness whether he knew of any prior injuries at the accident site; the court held that the testimony was not admissible (63). A later case, however, said that the absence of accidents at a site tended to show that the road authority did not have notice of any defect there (64). While the admissibility of the lack of accidents is not clear, it is clear that evidence of periodic maintenance and prompt repair of defects is admissible to prove lack of notice (65).

When the defect alleged is flooding on a highway, the rule is that a road authority must take into account the ordinary flow of water. Thus, a road authority is not liable for unusual floods, but is considered to have notice of ordinary seasonal flooding (66).

When the plaintiff attempts to satisfy the notice requirement by showing that the defect has existed for more than thirty days, public knowledge becomes important. In this regard, the testimony of citizens and police officers as to the length of time the defect has existed is important (67).

It is not necessary to show that a defect existed for thirty days. In one case where a large tree limb had fallen across a road, the court held that two days were sufficient for the road authority to learn of the defect and take action to correct it (68). In another case, a barricade at a construction site had been knocked down ten minutes before the plaintiff drove into the excavation. The court in that case considered notice of the excavation to be sufficient notice, treating the sufficiency of the barricade as a separate question (69).

When the alleged defect is one of design, it might be argued that the plaintiff should not have to show that the road authority had notice of the defect, since the authority itself created it. This in fact was the rule until fairly recently (70). The rule today, however, is that notice must be proven in all cases (71). When a plaintiff proves notice of a design defect, he will do so by using the road authority's design plans and construction records, so that the new rule does not impose any significant burden on the plaintiff.

Summary

The requirement that a road authority have actual or constructive notice of a defect and a reasonable time to repair it is a significant limitation on a road authority's liability. However, it is not a defense that often succeeds in stopping a lawsuit short of trial; instead, it is usually a question of fact to be decided by a jury based on the evidence presented in the case. A road authority will not be found to have notice merely because it failed to carry out routine inspections of its roads; only when it has reason to believe there is a defect at some location must it inspect. In general, the knowledge of any road authority employee will be considered notice to the road authority; the knowledge of a contractor (whether it is a private company or another road authority) will also be attributed to the road authority. Whether the road authority is found to have notice in any particular case will be decided on the basis of the facts of that case. Factors that have been considered in making this decision are the presence or absence of prior accidents, whether the defect is caused by seasonal occurrences (such as flooding), the knowledge of the community as to how long the condition has existed, and whether the defect is contained in the road authority's own plans or construction records.

A RISK MANAGEMENT PROGRAM AS A DEFENSE

In appropriate cases, a road authority with a risk management program might try to use that program as a defense at trial. While it would not be an absolute legal defense, a risk management program--or, more

specifically, a road management procedure that is part of the program—could be persuasive if explained to the jury. If, for example, a defective condition has arisen despite the road authority's best efforts in carrying out a well-organized road inspection and maintenance program, the road authority might want the jury to consider its program in deciding whether it was at fault. The argument, in essence, would be that the authority was making the best use of its limited resources and therefore should not be liable for an individual undetected defect. In a simpler form, this defense could take the form of a simple argument that the road authority lacked the funds or the staff to correct the defect.

Road authorities have tried to raise this defense several times in Michigan, but they have not been successful. It was first raised in 1881 in a case involving an injury caused by a hole in a street. The defendent city argued that it had only two street commissioners and that they "could not possibly supervise the streets of so large a city." The court replied that this argument was ". . . inadmissible. The statute having reposed the duty of repair and the liability for neglect, the city at its peril must do whatever is needful to protect itself against actions for injury" (72).

When the lack-of-funds defense was next raised, it was also rejected. The case arose out of an injury caused by a hole in a wooden sidewalk. The defendant village in that case argued that it had only been in existence for fifteen months and lacked the means to cure the defect. The court noted that the defendant did in fact have the means to correct the defect, and went on to say that the duty to keep its sidewalks reasonably safe was "an imperative one. It involves the duty of providing all that is necessary to that end, including . . . a 'full complement of officers and employees,' as well as the necessary funds for that purpose." (73)

The defense was raised again in 1965, in a case arising out of an injury to a pedestrian caused by a chuckhole. The defendant in that case did not plead lack of funds, but instead tried to show "the procedures followed in routine maintenance of its streets, the number and size of its streets and street repair crews, and in general, the problems of

maintenance and construction in the streets while attempting to keep the same in a condition reasonably safe and fit for public travel." The court said that this evidence was properly excluded because it was not relevant to the factual issue of the condition of the road. (74)

In the most recent case, when the lack-of-funds defense was raised, it met the same fate. The court of appeals quoted the trial judge's statement that the law "imposes a duty on the road commission to keep all roads in reasonable repair and that duty is in no way altered by the way in which the road commission spends its allocated funds" (75).

It appears from these cases that neither a simple lack-of-funds argument or a more sophisticated "reasonable allocation of resources" argument would be accepted by the Michigan courts as a defense based on the reasonableness of the road authority's actions (76). The decision to reject the defense in each of the cases rested ultimately on the language of the statute. The statute requires that the road authority maintain a condition (reasonably safe roads); this is different from the usual negligence concept, which inquires into the defendant's conduct to determine whether it was reasonable (77). If the test were whether the road authority used reasonable care, then a defense based on a well-organized system for allocation of resources would more likely be accepted. However, as long as the statute bases liability on the condition of the road, neither a lack-of-funds nor an allocation-of-resources defense is likely to be accepted. Still, as noted earlier, one of the prime components of a risk management program—a road inspection system--can be used to support the lack-of-notice defense.

STATE OF THE ART

When a road authority is sued for an alleged design defect, it might raise a state-of-the-art defense. This defense can take any of three forms. First, the road authority might argue that the road complied with all of the engineering design standards of the time it was built and therefore the road should be considered reasonably safe even if it does not meet current design standards. Second, the road authority might argue that a road that meets current design standards should be

considered reasonably safe as a matter of law. Finally, a road authority might want to have the jury consider whether the road was in as good a condition as other roads in the area.

The defense that a road complied with design standards when it was built is recognized in a number of states. It is strongest in New Jersey, where a statute provides immunity for any "plan or design" prepared by any employee with discretionary authority. This immunity continues to apply even when changed conditions subsequently make the road, as originally designed, unsafe (78).

A less extensive version of the state-of-the-art defense is recognized in California and New York. In New York, the courts have developed the rule that design immunity does protect the initial plan or design (absent a showing that the plan was evolved without adequate study or lacked reasonable basis) (79), but that the state has a "continuing duty to review its plan in the light of its actual operation" (80).

In California, design immunity is statutory (81) and, as in New Jersey, extends to any plan or design prepared by an employee exercising discretionary authority. However, in California the court has followed the lead of the New York courts and held that "design immunity persists only so long as conditions have not changed." (82) Both California and New York provide that the state loses its design immunity when it has notice that the plan or design has created a dangerous condition (83).

In these states, the doctrine of design immunity offers considerable protection to the road authority. In New Jersey it even goes beyond a state-of-the-art defense, because immunity is based on the fact that designing a road is a discretionary activity; whether that design complies with any objective standards is irrelevant. In New York, the scope of immunity is not as great but is still considerable.

The law in these states illustrates how the law might have developed in Michigan, but it does not express the law as it has in fact developed. Road liability is based on statutory law, and the statutes of each state largely determine the shape that liability will take. Courts, in the course of applying a statute, may by their interpretations make a few modifications in it, but the statute itself remains the ultimate authority.

In the states discussed above, the state-of-the-art defense, in the form of design immunity, is created by statute. In Michigan, the statutory basis of road liability is quite different. Michigan's road liability statutes establish a broad and continuing duty to provide reasonably safe roads. In virtually every case, the question will be whether a road was in fact reasonably safe.

At a minimum, Michigan's road liabilty statutes eliminate "state-of-the-art" as an absolute defense in the form of design immunity. Not long after the current statutory basis for liability was created, the question of design immunity was raised. The court rejected the concept, saying that a road authority

> . . . cannot construct a dangerous and unsafe road,—one not safe and convenient for public travel,—and shield itself behind its legislative powers to adopt a plan and method of building (84).

Therefore, a court will not rule that, as a matter of law, a road was reasonably safe because it complied with design standards. It will leave that question for the jury to decide. Compliance with neither the current nor a past state of the art will ensure freedom from liability.

If state of the art is not an absolute defense, it still can be an important factual defense. That is, it could be very helpful in persuading the jury that a road was, as a matter of fact, reasonably safe. Different types of evidence might be used in this kind of state-of-the-art defense. A road authority might, for example, try to show that other roads are in similar or worse condition or that its practices are those in general use by other commissions. The road authority might also try to show that a road was designed in accordance with generally accepted engineering standards.

It is clear that a road authority cannot base a defense on a comparison of the road in question to other roads. In one case, a city that had been sued for an injury caused by a hole in the road tried to show that similar defects were permitted to continue for a considerable time without attention from the public authorities. The court described this evidence as "wholly immaterial" (85). In another case, also involving

a city street, the city tried to show that the street was no worse than a country road. The court rejected the evidence, saying that "the fact that a country road was not kept in reasonable repair would in no way excuse a city for its neglect to keep its streets in such a condition" (86). The rule was also followed in a case where the claimed defect was the absence of a guardrail. The defendant tried to introduce evidence as to "the custom and usage generally as to placing" guardrails. The court said that the statutory duty was plain, and whether other municipalities complied with it was not relevant (87). In another case the road authority tried to introduce evidence of the usual plans and customs employed in constructing roads on fills. The court said that the question was not whether the road was built "in accordance with the prevailing custom in vogue in that vicinity, but whether it was . . . reasonably safe and fit for public travel" (88).

The court's rejection of evidence of local custom and practice should not be taken as indicating that engineering standards cannot be used. The cases discussed above arose before highway and traffic engineering had become separate disciplines. A more recent case treated the road authority's compliance with the standards in the Michigan Manual of Uniform Traffic Control Devices as proof of care (89). Because the manual is adopted under statutory authority, the law provides that failure to comply with it is evidence of negligence (90), but there is no corresponding rule that compliance with a regulation is proof of care. It is because the manual expresses engineering standards that compliance is proof of care. Similarly, other engineering data and standards should be admissible. The ultimate question--whether the road was reasonably safe--will almost always be decided by the jury, but evidence of facts such as the strength of a guardrail or the coefficient of friction of a road is relevant to that decision and therefore admissible (91). Therefore, evidence as to whether a design complies with current engineering standards should also be admissible.

Summary

The state-of-the-art defense can take several forms. In its strongest form, it would provide immunity from liability for a road that met ordinary design standards when it was built, even if it is no longer safe by current standards or under current conditions. This rule is recognized in a few states, but not in Michigan. The state-of-the-art defense can also provide immunity from liability for a road that meets current design standards. This rule also does not apply in Michigan. In Michigan the test is always whether the road was reasonably safe, and that will almost always be a question of fact for the jury, so that state-of-the-art arguments will be arguments of fact. Evidence as to the condition of other roads or the custom of other road authorities has been held not to be admissible. However, engineering facts and engineering standards do tend to establish the reasonable safety of the road, and should be admissible.

COMPARATIVE NEGLIGENCE IN MICHIGAN

Introduction

In the case of Placek v. City Sterling Heights, decided February 8, 1979 (92), the Supreme Court of Michigan changed the law of negligence by replacing the doctrine of contributory negligence with the doctrine of comparative negligence. Under the doctrine of contributory negligence a court could completely deny recovery to someone injured by another's negligence when the injured person was also negligent. Under the new doctrine of comparative negligence, however, an injured person's own negligence will only reduce his recovery, not bar it completely.

Negligence

Both contributory and comparative negligence are based on the broader concept of negligence. Negligence involves the general duty to use reasonable care to avoid causing harm to a person or to property. This duty arises whenever it is foreseeable that one's conduct poses an unreasonable risk of injury to another (93). When injury is foreseeable

and a person nevertheless fails to use reasonable care, he is negligent and is responsible to pay damages to the person who is injured. This concept is a very broad one; it is applied in specific cases by the jury, which decides on the facts of each case whether the defendant exercised reasonable care.

Contributory Negligence

The concept of negligence extends not only to the defendant in a lawsuit, but to a plaintiff as well. Just as a defendant can have a duty to exercise reasonable care to avoid injury to a plaintiff, the plaintiff himself has a duty to exercise reasonable care for his own safety (94). The plaintiff's failure to exercise this care is contributory negligence.

The traditional rule (and, until Placek, the rule in Michigan) was that a plaintiff who was negligent could not recover any damages from the defendant. Even if it was clear that the defendant's negligence was much greater than the plaintiff's negligence, the defendant still was not required to pay any damages to the plaintiff.

This rule was often criticized as being too harsh, and therefore unjust (95). It was also long suspected that juries simply ignored the theory of contributory negligence as a complete bar to the plaintiff's recovery, and made their own rough apportionment of fault between the parties (96).

The judges also had the same dissatisfaction with the harshness of the contributory negligence rule. One way the courts mitigated the harshness of contributory negligence was by creating an exception to it: the doctrine of "last clear chance." This doctrine was used to permit an injured plaintiff to recover even when he was negligent. It applied when the plaintiff's negligence had ceased to operate, or had "come to rest" (97). For example, the plaintiff might have been negligent in a way that caused his car to become disabled on a highway (e.g., had run out of gas). If the defendant drives on that highway negligently and collides with the plaintiff's car, he will be responsible even though the plaintiff was also negligent; the theory is that he had the last clear chance to avoid the collision (98). The rationale of the last clear chance rule was that the plaintiff's negligence had ended and therefore did not cause the

injury. The practical effect of the rule was to avoid the harshness of the contributory negligence rule.

The last clear chance rule illustrates both the dissatisfaction with contributory negligence and the difficulty of attempting to mitigate its harshness. While last clear chance does reduce the harshness of contributory negligence, it does so only in a small minority of cases: those in which the plaintiff's negligence has come to rest. In addition, the last clear chance rule is itself is as harsh as the rule it modifies. It requires that the defendant pay the full amount of the plaintiff's damages, even when the plaintiff's own negligence in fact caused some of them. Yet it has survived simply because it offered a way to avoid the effects of contributory negligence (99).

Comparative Negligence

Comparative negligence is not a new concept. It has long existed in other areas of the law (100), and is now in general use in negligence cases in a majority of states (101). In most of the states where comparative negligence is the law, it was adopted by the legislature (102). Only three states besides Michigan have adopted it by court decision (103).

The rule of comparative negligence, as adopted by the Michigan Supreme Court in the Placek case, requires that the plaintiff's recovery in a negligence case be reduced in proportion to his own negligence (104). Thus, where both plaintiff and defendant are at fault, the plaintiff will not be barred from recovery, but he will receive less than total compensation.

The mechanism to be used by the jury is a simple one. It is required to decide the amount of the plaintiff's damages and the amount of plaintiff's negligence (expressed as a percentage) and reduce the plaintiff's recovery by that percent. Thus, a plaintiff who is 20% negligent will receive 80% of his damages. Although this formula is simple to state, its application is not as precise as it may appear. The law does not provide any guidelines for jurors to assess percentages of fault. It is not possible to predict whether a jury will find a plaintiff in a particular case to be 20% at fault or 25% at fault.

Effect of Comparative Negligence on Other Rules of Law

The Placek decision adopts the rule of comparative negligence in Michigan, but it does not go beyond that. Questions that may arise when comparative negligence is put into practice are left by the Supreme Court to be decided as they arise. One of the rules that may be affected by the adoption of comparative negligence is the last clear chance rule. As discussed above, last clear chance was used to permit recovery to a plaintiff who would otherwise be denied compensation by the rules of contributory negligence. Under comparative negligence, a defendant might argue that the last clear chance rule should not be permitted to exclude the plaintiff's negligence from the jury's consideration.

A Michigan court faced with this question could hold that the last clear chance rule still applied. The theory of last clear chance is that the plaintiff's negligence had "ceased to operate" and therefore was not a "proximate cause" of his injuries. The theory that the plaintiff's negligence did not cause his injuries could be applied in a comparative negligence system; the result would be that the plaintiff's negligence would not be considered and his damages would not be reduced. Retaining last clear chance would be to the plaintiff's advantage.

On the other hand, the court might consider that approach to be too mechanical and to miss the point of comparative negligence. It might say that the fundamental purpose of the last clear chance rule was to reduce the harshness of the contributory negligence rule, and that the abolition of contributory negligence therefore eliminated the need for the last clear chance rule. The result of this view would be that the jury would be asked to consider the plaintiff's contributory negligence and reduce his award by an appropriate amount.

It is not possible to predict with certainty what decision a Michigan court will make, but the elimination of last clear chance appears more consistent with the theory of comparative negligence. The states with comparative negligence systems like Michigan's have taken this approach (105). Thus, it appears likely that the doctrine of last clear chance will no longer play a part in the Michigan law of negligence.

In addition to changes in legal doctrine, such as last clear chance, comparative negligence may also change the type of conduct that is considered negligent. For example, the law in Michigan clearly holds that the failure of an injured plaintiff to wear a seat belt cannot be considered as negligence (106). However, in two states that have comparative negligence, the failure to wear a seat belt can be considered by the jury as negligence, which would increase the plaintiff's percent of fault (107). It is possible that the Michigan courts might take this approach, so that the failure to wear seat belts—or other conduct which is not at present considered negligent--might become a factor to be considered in determining relative degrees of fault.

Apportionment of Damages

The operation of comparative negligence is simple enough in the case of one plaintiff and one defendant; the reduction requirements are applied to the plaintiff's award and the defendant pays that reduced amount. If, however, the plaintiff sues two or more defendants and wins, the defendants may ask how the payment should be shared among them and what effect, if any, comparative negligence has on the amounts they have to pay individually.

When a plaintiff is injured by the negligence of two or more defendants, the rule has long been that he can collect the entire award from any one of them. There is a mechanism for allocating the burden of paying the award among the defendants, but from the plaintiff's point of view, each defendant is responsible for the entire amount (108). This method of collecting the award is known as joint and several liability.

The Placek decision does not discuss the question of collection from multiple defendants, but the question is likely to arise. A defendant who is asked to pay the entire award, for example, may argue that he should be responsible to pay only as much of the award as was due to his own negligence. This could be accomplished by determining both the plaintiff's fault and the fault of each defendant; the court could then calculate the amount owed by each defendant and the plaintiff could collect that amount from each (109).

From the plaintiff's point of view, this approach would be somewhat more complicated, but usually not much different from collecting all of the award from a single defendant. However, if one defendant turns out to be "uncollectible" (unable to pay the judgment), the difference becomes major. At present, since the rule of joint and several liability permits the plaintiff to collect all of his award from any one defendant, the burden of an uncollectible defendant falls on the other defendants. If comparative negligence is interpreted to mean that each defendant is only liable for the damage caused by his own negligence, then the burden of an uncollectible defendant would fall on the plaintiff, who would be unable to collect part of his award. Note that there is no "fair" solution to this problem; the burden of the uncollectible defendant must fall either on the plaintiff or on the other defendants.

As yet, there are no cases in Michigan discussing this question. However, except where a statute specifically abolishes joint and several liability, all states considering the matter have retained it, including two of the three states with systems similar to Michigan's. Also most states considering the issue in recent times have retained the rule that the plaintiff can collect his entire award from any one defendant (110). It is therefore likely that Michigan courts will do the same.

A similar question arises in the case of a "missing defendant." Often someone who is in fact responsible for a portion of the plaintiff's injuries is not a defendant in the lawsuit. There are several reasons why this might happen. Sometimes the person responsible cannot be sued; for example, an employee is prohibited from suing his employer for injuries suffered during the course of his employment. In other cases, the time limit within which a lawsuit must be filed may have expired as to one defendant. For whatever reason, the "missing defendant" is not a defendant at all, even though he is in fact responsible for part of plaintiff's damages.

As in the case of the uncollectible defendant, the defendants who are being sued might argue that the negligence of the absent person should be determined along with theirs, and that each defendant should be responsible only for the damages caused by his own negligence. Without

joint and several liability, this approach would mean that the plaintiff would lose the portion of the award attributable to the absent person just as if he were uncollectible.

There is a wide variation among the states on the question of considering the negligence of the "missing defendant." Some completely exclude consideration of his negligence, some freely permit it, and some permit it in certain circumstances (111). However, the leading cases permit the defendants to "point the finger" at an absent person, but retain the rule of joint and several liability (112). Thus, the plaintiff can still collect all of his award and the missing defendant becomes a problem only for the defendants, as they are left to allocate the absent person's share among themselves.

Contribution Among Defendants

The purpose of the rule that the plaintiff can collect all of his award from any one defendant is to ensure that the plaintiff receives all of the compensation to which he is entitled. The defendant who has paid the award is not, however, required to bear the loss alone. The law provides that, after he has paid the judgment, he can require the other defendants to make pro-rata "contributions" to him, so that all defendants bear the loss equally (113). Thus, if there were three defendants, the one who paid the judgment could require each of the other two defendants to pay one-third.

The Placek decision does not discuss the question of contribution among co-defendants, but the question is certain to arise. In a case with three defendants, a defendant whose negligence was found to be 10% will object to being required to pay one-third of a judgment. He will argue that, even if the plaintiff can collect all of his damages from any one defendant, among the defendants themselves the burden of the award should be based on their relative percentages of negligence. This argument is strong since it is a logical application of comparative negligence and has no adverse effect on the plaintiff.

Again the states take differing approaches to this issue, but the majority, including California and New York, permit each defendant to

collect contribution for the amount paid above his percent of fault, so that a defendant whose negligence is 10% need not pay one-third of a judgment (114). In Michigan, however, the rule requiring pro-rata sharing of the plaintiff's award is expressed in a statute which forbids consideration of percentages of fault (115). Unless this statute is amended or repealed the courts must continue to apply strict pro-rata contribution (116).

The question of the effect of comparative negligence on the plaintiff's ability to collect his judgment when one defendant is missing or absent, and on the apportionment of damages among defendants, will be answered as the appropriate cases arise in the future. The last clear chance rule may also be reconsidered, and the courts may also begin to consider some conduct—such as failure to wear seat belts--as negligent. Any changes that come about in these areas will be in the nature of adjustments to the law to make it more compatible with comparative negligence.

The changes may have a significant effect on the dollar amount of a road authority's liability in specific lawsuits. The question of the basis for contribution among co-defendants illustrates this. If the court adopts a system of apportionment of damages among defendants on the basis of fault, instead of the present pro-rata system, this will reduce a road authority's liability in some cases and increase it in others. If the authority is less negligent than its co-defendant, it would prefer apportionment by fault; if it is more negligent, it would prefer a pro-rata system. While the results in each case will vary, a road authority's liability on the whole is likely to be much the same as before.

Practical Effects of Comparative Negligence

The last clear chance rule and the questions arising in multiple defendant cases illustrate some areas in which legal theories may be changed because of comparative negligence. But comparative negligence will also have some practical effects on the handling of negligence cases. Some of these are:

- Change in Emphasis - The prior law of contributory negligence encouraged arguments tending to show total

guilt and total innocence. Comparative negligence is likely to encourage each party to argue that relatively higher degrees of fault should be assigned to the opposing party and lesser degrees of fault should be assigned to him. Therefore, evidence showing the relative amounts of fault may become more important under comparative negligence than under contributory negligence.

- Admissions - Some parties may feel that they will appear more truthful before the jury by admitting to slight fault rather than insisting on total innocence. The adoption of comparative negligence may therefore prompt admissions of some degree of fault that would not have been made under the prior law.

- Increased Value of Small Claims - If Michigan juries tend to assign slight fault rather than no fault, more claims will be worth at least something. Therefore, claims of small value may be more frequently raised and seriously pursued than would have been so under the prior law.

- Reduction of Large Claims - It is commonly thought that juries are swayed by sympathy for the injured plaintiff and are therefore reluctant to find contributory negligence when it completely bars recovery. Comparative negligence may alter this pattern by permitting the jury to make a discount for the plaintiff's misconduct but still permitting some compensation for injuries. The more sizable claims would thus be reduced. This development would, of course, benefit defendants.

- Facility of Settlement - Comparative negligence may facilitate more frequent settlement by directing attention to the percentages of fault of the parties rather than to the strength or weakness of the defense of contributory negligence. Litigators are often able to reach agreement early on with respect to the presence or absence of liability. Since comparative negligence will permit them to consider relative degrees of fault they may now also agree more easily on damages. These developments would lead to more frequent and more rapid settlement.

- Proving Negligence of Co-Defendants - If comparative negligence results in a change in the rules of contribution among co-defendants to permit contribution on the basis of fault rather than pro-rata, defendants will devote more energy than at present to proving the degree of fault of their co-defendants. This is particularly true of a defendant, like a road authority, which is a "target" defendant, especially where its negligence is less than that

of its co-defendants.

Like the changes in legal theories related to negligence, these changes in litigation practice are not major. They are changes in emphasis rather than fundamental changes in approach. As the relative degree of fault becomes more important than the presence or absence of fault, the practical aspects of negligence litigation are similarly modified. This may have a significant effect on specific cases. For example, the value of small claims is likely to increase somewhat. On the other hand, it is equally likely that the value of large claims will decrease somewhat. Therefore, on the average, a road authority, like other defendants, probably will be in much the same position after comparative negligence as before.

Conclusion

The adoption of comparative negligence brings about a significant change in the law of negligence. An injured person's negligence no longer will completely bar his recovery of damages. Instead, it will reduce his recovery proportionately.

The change from contributory negligence to comparative negligence may also bring about changes in other legal theories related to negligence. For example, the rule of last clear chance may be eliminated and defendants may share a judgment based on their respective degrees of fault rather than a strict pro-rata system.

In addition, conduct that is presently considered not to be negligent may be treated as negligence, since it will only reduce, and not bar the plaintiff's recovery. It is likely, therefore, that comparative negligence will permit a road authority to raise matters in defense or mitigation of fault that were not previously allowed. A plaintiff's failure to wear seat belts has been noted as one such possible factor, and other similar "human factors" should also be considered. Since the findings of studies of accident causation indicate that human factors are causally involved in nearly 93 percent of traffic crashes, as compared to 33.8 percent for environmental factors and 12.6 percent for vehicle factors, the

identification of such factors for use in defending against claims will be more important for defendants (117).

In addition to possible changes in legal theory, comparative negligence may bring changes in present litigation practice. The value of small claims will likely be increased and the value of large claims reduced. The emphasis in trials will likely change from proving the complete absence of fault to showing differing degrees of fault.

Although comparative negligence is a significant change from contributory negligence, it is nevertheless a change within the fault system, not a change of the system itself. Fault will continue to be the basis of the system and proving fault remains the central purpose of negligence litigation. Conduct that was negligent before comparative negligence continues to be negligent, and the evidence used to prove negligence remains largely the same. In individual cases the changes brought about by comparative negligence may have a significant effect on a road authority's liability, but on the whole its liability is substantially unchanged.

THE NO-FAULT AUTOMOBILE INSURANCE LAW

Introduction

Michigan's no-fault automobile insurance law (No-Fault) made substantial changes in the way persons involved in automobile crashes are compensated for injuries and for damage to their property. Under No-Fault the litigation system, in which compensation depends on fault, is replaced by a system in which an injured person receives insurance benefits without regard to fault.

The General Highway Law and the Governmental Immunity Law (road liability laws) both provide that road authorities are responsible for injuries caused by their fault in failing to provide safe roads.

When the No-Fault law and the road liability laws intersect, that is, where a defective road causes a crash which results in damage to a car or injury to its occupants, (and where the No-Fault law would otherwise apply), a road authority might argue that the No-Fault law takes

precedence and in effect negates its liability under the road liability laws. To assess the strength of this argument, it is necessary to begin with a discussion of the No-Fault law in general.

The No-Fault Law

The law has traditionally determined responsibility for injuries in a traffic crash on the basis of fault. This was expressed in the concept of negligence, the failure to use ordinary care in the situation in which the accident occurred. Thus, to receive compensation, the injured party was required to prove that the other driver had been careless. However, the other driver, even if he was negligent, could avoid paying the injured party by showing that the injured party was also negligent (11). In the case of a road authority, fault is determined with respect to its statutory duty to maintain reasonably safe roads. The concern with establishing fault often led to numerous and long trials and was thought to be a major cause of court congestion. The result was that a legitimate claim for a large amount of money, where the injuries were severe, was likely to be settled for less than it was worth, because of the injured party needed the money. On the other hand, a small claim could often be settled for more than it was worth because it was cheaper for a defendant to settle it than to pay to defent it.

Dissatisfaction with the operation of the negligence system led to the passage of the No-Fault law in 1972. This law has been upheld by the Michigan Supreme Court (119). Because the No-Fault law is fairly recent and complex, it will be described relatively completely in the rest of this section. In general, it can be said that No-Fault changed the focus of the injury compensation system. Before No-Fault, the focus was on the personal fault of the driver. After No-Fault, it is on the insurer of the vehicle.

The No-Fault law eliminated liability for negligence and replaced it with insurance benefits available from the injured person's own insurer. There are two important exceptions to this rule. Liability for negligence is retained where (a) the damages for economic loss (wages, expenses, etc.) exceed the amounts paid for these losses under the insurance, or (b)

the injured person suffers "death, serious impairment of body function or permanent serious disfigurement" (120). These exceptions establish a threshold. Above the threshold, lawsuits for damages based on fault are still permitted. Therefore, it is clear that the No-Fault law is intended, not to abolish liability for negligence altogether, but to limit it to the more serious cases. It follows that if it does apply to suits against the commission, No-Fault will eliminate only the lesser ones, and not those where the injuries are serious.

No-Fault changed the focus of the compensation system to the insurance of one's own vehicle rather than the conduct of the other driver. Insurance is mandatory under No-Fault. To register a motor vehicle in Michigan, its owner must present proof of insurance (or be an approved self-insurer) (121). Three types of insurance are required: personal injury, property damage, and residual liability. Residual liability insurance covers accidents occurring out of state, but more important, it covers cases where the driver covered by the policy is at fault and the injuries are above the threshold. These are the cases where claims against the negligent driver are still permitted by No-Fault. Personal injury and property damage coverage are discussed below.

No-Fault's personal injury provisions make the insurers of owners and operators of motor vehicles responsible for "economic" losses suffered by the occupants of their vehicle (122). Personal injury insurance covers these losses. Economic losses include lost wages, loss of support, and out-of-pocket expenses. Out-of-pocket expenses include the cost of supplies, services, and accommodations during treatment and recovery. Lost wages are limited to the first three years after an accident (123). As long as a person's injuries are below the No-Fault threshold, he is not permitted to sue for damages. But if the losses exceed the No-Fault benefits, or if the injuries involve death, serious impairment of body function, or permanent serious disfigurement, then the injured person is above the threshold and can sue for damages based on negligence.

Within the limits of No-Fault coverage, however, financial responsibility for an accident is on the insurer of the owner or operator of the vehicle occupied by the injured person. Thus, the personal injury

protection carried by the vehicle (i.e., by its owner) applies to all the occupants of the vehicle. This protection applies whether the vehicle is privately owned or is owned by a company and driven by an employee. Therefore, if the owner of the vehicle is driving it and he and a passenger are injured, they both receive compensation from the owner's insurer. If the owner has not insured the vehicle, then the occupants are compensated by the insurer of that vehicle's driver (unless, of course, the driver is the owner). If neither the owner nor the driver is insured, then the occupants look to the insurance on their own vehicles (124).

No-Fault's property damage provisions make the insurers of owners and operators of motor vehicles responsible for the cost of accidental damage to physical property "arising out of" the use of such vehicles in Michigan (125). Covered damages include loss of use of property. Responsibility is, however, limited to the lesser of repair or depreciated replacement cost. The maximum liability of an insurer in any single accident is limited to one million dollars. No-Fault property damage benefits will not pay for damage to the motor vehicle itself unless, at the time of the accident, it was properly parked and was struck by another vehicle (126). Insurance for damage to one's own vehicle can be obtained by purchasing a separate collision rider, usually with a deductible provision, whereby the insured pays a certain amount and the insurer pays the excess. These riders typically waive the deductible if the driver was not at fault in the accident. However, collision riders are not mandatory under No-Fault. They are options available to those who want this protection in exchange for additional premiums. The extent of the collision coverage is a contractual matter between the insurance company and the vehicle owner and is spelled out in the insurance policy.

The Effect of the No-Fault Law on Road Authority Liability

The road liability laws impose liability on a road authority when its negligence in constructing or maintaining the highways causes damage or injury to an automobile or its occupants. On the other hand, the No-Fault law abolishes liability for negligence arising out of the use of an automobile except where the injuries are serious enough to be above the

threshold. Thus, these laws appear to be in conflict. This section discusses that conflict and possible resolutions of it.

Two points should be made at the outset. First, even if No-Fault does apply to claims by injured persons against road authorities, it does not entirely bar them; rather, No-Fault would still permit such claims where the claimed injuries are above the threshold (127). Second, an authoritative resolution of the conflict between the statutes can only come from the legislature itself, or from an interpretation of the statutes by the courts. At present, there are no decisions from the Michigan courts on this question. Therefore it is necessary to examine the statutes themselves, and the legislature's intent in enacting them.

Read literally and by itself, No-Fault appears to bar suits against road authorities for injuries or property damage caused by defective highway maintenance, since all such injuries arise out of the use of motor vehicles in Michigan.

The No-Fault law reads in part:

> Notwithstanding any other provision of law, tort liability arising from the ownership, maintenance or use within this state of a motor vehicle . . . is abolished [.]

The Supreme Court has explained the legislature's intent in enacting the personal injury portion of the No-Fault law (128). It stated that the legislature sought:

- to end the delays in settling claims that were common under the negligence system,
- to reduce pressure on injured parties to take less than their claims were worth, and
- to lessen the number of motor-vehicle accidents litigated in court.

The court also summarized the purposes of the property damage provisions of the No-Fault law. In this regard the legislature sought:

- to create safer cars by keying premium costs to repair costs of the insured's car and so promote development of more crash-worthy cars,

- to eliminate accident investigations, thereby lowering preiums by reducing administrative costs, and
- to make group insurance feasible and so reduce premium costs because of its relatively lower administrative costs.

All of these stated rationales would apply to suits by drivers against a road authority, and therefore support the conclusion that No-Fault bars suits against road authorities for defective highway maintenance.

The nature and strength of these purposes must be weighed against the purpose of the road liability laws. The purpose of the liability provisions in the road liability laws is twofold: to provide an incentive to road authorities to be diligent in carrying out their responsibility to provide safe roads; and to provide a means for compensating anyone injured by a road authority's failure to do so.

The No-Fault law limits liability for negligence to cases involving serious injury. The road liability laws establish liability for negligence against road authorities. The purpose of No-Fault is to provide a fairer and swifter system of compensation by eliminating the expense and delay of litigation. The purpose of the road liability laws is to provide a means of compensating persons injured because of defective roads and to provide an incentive to road authorities to provide safer roads (129).

A court that tries to resolve the conflict between these laws will likely base its decisions on the intent of the legislature in enacting the statutes. In addition to referring to the language used in the acts, the court will use some general principles of interpretation which apply whenever statutes seem to be in conflict. The following discussion describes the reasoning that a court might follow and summarizes the results a court might reach.

There are several reasons that support the conclusion that No-Fault bars claims for negligence against a road authority. As was stated above, No-Fault's purpose is to create a fairer compensation system by substituting insurance for negligence liability. Since the use of litigation to determine fault is as expensive and time-consuming in a a defective-road case as in any other case, No-Fault's benefits should apply

in those cases and the road authority should not be liable.

The very specific language in the No-Fault act also supports this conclusion. As stated earlier, the act provides that:

> Notwithstanding any other provision of law, tort liability arising from the ownership, maintenance or use within this state of a motor vehicle...is abolished [.]

These words would appear to include any injury or damage to a vehicle caused by the roadway, since the use of the vehicle was a factor in the crash.

Finally, if No-Fault does conflict with the road liability laws, it can be argued that it has priority because it is the more recent statute, and when two statutes deal with the same area and are in conflict, the more recent one ordinarily takes precedence (130).

While the arguments in favor of No-Fault's limiting a road authority's liability are substantial, there are also substantial arguments for the opposite conclusion.

The first of these is the strength of the policy, underlying the road liability statutes, that road authorities be held responsible for damage caused by their failure to exercise care in making the roads safe for travel. This principle is not a new one. It has been recognized for at least a century (131). Its strength is reflected not only in the fact that it has continued to exist for so long but also in that it was never questioned during a recent dispute between the Michigan Supreme Court and the legislature over governmental immunity. The Supreme Court twice issued opinions that reduced the scope of state and local governments' immunity from liability (132). The legislature twice responded with statutes that reestablished that immunity (133). However, neither of those statutes changed the rule that road authorities were responsible for failure to use care in keeping the roads safe. Thus, the legislature never contemplated immunity for road authorities.

Moreover, in a recent case where a road authority attempted to use another statute to reduce its general liability to maintain safe roads, the Michigan Supreme Court nonetheless found the commission liable. In

Mullins v. Wayne County (134), the road commission was sued for failure to erect a sign indicating the end of a road at a T-intersection. The commission raised as a defense that its failure to erect a sign was justified by the Uniform Traffic Signal Control Statute (135), which gives road authorities discretion as to erecting signs. The court rejected that argument, stating that a road authority could not use the more lenient statute "as a shield to its statutory liability for construction of an unsafe road." While the Mullins case does not deal with the effect of the No-Fault law, it does illustrate the importance that the court attaches to a road authority's statutory obligation to provide safe roads, even where another statute apparently reduces that liability.

Second, if the No-Fault law does limit road authority liability for defective roads, then No-Fault is, in effect, a partial repeal of the statutes establishing that liability. However, when the legislature enacts a statute that repeals or modifies an earlier one, the repealing statute generally names the affected statute explicitly. If this were not done, it would become very difficult to tell which laws were currently in force. It sometimes happens that a more recent statute will repeal or modify an earlier one "by implication." This repeal happens when the application of the newer statute necessarily conflicts with the earlier one. Such repeals are possible, but it has been held by the courts that:

> Repeals by implication are not favored. The intent to repeal must very clearly appear, and courts will not hold to a repeal if they can find a reasonable ground to the contrary. (136).
>
> The principle that the law does not favor a repeal by implication is of especial application in the case of an important public statute of long standing, which should be shown to be repealed either expressly, or by a strong and necessary implication.

A court taking this approach might also rely upon the language in the No-Fault act limiting its application to injuries and damage "arising out of the . . . use of a motor vehicle." This language could be interpreted to mean that only crashes caused by the operation of a vehicle are within the scope of No-Fault. When an accident is claimed to be caused by a

defective highway, it could be said that the accident arose out of the defect rather than the operation of the vehicle.

Finally, a court facing the question of whether the No-Fault law limited road authority liability would also consider the relative breadth of the laws. The No-Fault law covers the entire field of injuries arising out of motor vehicle use. The road liability laws deal with only a part of that field, namely injuries caused by defective roads. It is a general rule that where two statutes apply to the same situation, but one applies specifically while the other applies in general terms which cover other situations as well, the more specific statute will take precedence over the more general (138). Since the road liability statutes are quite specific, this rule would support the conclusion that the No-Fault law does not limit a road commission's liability for defective roads.

It is clear that arguments can be made for and against the application of No-Fault to limit road authority liability. Based on this analysis, there appear to be three possible results.

First, a court might decide that the No-Fault law takes precedence over the road liability laws and therefore limits claims against a road authority to those permitted by No-Fault. The result of this would be that the authority would be liable only where the injuries were above the threshold, as defined by the No-Fault law.

Second, a court might reach the opposite conclusion and hold that the No-Fault law does not apply at all where the road authority's failure to provide safe roads was the cause of injury. This would mean that an injured person would not be covered by No-Fault benefits and that he could seek compensation only from the road authority, by way of litigation, to establish that the authority was at fault.

There is a third possibility as well. A court could decide that both No-Fault and the road liability laws apply. This approach would permit an injured person to seek compensation from both the insurer and the road authority.

Because there are substantial arguments to support any of these decisions, it cannot be stated with certainity which approach a court would in fact take. The next section suggests methods of resolving this

problem.

Conclusions and Recommendations

The legislative purpose behind the No-Fault law is clear, as is the purpose behind the road liability laws. However, it is not clear which of these laws would take precedence if the road authority were to raise the No-Fault law as a defense in a suit alleging that it was liable for maintaining defective roads. The No-Fault law seeks to provide fairer and swifter compensation for injured persons. It does this by eliminating liability for negligence where the injuries are not serious, thereby eliminating the delay and expense of lawsuits to determine fault. On the other hand, the road liability laws express a continuing policy of holding road authorities liable for all damages caused by their failure to keep the roads in good repair and reasonably safe for public use. The relationship between these policies can be determined only by a decision of the courts, or by the legislature itself.

There are three possible approaches that might be taken to obtain such a resolution:

- A road authority could raise No-Fault as a defense in a trial in which it is sued for damages.
- A road authority could bring a declaratory judgment action, asking a court specifically to determine the effect of No-Fault.
- A road authority could ask the legislature to resolve the issue by enacting an amendment clarifying the law.

Each of these approaches has advantages and disadvantages that should be weighed before deciding on any course of action.

If a road authority is sued by a person whose damages are below the No-Fault threshold or are for property damage only, it could raise No-Fault as a defense in the trial. The trial judge would then be required to decide whether No-Fault limits the road authority's liability. The trial judge's decision could be appealed to the Michigan Court of Appeals and probably to the Michigan Supreme Court. A final ruling

from the Michigan courts would resolve the issue as to present law. However, the legislature could, if it chose to do so, change the law as determined by the courts by enacting a new statute to amend No-Fault or one of the road liability laws.

The road authority might also seek a resolution from the courts by way of a declaratory judgment action. This is a form of lawsuit, and is like the first approach in that it is begun in the trial court and the trial judge's decision can be appealed. The result of this approach would also be a resolution of the issue under present law, subject to the power of the legislature to change the law. There is also a significant difference between the declaratory judgment approach and the first approach. A declaratory judgment action asks only that the court declare the law in a certain area. It is not based on a specific accident or injury, and does not ask the court to determine who was at fault and how much compensation should be paid. Therefore, the declaratory judgment approach would permit the specific question of the effect of No-Fault on road authority liability to be raised and decided without considering other issues that are part of an ordinary lawsuit.

An additional advantage of the declaratory judgment approach is that it permits the road authority to begin the proceedings at a time of its choosing, rather than as part of a defense to a claim brought by someone else.

Both of these approaches offer the opportunity to obtain a specific answer to the question raised, since it is difficult for a court to avoid answering a question that is properly brought before it. The legislature, on the other hand, cannot be required to enact a law. There are, however, significant advantages to the legislative approach.

The third way to determine the effect of the No-Fault law on road authority liability is to ask the legislature itself to resolve the issue by amending one of the acts. This approach has several advantages. First, since the question involves the interpretation of statutes enacted by the legislature, the legislature itself is the final authority. Its decision, expressed in an amendment to one of the statutes, would be binding on the courts and would, in effect, overrule an inconsistent court decision.

Closely related to this is the possibility that any court decision that might result from the first two approaches would ultimately be reviewed by the legislature, if those who disagreed with the court decision sought a statutory amendment to override it.

Additional advantages are derived from the nature of the legislative process. While a court makes its decisions in seclusion after hearing the arguments of all parties, the legislature operates more openly in moving a bill through the various stages to enactment into law. It is therefore possible to discuss proposed legislation with any member of the legislature at any time. This can provide two benefits. First, it may be possible to determine the legislative sentiment toward a proposed bill before it is introduced. Second, it is easier to monitor the prospect of a favorable result.

Considering the relative advantages and disadvantages of the three possible approaches, the legislative approach appears to be preferable. The legislature is the final authority where the meaning of a statute is in question, and the more open nature of the legislative process may make it easier to estimate the likelihood of, and to bring about, a favorable result. In addition, if the legislature failed to act, the first two approaches would still be available.

Each of the three possible approaches presents the possibility of an unfavorable decision as well as a favorable one. In considering whether to seek a determination, and if so, which course to choose, it is necessary to weigh the advantages of each and the probablity of a favorable result. Since this weighing process is a matter of judgment, any decision should be made only after consultation with the road authority's counsel.

SUMMARY

A road authority has a broad range of defenses available to it in appropriate cases. Some of these defenses (lack of jurisdiction over the road, and statute of limitations) are nearly absolute when they apply, but they apply only in a small percentage of cases. Other possible defenses (state of the art, risk management program, and No-Fault insurance law)

seem not to be of very much use in Michigan.

The remaining defenses are more directly concerned with the claim itself. They deal with the plaintiff's conduct (contributory negligence and failure to notify the road authority of the injury) and with the road authority's activities (notice of the defect). These are the defenses that are most commonly raised. In most cases, these defenses are addressed to the jury, which will decide in each case where the responsibility lies. In the large majority of cases, therefore, the extent of a road authority's liability will be determined by a jury as it weighs these defenses and considers the underlying question in each case: whether the road was reasonably safe.

FOOTNOTES

1. M.C.L.A. 691.1402, M.S.A. 3.996(102).
2. M.C.L.A. 691.1401, M.S.A. 3.996(101).
3. Jones v. City of Ypsilanti, 26 Mich. App. 574, 182 N.W.2d 795 (1970).
4. M.C.L.A. 224.21, M.S.A. 9.121.
5. Bennett v. City of Lansing, 52 Mich. App. 289, 217 N.W.2d 54 (1974); Moyer v. Wayne County Road Commission, 52 Mich. App. 285, 217 N.W.2d 53 (19740.
6. Summerville v. Board of County Road Commissioners of the County of Kalamazoo, 77 Mich. App. 580, 259 N.W.2d 206 (1977).
7. Barker v. City of Kalamazoo, 146 Mich 257, 109 N.W. 427 (1906); Hughes v. City of Detroit, 161 Mich. 283, 126 N.W. 214 (1910); Lang v. Ingham County, 277 Mich. 345, 269 N.W. 197 (1936).
8. Bennett v. City of Lansing, note 5, above; Moyer v. Wayne County Road Commission, note 5, above; Peters v. State Highway Department, 400 Mich. 50, 252 N.W.2d 799 (1977).
9. Martin v. J.A. Mercier Company, 255 Mich. 587, 238 N.W. 181 (1931).
10. White v. Livingston County, 299 Mich. 153, 200 N.W. 973 (1924).
11. Hargis v. City of Dearborn Heights, 34 Mich. App. 594, 192 N.W.2d 44 (1971). Two recent cases mention the possibility of two authorities having jurisdiction. Hiner v. State of Michigan, State Highway Commission, and Macomb County Road Commission, ___ Mich. App. ___, ___ N.W.2d ___, (1980); Stricker v. Michigan Department of State Highways and Transportation and Macomb County Road Commission, ___ Mich. App. ___ , ___ N.W.2d ___, (1980). However, neither of these cases discusses the question, so neither seems to add anything to the Hargis case.
12. Constitution, 1963, Art. 7, §16 (emphasis added).
13. M.C.L.A. 224.21, M.S.A. 9.121; M.C.L.A. 691.1402, M.S.A. 3.996 (102).
14. M.C.L.A. 224.21, M.S.A. 9.121.
15. See note 6, above.
16. M.C.L.A. 600.5805(7), M.S.A. 27A.5805(7).
17. M.C.L.A. 691.1411, M.S.A. 3.996(111).

18. Dillon v. Tamminga, 64 Mich. App. 301, 236 N.W.2d 716 (1975), Forest v. Parmalee, 402 Mich. 348, 262 N.W.2d 653 (1978).
19. Pfaff v. Board of County Road Comissioners of Ogemaw County, 354 Mich. 575, 93 N.W.2d 244 (1958); Stremler v. Michigan Department of State Highways, 58 Mich. App. 620, 228 N.W.2d 492 (1975).
20. M.C.L.A. 600.6431, M.S.A. 27A.6431.
21. Kerkstra v. State of Michigan, 60 Mich. App. 761, 231 N.W.2d 521 (1975), affirmed 398 Mich. 103, 247 N.W.2d 759 (1976); Zimmer v. State of Michigan, 16 Mich. App 769, 231 N.W.2d 519 (1975).
22. Yarger v. City of Hastings, 375 Mich. 413, 134 N.W.2d 726 (1965); M.C.L.A. 600.5855.
23. M.C.L.A. 600.5852, M.S.A. 27A.5852.
24. M.C.L.A. 600.5851, M.S.A. 27A.5851.
25. M.C.L.A. 600.5853, M.S.A. 27A.5853.
26. M.C.L.A. 600.5856, M.S.A. 27A.5856; General Court Rules 101, 102; Buscaino v. Rhodes, 20 M.A. 329, 174 N.W.2d 61, 385 Mich. 474, 189 N.W.2d 202.
27. Harrington v. City of Battle Creek, 288 Mich. 152, 284 N.W. 680 (1939).
28. Brown v. Wayne County, 303 Mich. 454, 6 N.W.2d 744 (1942).
29. Dempsey v. City of Detroit, 4 Mich. App. 150, 144 N.W.2d 684 (1966).
30. Griswold v. City of Ludington, 116 Mich. 401, 74 N.W.2d 663 (1898). (In this case, defendant was held to have waived the defect).
31. Rottschafer v. City of East Grand Rapids, 342 Mich. 43, 69 N.W.2d 193 (1955).
32. Kraus v. Board of County Road Commissioners for the County of Kent, 385 F.2d 864 (1967); Trbovich v. City of Detroit, 378 Mich. 79, 142 N.W.2d 696 (1966).
33. Hussey v. City of Muckegon Heights, 36 Mich. App. 264, 193 N.W.2d 421 (1971); Jones v. City of Ypsilanti, 26 Mich. App. 574, 182 N.W.2d 795 (1970; Meredith v. City of Melvindale, 381 Mich. 572, 165 N.W.2d 7 (1969).
34. Reynolds v. Board of County Road Commissioners of Clare County,

34 Mich. App. 460, 191 N.W.2d 503 (1971).

35. Republic Franklin Insurance Company v. City of Walker, 17 Mich. App. 92, 169 N.W.2d 175 (1969).

36. Grubaugh v. City of St. Johns, 384 Mich. 165, 180 N.W.2d 778 (1970).

37. Reich v. State Highway Department, 386 Mich. 617, 194 N.W.2d 700 (1972).

38. Hobbs v. Michigan State Highway Department, 398 Mich. 94, 247 N.W.2d 754 (1976); Phelps v. State of Michigan, 75 Mich. App. 442, 254 N.W.2d 923 (1977).

39. M.C.L.A. 691.1403, M.S.A. 3.996 (103).

40. Thirty-eight cases involving notice are indexed in Volume II.

41. Corey v. City of Ann Arbor, 134 Mich. 376, 96 N.W. 477 (1903).

42. Canfield v. Township of Gun Plains, 175 Mich. 379, 141 N.W. 634 (1913).

43. Moblo v. City of Lansing, 243 Mich. 465, 220 N.W. 890 (1928).

44. Beamon v. City of Highland Park, 85 Mich. App. 242, 271 N.W.2d 187 (1978).

45. Wakeham v. Township of St. Clair, 91 Mich. 15, 51 N.W. 696 (1892); Thomas v. City of Flint, 123 Mich. 10, 81 N.W. 936 (1900).

46. Thomas v. City of Flintt note 7, above.

47. Snyder v. City of Albion, 113 Mich. 275, 71 N.W. 475 (1897).

48. Hunter v. Village of Ithaca, 141 Mich. 539, 105 N.W. 9 (1905).

49. Moore v. Kenockee Township, 75 Mich. 332, 42 N.W. 944 (1899).

50. Davis v. City of Adrian, 147 Mich. 300, 110 N.W. 1084 (1907); Dundas v. City of Lansing, 75 Mich. 499, 43 N.W. 1011 (1889).

51. Corey v. City of Ann Arbor, 134 Mich. 376, 96 N.W.477 (1903).

52. Burns v. Van Buren Township, 218 Mich. 40, 187 N.W. 276 (1922).

53. Malloy v. Township of Walker, 77 Mich. 448, 43 N.W. 1013 (1889).

54. McEvoy v. City of Sault St. Marie, 136 Mich. 172, 98 N.W. 1006 (1904).

55. Peters v. State Highway Department, 400 Mich. 50, 252 N.W.2d 799 (1977).

56. Cruz v. City of Saginaw, 370 Mich. 476, 122 N.W.2d 670 (1963).

57. Jones v. City of Lansing, 273 Mich. 23, 263 N.W. 757 (1935);

Rytkonen v. City of Wakefield, 364 Mich. 86, 111 N.W.2d 63 (1961), can be read as suggesting that knowledge of a police officer is attributed to a city, but does not squarely address the issue; in addition, in that case police officers seem to have been responsible for lighting flares.

58. Barker v. City of Kalamazoo; Hughes v. City of Detroit; Lang v. Ingham County, note 7, above.
59. Peters v. State Highway Department, note 8 above.
60. Barker v. City of Kalamazoo; Hughes v. City of Detroit, note 7 above.
61. Peters v. State Highway Department, note 8 above.
62. Corcoran v. City of Detroit, 95 Mich. 84, 54 N.W. 692 (1893); Lombar v. Village of East Tawas, 86 Mich. 14, 48 N.W. 947 (1891); Smith v. Sherwood Township, 62 Mich. 159, 28 N.W. 806 (1886).
63. Langworthy v. Township of Green, 88 Mich. 207, 50 N.W. 130 (1891).
64. Canfield v. Township of Gun Plains, note 42, above.
65. Williams v. State Highway Department, 44 Mich. App. 51, 205 N.W.2d 200 (1972).
66. Fidler v. Lafayette Township, 226 Mich. 635, 198 N.W. 262 (1924).
67. Burgdorf v. Holme-Shaw, 365 Mich. 45, 96 N.W.2d 164 (1959); Davis v. City of Adrian, 147 Mich. 300, 110 N.W. 1084 (1907); Peters v. State Highway Department, note 8, above.
68. Holland v. Allegan County, 316 Mich. 134, 25 N.W. 140 (1946).
69. Walsh v. Consumers Power Company, 365 Mich. 253, 112 N.W.2d 448 (1961).
70. Nevala v. City of Ironwood, 232 Mich. 315, 205 N.W. 96 (1925).
71. Peters v. State Highway Department, note 8, above.
72. Grand Rapids v. Wyman, 46 Mich. 516, 9 N.W. 833 (1881).
73. Lombar v. Village of East Tawas, 86 Mich. 14, 48 N.W. 947 (1891).
74. Sable v. City of Detroit, 1 Mich. App. 87, 134 N.W.2d 375 (1965).
75. Grawey v. Board of Road Commissioners of the County of Genesee, 48 Mich. App. 742, 211 N.W.2d 68 (1973).
76. However, evidence of a comprehensive road management program would be admissible to show that the road authority did not have

notice of a defect. See section 5.4.4 at note 27.

77. For a more complete discussion of this aspect of a road authority's liability, see Section 3.2.2 above.

78. N.J.S.A. T59 § 4-6 (Legislative Comment); Costa v. Josey, 160 N.J. Super 1, 388 A.2d 1019, affirmed 79 N.J. 535, 401 A.2d 525.

79. Weiss v. Alexander, 7 N.Y.2d 79, 416; 200 N.Y.S.2d 409, 103 N.E.2d 56 (1960).

80. ibid, 587-588; 414-415; 67.

81. Cal. Govt. Code §830.6. For the text of this section, see footnote 5, Baldwin v. State, 6 Cal.3d 424, 99 Cal. Rptr 145, 491 P.2d 1121 (1972).

82. Baldwin v. State, 99 Cal. Rptr 145, 151. In California, the legislative hstory of the statute indicated an intent to adopt the New York approach expressed in the Weiss case. New Jersey, on the other hand, considered and expressly rejected the New York-California approach.

83. Baldwin v. State, 99 Cal. Rptr. at 151.

84. Malloy v. Township of Walker, 77 Mich. 448, 43 N.W. 1012 (1889).

85. Grand Rapids v. Wyman, 46 Mich. 516, 9 N.W. 833 (1881).

86. Parker v. Kettinger, 257 Mich. 385, 241 N.W. 226 (1932).

87. Malloy v. Township of Walker, note 84 above.

88. Mazzolini v. Kalamazoo County, 228 Mich. 59, 199 N.W. 648 (1924); Hoag v. Hyzy, 339 Mich. 163, 63 N.W.2d 632 (1954).

89. National Bank of Detroit v. State of Michigan, 51 Mich. App. 415, 215 N.W.2d 599 (1974).

90. For a discussion of the legal status of the manual, see Chapter 4, Section 4.1.

91. Rules 402, 702, Michigan Rules of Evidence.

92. Placek v. City of Sterling Heights, 405 Mich. 638, 275 N.W.2d 511 (1979).

93. Prosser, W.L. 1971. Handbook of the law of torts. 4th ed. pp. 145-46. St Paul: West Publishing Co.

94. Prosser, pp. 416-17.

95. Prosser, p. 418.

96. See for example the examination of prospective jurors in Schwartz, L. 1977. Proof, persuasion, and cross examination. Vol. II. p 2407. Englewood Cliffs, N.J.: Executive Reports Corporations. For a discussion of jury sympathy in a road liability setting see Thomas v. City of Flint, 123 Mich. 10, 31; 81 N.W. 936 (1900).

97. Conant v. Bosworth, 332 Mich. 51, 50 N.W.2d 842 (1952).

98. Zeni v. Anderson, 397 Mich. 117, 243 N.W.2d 270 (1976).

99. Kirby v. Larsen, 400 Mich. 55, 256 N.W.2d 400 (1977); Prosser, p. 428.

100. Federal maritime law has used the doctrine in personal injury cases since 1890. Schwartz, V. 1974. Comparative Negligence, p. 57. Indianapolis: Allen Smith Company.

101. Thirty three by 1978. Schwartz, V. Appendix A.

102. Schwartz, V. Appendix A.

103. Alaska, California, and Florida. Schwartz, V. Appendix A.

104. Placek v. City of Sterling Heights, 405 Mich. 638, 275 N.W.2d 511 (1979).

105. Schwartz, V. pp. 134-40.

106. Romankewiz v. Black, 16 Mich. App. 110, 167 N.W.2d 606 (1969).

107. Wisconsin and New York. Schwart, V. pp. 97-98.

108. Banzhof v. Roche, 228 Mich. 36, 199 N.W. 607 (1924).

109. See for example Jorae v. Clinton Crop Service et al., 495 F. Supp. 952 (1979), interpreting Michigan's Products Liability Statute.

110. Florida and California. Schwartz, V. pp. 253-54.

111. Schwartz, V. pp. 254-55.

112. California and New York. Dole v. Dow Chemical Co. 30 N.Y.2d 143, 282 N.E.2d 288 (1972); American Motorcycle Assoc. v. Superior Court of Los Angeles County, 20 Cal.3d 578 P.2d 899, 146 Cal. Rptr. 182 (1978). The California opinion, in particular, is well reasoned.

113. M.C.L.A. 600.295, M.S.A. 27A.2925.

114. Schwartz, V. pp. 268-71.

115. M.C.L.A. 600.2925, M.S.A. 27A.2925.

116. Another way in which defendants share a plaintiff's award is known

as indemnity. According to these rules a defendant who has had to pay the plaintiff but who is actually free from fault may recover the whole amount paid (not just a pro-rata share) from the person who was actually at fault. Thus, indemnity is typically available only to a person who has had to pay because of a rule of law making him responsible for someone else's misconduct. An example is the owner of a vehicle who is liable by statute for injury caused by the vehicle even if someone else was driving it. M.C.L.A. 257.401, M.S.A. 9.3101. Unlike the rules of contribution, which are statutory, the rules of indemnity, like the contributory negligence rule itself, are made by courts. Therefore, a court could change the indemnity rules if it chose to do so. It could even eliminate the requirement that one party be free of fault, and permit one defendant to collect from another in proportion to their relative degrees of fault. This would achieve the same result as amending the contribution statute and in fact was used in California and New York to get around contribution statutes similar to Michigan's. This theory of indemnity according to degrees of fault is known as "implied comparative indemnity." See Dole v. Dow Chemical Co. 30 N.Y.2d 143, 282 N.Y.2d 288 (1972; American Motorcycle Association v. Superior Court of Los Angeles County, 20 Cal.3d 578, 578 P.2d 899, 146 Cal. Rptr 182 (1978); and Schwartz, V., Comparative Negligence, pp. 260-274.

117. Treat, J. et al. (1977). Tri-Level study of the causes of accidents: Final report. National Highway Traffic Safety Administration technical report DOT-HS-034-3-535.

118. Since the recent case of Placek v. City of Sterling Heights, 405 Mich. 638, 275 N.W.2d 511 (February 8, 1979), which adopted comparative negligence, each person's negligence reduces his recovery.

119. Shavers v. Kelley, 402 Mich. 554, 267 N.W.2d 72 (1978).

120. M.C.L.A. 500.3135, M.S.A. 24.13135.

121. M.C.L.A. 500.3101, M.S.A. 24.13101.

122. M.C.L.A. 500.3105, M.S.A. 24.13105.

123. M.C.L.A. 500.3107, M.S.A. 24.13107.

124. M.C.L.A. 500.3114, M.S.A. 24.13114.

125. M.C.L.A. 500.3121, M.S.A. 24.13121.

126. M.C.L.A. 500.3123, M.S.A. 24.13123.

127. M.C.L.A. 500.3135, M.S.A. 24.13135.

128. Shavers v. Kelley, 402 Mich. 554, 267 N.W.2d 72 (1978).

129. Pickett v. Manistique Public Schools, 403 Mich. 268. 269 N.W.2d 143 (1978).

130. 73 Am. Jur. 2d Statutes § 256 (1974).

131. Public Act No. 244, (1879).

132. Williams v. City of Detroit, 364 Mich. 231, 111 N.W.2d 1, (1961). Maki v. City of East Tawas, 385 Mich. 151, 188 N.W.2d 593 (1971).

133. Public Act 170 of 1964, Public Act 155 of 1970.

134. 16 Mich. App. 365, 168 N.W.2d 246 (1969).

135. M.C.L.A. 257.610, M.S.A. 9.2310.

136. Courelis v. Michigan Bell Telephone Co., 281 Mich. 223, 274 N.W. 71 (1937).

137. Attorney General, ex rel. Owen v. Judge, 233 Mich 619, 207 N.W. 863 (1926).

138. 73 Am. Jur 2d Statutes § 257 (1974).

CHAPTER SIX
ROAD AUTHORITY LIABILITY FOR VEHICLES AND EQUIPMENT

Road authorities are also road users. Whether performing field studies and surveys, driving to and from work sites, or working on the road itself, road authorities make extensive use of vehicles and equipment. This use raises questions of the road authority's liability, not as a road authority, but as an owner of vehicles and equipment. A discussion of this type of liability must begin with an explanation of the no-fault automobile insurance law (No-Fault).

THE NO-FAULT LAW

Laws have traditionally determined responsibility for injuries in a traffic crash on the basis of fault. This was expressed in the concept of negligence, the failure to use ordinary care in the situation in which the accident occurred. Thus, the injured party, to receive compensation, was required to prove that the other driver had been at fault. The other driver was then personally responsible to compensate the injured person. However, the other driver, even if he were negligent, could avoid paying the injured party by showing that the injured party was also negligent (1). This concern with establishing fault often led to numerous and long trials and was thought to be a major cause of court congestion. The result was that a legitimate claim for a large amount of money, where the injuries were severe, was likely to be settled for less than it was worth, because the injured party needed the money. On the other hand, a small claim could often be settled for more than it was worth just because it was cheaper to settle than to pay to defend it.

Dissatisfaction with the operation of the negligence system led to the passage of the No-Fault law in 1972 (2). That law has been upheld by the Michigan Supreme Court (3). Because the No-Fault law is fairly recent and complex, it will be described relatively completely in the rest

of this section.

In general, it can be said that No-Fault changed the focus of the injury compensation system. Before No-Fault, the focus was on the personal fault of the driver. After No-Fault it is on the insurance maintained by the vehicle's owner.

The No-Fault law eliminated liability for negligence and replaced it with insurance benefits available from the injured person's own insurer (4). There are two important exceptions to this rule. Liability for negligence is retained where (a) the damages for economic loss (wages, expenses, etc.) exceed the amounts paid for these losses under the insurance, and where (b) the injured person suffers "death, serious impairment of body function or permanent serious disfigurement" (5). These exceptions establish a threshold. Below the threshold, liability for negligence is abolished. Above the threshold, lawsuits for damages based on fault are still permitted. Therefore, it is clear that the No-Fault law is intended, not to abolish liability for negligence altogether, but to limit it to the more serious cases. It follows that if it does apply to suits against a commission, No-Fault will eliminate only the lesser ones, not those where the injuries are greater.

No-Fault changed the focus of the compensation system from the drivers' conduct to the vehicle's insurance. Insurance is mandatory under No-Fault. To register a motor vehicle in Michigan, its owner must present proof of insurance (or be an approved self-insurer) (6). Three types of insurance are required: personal injury, property damage, and residual liability. Collision insurance, that is, insurance for damage to one's own vehicle, is not required. Residual liability insurance covers accidents occurring out of state, but more important, it covers cases where the driver covered by the policy is at fault and the injuries are above the threshold. These are the cases where claims against the negligent driver are still permitted by No-Fault. Personal injury and property damage coverage are discussed below.

No-Fault's personal injury provisions make the insurers of owners and operators of motor vehicles responsible for economic losses suffered by the occupants of their vehicle (7). Economic losses include out-of-pocket

expenses, lost wages, and loss or support. Out-of pocket expenses include the cost of supplies, services and accomodations during treatment and recovery. Lost wages are limited to the first three years after an accident (8).

As long as a person's injuries are below the No-Fault threshold, he is not permitted to sue for damages. But if the losses exceed the No-Fault benefits, or if the injuries involve death, serious impairment of body function, or permanent serious disfigurement, then the injured person is above the threshold and can sue for damages based on negligence.

Within the threshold limits of No-Fault coverage, however, the financial responsibility for an accident is on the insurer of the owner or operator of the vehicle occupied by the injured person. This personal injury protection carried by the vehicle (i.e., by its owner) applies to all the occupants of the vehicle. This coverage applies whether the vehicle is privately owned or owned by a company and driven by an employee. Therefore, if the owner of the vehicle is driving it and he and a passenger are injured, they both receive compensation from the owner's insurer. If the owner has not insured the vehicle then the occupants are compensated by the driver's insurer (unless, of course, the driver is the owner). If neither the owner nor the driver is insured, then the occupants look to the insurance on their own vehicles (9).

No-Fault's property damage provisions make the insurers of owners and operators of motor vehicles responsible for the cost of accidental damage to physical property arising out of the use of property. Responsibility is, however limited to the lesser of repair or depreciated replacement cost. The maximum liability of an insurer in any single accident is limited to one million dollars. No-Fault benefits will not pay for damage to the motor vehicle itself unless, at the time of the accident, it was properly parked and was struck by another vehicle (11). Insurance for damage to one's own vehicle can be obtained by purchasing a separate "collision rider," usually with a deductible provision, whereby the insured pays a certain amount and the insurer pays the excess. These riders typically waive the deductible if the driver was not at fault in the accident. However, collision riders are not mandatory under No-Fault. They are

options available to persons who want this protection in exchange for additional premiums. The extent of this coverage is a contractual matter between the insurance company and the vehicle owner and is spelled out in the provisions of the policy.

REGISTERED ROAD AUTHORITY VEHICLES

Some road authority vehicles are registered for use on the highways. As to these vehicles, the authority is in the same situation as any other owner of a fleet of vehicles and not far different from a private vehicle owner.

The description of No-Fault above therefore applies to a road authority. Briefly, this means that an injured person would first seek compensation from the insurer of the vehicle he occupied. If the vehicle were not insured, next in line to pay is the driver's insurer, followed (in the case of a passenger) by the passenger's own insurer. If the personal injuries are above the threshold, the normal rules of negligence liability would apply. Unless one of the vehicles was properly parked, compensation for damage to the vehicle itself would not be paid under the property damage coverage of No-Fault; it would be covered under the optional collision coverage if the owner had such coverage. The vehicle's No-Fault property damage coverage would apply to any nonvehicle property damage, such as signs or fences.

There is one modification of this scheme, which arises out of the fact that the road authority is also an employer. If the authority's employee were injured, worker's compensation insurance would provide benefits before the road authority vehicle's No-Fault insurance became available (12).

UNREGISTERED EQUIPMENT

No-Fault applies only to motor vehicles that are required to be registered in Michigan (13). Some of the road authority's equipment, though motorized, is not required to be registered and therefore is not insured under No-Fault. Graders and mowers fall into this category. If a piece of road equipment is involved in an accident with a registered

vehicle, both the personal injury and the property damage provisions of No-Fault will apply.

If the occupants of the registered vehicle are injured, they will look for payment first to the insurer of their vehicle, then to its driver's insurance, then to their own. No-Fault abolishes any claim against the road authority just as it would if a registered commission vehicle were involved. Only if their injuries are above the threshold can the injured persons sue the road authority for negligence.

A road authority employee who is operating unregistered equipment is not an occupant of a registered motor vehicle. The No-Fault law therefore treats him in the same way it treats pedestrians. If he is injured in a collision with a registered vehicle, he will receive benefits from the insurance of the vehicle's owner or driver. He can sue the other driver for negligence only where his injuries are above the threshold. Because he is an employee, he would also be covered by worker's compensation insurance, which would provide benefits before the No-Fault policies.

If the other vehicle were damaged, compensation would be determined under the No-Fault law. That is, its owner must bear the loss himself unless he has the optional collision coverage. The road authority would not be liable for the damage.

If the road equipment is damaged, however, the road authority is entitled to be paid without regard to fault under the property damage coverage of the other vehicle or its driver, because property damage coverage applies to all physical property except registered motor vehicles (14).

If the other vehicle involved in the accident were not a registered motor vehicle—for example, a farm tractor--then No-Fault would not apply at all and the rules of negligence would govern. Such situations are likely to be rare.

DAMAGE TO ROAD AUTHORITY PROPERTY

Motor vehicles can also cause damage to a road authority's property. Examples of such damage might include knocking over or denting signs,

guardrails, or fences. Road authority property of this type is in the same category as the unregistered road equipment. The authority should be able to claim for such damage against the property damage provisions of the No-Fault insurance carried by owners or operators of other vehicles involved.

SUMMARY

When a road authority uses vehicles and equipment in its work, its liability is determined under the No-Fault automobile insurance law. That law treats registered vehicles and unregistered road equipment differently. Specifically, it provides that:

- As to its registered vehicles, the road authority is in the same situation as any other employer that is also a fleet owner. Its vehicle coverage, along with worker's compensation coverage, protects the vehicle's occupants.

- If unregistered road equipment is involved in an accident with a motor vehicle, the occupants of the motor vehicle are not entitled to claim against the road authority for injuries, unless those injuries are above the No-Fault threshold. They must instead look to their own No-Fault insurers.

- If unregistered road equipment is damaged in an accident with a motor vehicle, the road authority is entitled to compensation under the No-Fault property damage insurance of the other vehicle.

- The road authority is entitled to compensation under the No-Fault insurance of a motor vehicle or its driver for damage caused by that vehicle to the authority's property such as signs and fences.

FOOTNOTES

1. Since the recent case of Placek v. City of Sterling Heights, 405 Mich. 638, 275 N.W.2d 511 (February 8, 1979), which adopted comparative negligence, each person's negligence reduces his recovery.
2. M.C.L.A. 500.3101, et seq., M.S.A. 24.13101 et seq.
3. Shavers v. Kelley, 403 Mich. 554, 267 N.W.2d 72 (1978).
4. M.C.L.A. 500.3135, M.S.A. 24.13135; M.C.L.A. 500.3101, M.S.A. 24.13101
5. M.C.L.A. 500.3135, M.S.A. 24.13135
6. M.C.L.A. 500.3101, M.S.A. 24.13101
7. M.C.L.A. 500.3105, M.S.A. 24.31305
8. M.C.L.A. 500.3107, M.S.A. 24.13107
9. M.C.L.A. 500.3114, M.S.A. 24.13114
10. M.C.L.A. 500.3121, M.S.A. 24.13121
11. M.C.L.A. 500.3123, M.S.A. 24.13123
12. M.C.L.A. 500.3109, M.S.A. 24.13109. The law in this area is still developing. One case holds that the employee may not recover any benefits at all from his employer's no-fault insurance carrier, even if his damages are greater than the worker's compensation benefits. Otten Wess v. Hawkeye-Security Insurance Co., 84 Mich. App. 292, 269 N.W.2d 570. However, this decision has been criticized and not followed in two more recent Court of Appeals decisions: Hubert v. Citizens Insurance Company of America, 88 Mich. App. 710, 279 N.W.2d 48 (1979); and Lewis v. Yellow Freight System, Inc., 89 Mich. App. 66, 279 N.W.2d 327 (1979), which hold that the employee may recover under the no-fault policy, less the amounts received from worker's compensation.
13. M.C.L.A. 500.3101, M.S.A. 24.13101
14. M.C.L.A. 500.3121, M.S.A. 24.13121

CHAPTER SEVEN
CIVIL AND CRIMINAL LIABILITY OF ROAD AUTHORITY EMPLOYEES

Like any other organization, a road authority can act only through its employees. This raises the question of the potential civil and criminal liability of those employees for actions performed or decisions made in the performance of their duties. Of special concern are employees, such as engineers, who exercise professional judgment in planning or desgning highways or superintending road maintenance or construction. The principles discussed in this chapter, however, apply to all employees.

The chapter begins with a discussion of the concept of civil liability for negligence and how it applies in the context of road authority activity. It then discusses the possibility of criminal liability for employees, identifying the types of criminal liability most likely to arise, and the consequences and likelihood of conviction. Finally, it considers whether a road authority is permitted or required to provide a legal defense or indemnity (reimbursement) to an employee who is found civilly or criminally liable.

CIVIL LIABILITY—NEGLIGENCE

Any civil lawsuit against a road authority employee will likely be based on negligence. Negligence exists where someone owes a duty to use reasonable care to avoid causing injury to another, and breaches that duty by failing to use reasonable care, the result being injury or damage to a person or to property. The duty to use reasonable care is the basis of negligence liability; it arises whenever it is foreseeable that one's conduct--an action or a failure to act--poses an unreasonable risk of harm. The protection provided by this duty extends to all who are within the scope of the risk. In the case of a road authority's employees, any person who is injured because of an employee's negligence is entitled to

sue the employee for money damages.

This definition of negligence is very general and relies heavily on a concept of reasonableness. The law does not provide a more specific definition. Rather, it leaves it to the jury to apply the general principles to the specific facts of the case and decide whether the defendant (the person being sued) was in fact negligent. If the jury does find that the defendant was negligent, it also decides the amount of the damages the plaintiff is entitled to recover from the defendant. A defendant who is found liable for negligence in a civil case is required to pay damages; a civil case does not lead to punishment by a fine or a jail term, nor does it require that the defendant's license (whether professional or vehicle operator) be suspended or revoked.

Because the definition of negligence is broad, it includes a broad range of conduct. In the case of a road authority's employee, it could include many activities. For example, a construction site might be left unguarded and children might play there and be injured, or a passerby might be injured by an employee's negligent operation of equipment. Negligence might also be found in the operation of a motor vehicle or in the design, construction, and maintenance of the highways, these latter areas of possible liability will be discussed in more detail, but the principles of negligence on which they are based apply to road commission activities in general.

Negligence in the operation of a motor vehicle is not unique to road authority employees and therefore presents no special problems in the area of civil liability. Whether certain driving is negligent does not depend on the fact that the driver works for a road authority. In addition, road authorities are, by statute, made liable for damages caused by the negligent operation of motor vehicles (1). Therefore, it is not likely that an employee sued for negligent operation of a motor vehicle would stand alone; the authority will usually be sued as well, since its greater resources make it the preferable defendant.

It is also possible for a road authority employee to be sued for negligence in the design, construction, or maintenance of a highway. This type of liability is similar to the liability of the authority itself, though

it is not the same. Road authorities are made responsible by statute for providing "reasonably safe" roads (2). This duty is more specific than the employee's general duty of reasonable care. The employee's duty relates to his actions, while the commission's duty is phrased in terms of a result--reasonably safe roads. Therefore, while the authority can be liable for a condition, the employee is only responsible for his own actions.

An employee's negligence in respect to road operations can cause an unsafe road condition to arise. When this happens, both the employee and the road authority will be liable. On the other hand, unsafe conditions that would make a road authority liable could occur without any particular employee having been negligent.

Since an employee is liable only for his own negligent acts, supervisory personnel will not necessarily be liable for the negligence of the employees under their supervision. The clearest example of this is the case where a claim is brought against the individual members of a board of county road commissioners, or against a state highway commissioner. The rule is that where there is no active personal negligence on the part of the board members or the highway commissioner, they are not personally liable (3). The same rule applies to supervisors in general. The power to hire and fire subordinates does not make the supervisor responsible for their actions (4). It is only when his own acts or omissions amount to "active, personal negligence" that an employee, whether a supervisor or not, is liable (5). If a supervisor is actively and personally negligent in carrying out his supervision, then he can be liable, but his liability does not arise from his position; it arises from his actions.

Even when a road authority employee is personally liable, he will not necessarily be sued in every case. Some practical and legal considerations may influence a plaintiff's decision. Foremost is the "visibility" of the defendants. While the plaintiff may have trouble identifying the individual employee whose negligence caused his injuries, it will not be difficult at all to identify the agency responsible for an unsafe road. Also very important is the collectibility--the ability to pay a judgment--of the defendant. The plaintiff is ultimately seeking money. Since the road authority will often be liable whenever its employee is,

and since it will be seen as a better source of funds, a plaintiff may simply choose to sue only the authority. The road authority is also likely to be a better defendant, from the plaintiff's point of view, for another reason. A jury in a trial for damages is more likely to award a sizeable verdict against the road authority than against an individual. Thus, in terms of both the size and collectibility of the award, the road authority is likely to be the target defendant. A legal consideration leads to the same conclusion. As was explained above, the authority is liable when a road is unsafe. The employee is liable when the road is unsafe and his active, personal negligence contributed to its unsafe condition. Therefore, it may well be easier for a plaintiff to prove his case against the road authority. For these reasons, the plaintiff may well decide to ignore the employee and sue the authority instead.

Even when the employee is sued, it is likely that the road authority will also be sued. If both the employee and the authority are found liable, the plaintiff is entitled to collect all of the award from either defendant. In this situation, the greater collectibility of the road authority may again make it the target defendant (6).

There is, however, one legal consideration that could persuade the plaintiff to sue only the employee. The Michigan statute of limitations provides that any claim against a road authority must be brought within two years of the injury. When individuals are sued, the period is three years. Therefore, a plaintiff who has waited more than two years will have no one left to sue but the employee.

In summary, road authority employees are liable for payment of damages where their active, personal negligence causes injury to someone. Supervisory employees are liable on the same basis; they are not liable merely because the employees they supervise are negligent. Although employees may be sued individually, it is likely that the road authority itself will also be sued, and will in fact be required to pay any judgment.

CRIMINAL LIABILITY

It is also possible (though much less likely than being found civilly liable) that an employee may be found guilty of criminal conduct in the

course of his duties. To assess the likelihood of this, it is necessary to understand some of the differences between civil and criminal liability.

The primary purpose of a civil lawsuit is to provide compensation to an injured plaintiff. It does this by requiring the defendant who has been found liable to pay damages to the plaintiff. On the other hand, the ultimate purpose of criminal prosecutions is to preserve an orderly society; it does this by punishing those found guilty of crimes. This punishment can be in the form of a fine, a jail or prison sentence, or a combination of the two.

Because the consequences of conviction of a crime are more severe than the consequences of civil liability, there are many provisions of law that make it more difficult for a person to be convicted of a crime. First, the laws that create the liability are different. Civil liability is based on very general principles. Negligence is a good example of this: its principles are very broad, and can be applied in a great many situations. Criminal laws are much more specific. For the most part, conduct is criminal only when a specific statute or ordinance says it is. For example, whether driving at 30 miles an hour down a residential street is negligent depends on the circumstances, but it is a crime only if an ordinance or statute prohibits it.

Criminal cases are also not as easily started as civil cases. Any person can begin a civil case by filing the appropriate papers and paying the ncessary fees. Criminal cases can be begun only by government officers, such as the county prosecuting attorney. The prosecutor has broad discretion whether to bring charges; he is not required to do it even if the facts clearly would support a conviction.

Once a prosecution is begun, additional protections come into play. Two of these relate to proof. First, the prosecutor must prove the defendant's guilt; the defendant is not required to prove his innocence. In addition, the prosecutor must prove the defendant's guilt beyond a reasonable doubt." In a civil case the plaintiff wins if he must show that it is more likely than not that the defendant was at fault. The requirement of proof beyond a reasonable doubt is more strict. It is sometimes said to require a "moral certainty" as to the guilt of the

defendant (7).

Another important protection is the jury system. In a civil case, the defendant can be found liable if five of six jurors agree. In a criminal case there are twelve jurors, and all must agree that the defendant is guilty. Obviously this makes it much easier for a single member of the jury to prevent a conviction.

All of these protections, all of which are parts of the criminal justice system, make a criminal conviction much less likely than a finding of civil liability. Therefore, unless the employee's misconduct is particularly bad and the consequences particularly severe, a prosecutor is not likely to bring criminal charges. Even when a person is found to be liable in a civil case, it does not follow that he would be found guilty in a criminal case. The two are so different that a finding of liability in a civil case cannot be used in evidence if there is a criminal prosecution.

There are many crimes that a road authority employee could commit, from embezzlement to arson. Most of these have nothing to do with the employee's job. If an employee robs a bank, whether on duty or off, it is a crime, but it does not relate to the road authority's business. Two types of crimes deserve special mention because they are the only ones likely to arise out of the activities of a road authority employee.

The first is known as "negligent homicide" (8). A more descriptive name would be "vehicular homicide" because it applies only to death caused by negligent driving (9). The maximum penalty is a $2,000 fine, two years imprisonment, or both. The same negligence that creates liability in the civil area applies here also, although the prosecution is still subject to the protective rules described above, and negligent homicide prosecutions are not frequent. As is the case with civil liability for negligent driving, negligent homicide does not relate to the nature of a road authority's activities. It applies to everyone who drives a motor vehicle.

A criminal prosecution of a road authority employee for on-the-job activities is not likely to occur unless the employee's misconduct caused someone's death or serious injury. This is so because there appear to be no specific crimes that would apply to injuries less than death or serious

injury caused by a road authority employee's actions in the course of his employment. In addition, as a practical matter, such injuries would be considered a civil matter by a prosecutor. The second type of crime that might be charged against a road authority employee is the crime of "involuntary manslaughter" (10). An example of this is a case in Massachusetts where a bridge collapsed, killing three people. The main beams had not been secured with enough bolts and pins. The engineer supervising construction was charged with manslaughter. He was found not guilty (11).

While negligent homicide applies only to vehicles, manslaughter is broader. It could, in fact, include a killing by automobile and by other means as well. For example, a supervisor might order employees to use equipment in violation of safety regulations and when he knows the equipment is unsafe and likely to cause serious injury. While involuntary manslaughter can include a killing by automobile, there is an important difference between it and negligent homicide. Negligent homicide requires only ordinary negligence, while manslaughter requires "gross negligence" (12). Gross negligence is not a greater from of negligence. It is different "not in degree but in kind" (13), and is based on the assumption that the defendant "did know but was recklessly or wantonly indifferent to the results" of his actions (14). It is therefore treated as the equivalent of intent (15). Since it is not possible to know what was in the defendant's mind, this knowledge can be inferred from the facts surrounding the incident, but those facts must support the conclusion that the danger "must have been apparent to him" (16).

Since the kind of conduct that would amount to gross negligence is seldom likely to occur, and since the knowledge that must be proven is difficult to establish, the possibility of criminal liability is slight. Although the possibility cannot be eliminated, it should not be considered significant.

INDEMNITY AND DEFENSE

When an employee is sued for money damages or charged with a crime, he is likely to have two concerns. First, if he is found liable, he

may be required to pay a substantial amount of money, either as damages or as a fine. In a criminal case, he may be concerned about having to spend time in jail or prison. In addition, whether he wins or loses, he will be concerned about paying the costs of his defense, principally in the form of attorney fees (17). If an employee were convicted of a crime and sentenced to jail, the road authority could do nothing with respect to the sentence. However, the employee might look to the road authority to help him present a defense at trial, and to pay any judgment or fine (idemnify him) if he lost.

The question of a road authority providing a defense or indemnity is specifically covered by a statute in Michigan (18). The statute treats civil and criminal cases differently. As to civil cases, it provides that when an employee of a governmental agency is sued for injuries caused by his negligence in the course of his employment and while acting within the scope of his authority, the agency is permitted to provide a defense or indemnity or both, but it is not required to do so.

In criminal cases the rule is different in two ways (19). First, the employee must have had reason to believe that he was within the scope of his authority. Second, the agency may provide a defense (but is not required to do so) but is not permitted to indemnify him by paying any fine.

Therefore, the decision whether to provide a defense (in civil and criminal cases) or indemnity (in civil cases only) is, by statute, entirely within the discretion of the road authority. The next section discusses the range of alternatives available to a road authority in deciding whether to provide an employee with a defense or indemnity, and makes recommendations as to the most appropriate course of action.

ALTERNATIVES AVAILABLE

Because the statute authorizing a governmental agency to defend or indemnify its employee does not require that the agency do either, a broad range of alternatives is possible. Briefly, these alternatives can be divided into three general approaches. First, the authority could decide to defend and indemnify all employees sued for negligence and defend all

employees charged with crimes. Second, at the other end of the spectrum, the authority could elect never to provide a defense or indemnity. Finally, in between these two approaches is the more complex one of providing a defense or indemnity or both in some, but not all, cases.

The first choice, to defend and indemnify all employees, needs to be qualified in one important respect. Since the statute permitting indemnity and defense restricts them to cases where the employee was acting within the scope of his authority (or, in criminal cases, believed he was within the scope of his authority), any agreement to defend and indemnify in all cases would have to reflect this restriction. With this exception, though, it would be possible to provide both defense and indemnity in any case. This approach could be accomplished either by contract or by official policy. The road authority could agree to the inclusion of a defense/indemnity clause in its employment contracts, or it could simply declare and follow a policy of providing a defense and indemnity in all cases. The contract method provides greater protection for the employee, at the expense of less freedom of action for the authority. The policy method provides somewhat less protection for the employee, since the authority could rescind or modify its policy at any time.

Whether expressed in a contract or a policy, the decision to defend and indemnify in all cases has several advantages and disadvantages. The advantages are:

- It would improve employee morale.
- It might promote road safety, and thereby decrease commission exposure to liability, by encouraging employees to make the more difficult judgment decisions.
- As to civil cases, which are by far more frequent, the commission will often be a defendant itself, so the cost may in fact not be very great.

This last point merits some discussion. When the road authority is a

co-defendant, it will likely be called upon to pay any judgment itself. In such cases, it has in fact indemnified the employee anyway, so to do it officially as well as in fact costs nothing. As to providing a defense in such cases, the reasoning is similar, though not identical. In most cases, the legal positions of the employee and the road authority will be the same; when this happens, the authority's counsel can also represent the employees. In some cases, their positions would be different, possibly in conflict; in those cases, it would be necessary that the employee have his own counsel, which would be an additional cost to the road authority.

The decision to defend and indemnify in all cases also has disadvantages:

- It would cost money. How much it would cost could be estimated by reviewing the history of litigation against road authority employees.
- It might invite some additional lawsuits. For example, when more than two years have passed since the injury and the road authority itself can no longer be sued, providing an employee defense and indemnity might have the effect of extending the authority's liability for an additional year.
- It might raise the settlement cost of the lawsuit, since the plaintiff will have a more collectible defendant.
- It might commit the road authority, in advance, to provide a defense and indemnity in cases that it believes do not merit them. It is not possible to anticipate all of the types of cases that might arise, and then draft a contract provision or a policy sufficiently precise to separate those that merit defense and indemnity from those that do not.
- It might lead to some employee dissatisfaction if cases arise that the road authority considers beyond the policy because it believes the employee's activity was outside the scope of his authority. If the agreement is part of an employment contract, the disagreement might lead to a lawsuit by the employee against the road authority for breach of contract.

Clearly, providing defense and indemnity in all cases as a matter of contract or policy has definite advantages and disadvantages. The second

approach, not providing them in any case, has advantages and disadvantages that reflect the fact that it is the opposite of the first approach. The primary advantage of this approach is that it is the least costly alternative. It avoids the possibility of additional attorney fees and damage awards, and also avoids the prospect of attracting additional lawsuits when plaintiffs become aware that the road authority will pay any judgment against one of its employees. The primary disadvantage of this approach is its adverse effect on employee morale. Since employees tend to see liability problems as being greater than they really are, this effect on morale may be larger than the risk of liability actually justifies.

Each of the first two approaches has significant problems. A blanket policy of providing indemnity and defense in all cases may commit the road authority to liability, in advance, in situations that do not merit it. On the other hand, refusing to provide it at all is bad for employee morale. The third approach therefore becomes especially important. It involves providing either a defense or indemnity, or both, in some cases, but not necessarily all cases. This approach covers a range of possibilities; for purposes of discussion they can be divided into two groups according to the method used. The first method involves establishing specific criteria for determining the cases in which the road authority will provide a defense or indemnity. The second method involves a general declaration that the road authority will provide a defense and indemnity in appropriate cases, but will make the decision on a case by case basis.

The first method envisions a set of criteria that will be applied to determine whether a case qualifies for indemnity or defense or both. There are several criteria that might be used. They include:

- Whether a case is civil or criminal;
- Whether, in a civil case, the road authority is also a defendant;
- Whether the case was brought within two years;
- Whether the employee's conduct involved professional judgment; and

- Whether the employee's conduct was reasonable and taken in good faith.

This list is intended to give examples of criteria that might be used; it is not intended to list all that might be used. Note also that the criteria would require the road authority to provide a defense or indemnity in those cases that satisfy the criteria but would not prevent it from providing a defense or indemnity even in cases where the criteria do not require it do so.

The criteria can be made fairly specific. For example, under the first criterion listed above, one possibility is to exclude all criminal cases on the theory that they are likely to involve conduct that does not merit assistance to the employee. Another possibility is to exclude only certain crimes. For example, only cases involving professional judgment (such as the Massachusetts case discussed earlier) might be included; all crimes related to driving might be excluded. Another variation could be to exclude driving cases where the use of alcohol is a factor. A similar analysis could be used in civil cases.

Because this first method involves criteria that obligate the commission to provide a defense or indemnity in specified cases, its advantages and disadvantages are similar to those of the first approach, which requires the authority to defend and indemnify in all cases. Thus, it may be expected to improve employee morale, and may encourage those who must exercise judgment to do so more freely. On the other hand, it will cost some money, and may cause dissatisfaction (and perhaps lawsuits) on the part of employees who are sued and whom the authority declines to help. In addition, it may commit the authority in advance to defend or indemnify an employee in a case in which it would prefer not to.

The second method involves less of a commitment on the part of the road authority. The authority would indicate its intention to provide a defense and indemnity in appropriate cases, but would expressly reserve the right to decide in each case whether to provide help and what type to provide. While this would preserve flexibility for the authority, it

might also be less beneficial to employee morale than including all cases or using firm criteria. However, in making decisions on individual cases, the road authority will in fact use some criteria. The authority could therefore make those criteria known to its employees as the guidelines it will use, so as to increase employee confidence in the policy.

The case-by-case method provides flexibility in that it does not bind the road authority in advance to defend and indemnify all cases. It has other advantages as well:

- It permits the authority to tailor its response to the individual case. Thus, it might decide to provide only a defense, or to indemnify up to or beyond a certain amount (if, for example, the employee had insurance coverage of his own).

- It permits the authority to keep the question of indemnity or defense a private one. The plaintiff need not know that indemnity will be provided, and may therefore settle his claim for a lesser amount.

- It leaves the authority free to develop more specific guidelines as more experience with individual cases is gained. At some time in the future the knowledge gained may be sufficient that specific binding criteria may be developed.

As against these advantages, the case-by-case method has two disadvantages. First, it will cost money, though the amount will be to some extent in the control of the road authority. Also, it may not improve employee morale as much as an explicit commitment to defend and indemnify, though the way in which the policy is presented may have much to do with this.

SUMMARY AND CONCLUSIONS

A road authority employee is liable for damages if his negligence causes harm to a person or to property. He is not liable merely because of any position he may hold, such as supervisor, but is liable only for his own active, personal negligence. When his liability is based on his activities as a road authority employee, the authority itself will usually be liable as well; therefore, it is likely that the authority will be a

codefendant and will bear the actual loss.

An employee can be criminally liable for negligent homicide if his negligent driving causes a death, though such prosecutions are relatively infrequent. Apart from this, an employee can be criminally liable only where he is guilty of gross negligence, which amounts to wanton and reckless disregard of the consequences of his actions. Because of the difficulty of proving this, and because this type of conduct is uncommon, criminal prosecutions of road authority employees are likely to be very rare.

When an employee is sued for damages because of his work for the road authority, the authority is permitted, but not required by statute, to provide a legal defense for him and to pay any damages assessed against him (indemnify him). If criminal charges are brought, the authority may provide a defense, but may not indemnify him.

Because the statute permits defense and indemnity, but does not require either, a broad range of options is possible. Some of them are:

- The authority can, by contract or declaration of policy, agree in advance to defend and indemnify the employee in all cases where the statute permits it.

- The authority can, by contract or declaration of policy, agree in advance to defend or indemnify the employee in all cases that meet certain specific criteria.

- The authority can declare that it intends to defend and indemnify employees in appropriate cases, but reserve the right to determine, with or without specific guidelines, which cases are appropriate, and to determine what help should be provided each case.

- The authority can decline to defend or indemnify its employees in any case.

Because the third option offers the prospect of substantial help to an employee while preserving the road authority's control over its costs and flexibility in its policy, it appears to be preferable. However, the approach finally decided on need not fit entirely into any one of the four categories listed above. It may range across two or more of them. Those categories, and this discussion, are intended only as guides for

discussion by the road authority. What form the policy should take is a matter for the judgment of the authority in consultation with its counsel.

FOOTNOTES

1. M.C.L.A. 691.1405, M.S.A. 3.996(105).
2. M.C.L.A. 691.1402, M.S.A. 3.996(102).
3. Rose v. Mackie, 22 Mich. App. 463, 177 N.W.2d 633 (1970); Dowell v. State Highway Commissioner, 365 Mich. 268, 112 N.W.2d 491 (1961); Longstreet v. County of Mecosta, 228 Mich. 542, 200 N.W. 248 (1924).
4. Smith v. Olander, 251 Mich. 503, 232 N.W. 364 (1930).
5. Rush v. Pierson Contracting Company, 310 F. Supp. 1389 (E.D. Mich.)(1970).
6. If the commission did pay all of the judgment, it could, if it chose, require the employee to reimburse it for a pro-rata share of the award.
7. 30 Am. Jur. 2d Evidence § 1170 (1974).
8. M.C.L.A. 750.324, M.S.A. 28.556.
9. People v. McKee, 15 Mich. App. 382, 166 N.W.2d 688 (1968). There is a lesser offense called "felonious driving," which applies when the injuries are crippling, but less than death. M.C.L.A. 752.191, M.S.A. 28.661.
10. M.C.L.A. 750.321, M.S.A. 28.553.
11. The case was not appealed and is therefore not reported. It is discussed in Richards, F. 1977. The field engineer: Political and Legal Scapegoat? Civil Engineering. July 1977.
12. People v. Florida, 61 Mich.App. 653, 233 N.W.2d 127 (1975).
13. People v. Orr, 243 Mich. 300, 220 N.W. 777 (1928).
14. People v. Campbell, 237 Mich. 424, 212 N.W. 97 (1927).
15. People v. Florida, 61 Mich. App. 653, 233 N.W.2d 127 (1975).
16. People v. Orr, 243 Mich. 300, 220 N.W. 777 (1928).
17. Although the engineer in the Massachusetts bridge collapse case was found not guilty, his legal fees came to $27,000.
18. M.C.L.A. 691.1408, M.S.A. 3.996 (108).
19. As to criminal cases, the statute took effect on 11 May 1978 and applies to expenses incurred after 31 December 1975.

CHAPTER EIGHT
SELF-INSURANCE

The decision to become a self-insurer usually does not involve doing without insurance. Instead, self-insurance usually involves the retention of a large amount of primary liability exposure, with an insurance policy to cover losses **above** that amount. In this way, the road authority becomes its own insurer, while the insurance company provides excess coverage, just as one insurance company will often provide primary coverage and another excess coverage. Self-insurance can also be seen as simply an ordinary insurance arrangement except that the amount of the deductible is greatly increased.

However self-insurance is described, it involves something of a reversal of roles between the insured and the insurance company. In the usual arrangement, the insurance company pays any successful claim up to the amount of its policy limit. If more is to be paid, either because of a lawsuit or in a settlement of a claim, the insured is responsible for the excess. In a self-insurance arrangement, the insured is first responsible for a relatively large amount of liability, and only after that is the insurer responsible.

In the ordinary insurance situation, a large claim—in that it presents a possibility of exceeding policy limits—can be a cause of friction between the insured and the insurance company. If, for example, the policy limit is $10,000, the insured will be responsible for any claim above that amount. In one case, the insurance company could have settled a claim for $10,000 but refused to do so and a trial resulted in a verdict of $331,000, of which the insured was required to pay $321,000. Cases like this tend to give rise to a second lawsuit, one in which the insured sues his own insurance company, claiming that its refusal to settle the case was improper. The substance of the insured's argument in this type of case is that the insurance company acted in bad faith, that is, it looked

after its own interests rather than those of its insured.

The reversal of roles in a self-insurance arrangement could lead to the problem operating in reverse. Thus, the insurance company may claim that the insured should have settled a claim before trial. In addition, if the excess coverage applies after the claim is paid by the insured reach an aggregate limit, the insurance company might claim that the insured should not have settled some or all of the claim.

Because self-insurance is a relatively recent phenomenon, there are no cases in Michigan dealing with the obligation of an insured to a company providing excess insurance. To assess the nature and extent of those obligations, it is therefore necessary to examine cases involving the ordinary situation and then determine how they might apply when self-insurance reverses the positions.

BAD FAITH

The first case in Michigan involving an insured's claim of bad faith was City of Wakefield v. Globe Indemnity (1). The principles expressed in that case continue to be valid law today. In Wakefield, the policy limit was $10,000. The insurance company refused to accept the plaintiff's offer to settle his claim for $4,325, and at trial the verdict was over $15,000. The insurer paid $10,000 and the city was required to pay the rest. The city sued its insurer for the amount it was required to pay, claiming the insurer had acted in bad faith in refusing to accept the settlement offer. The court agreed that an insurance company would be liable beyond its policy limits if it had acted in bad faith, and discussed the concept at some length.

> [A]rbitrary refusal to settle for a reasonable amount, where it is apparent that suit would result in a judgment in excess of the policy limit, indifference to the effect of refusal on the insured, failure to fairly consider a compromise and facts presented and pass honest judgment thereon, or refusal upon grounds which depart from the contract and the purpose of the power [to settle cases], would tend to show bad faith (2).

The court also listed some considerations tending to show that the insurer was not acting in bad faith.

> It is not bad faith if counsel for the insurer refuse settlement under the bona fide belief that they might defeat the action, or in any event, can probably keep the verdict within the policy limit, or have a "fighting chance" to win. A mistake of judgment is not bad faith (3).

After stating these principles, the court proceeded to review the case and evaluate the insurance company's conduct and the propriety of its decision not to settle. On the facts of the case, the Wakefield court found that the insurer had not acted in bad faith.

Subsequent cases have followed the Wakefield principles, and have shed some additional light on what is required of the insurance company. In general, the requirements add up to a duty to keep the insured informed of facts that he needs to make an intelligent decision regarding his liability. In one case, the court held that there was no bad faith when the insurance company believed it had a good defense and told the insured the amount of the claim and that he had a right to hire his own counsel (4). More recent cases tend to elaborate on this theme of communication. In one case, where the policy limit was $10,000 and the verdict was over $30,000, the court rejected a claim of bad faith, noting that the insurer communicated extensively with the insured and suggested that he retain separate counsel. The insurer in that case also raised the question of settlement with its insured, and the insured agreed that the settlement offer should be rejected. The court observed that "if the insured actively concurs in the rejection of a compromise offer, he cannot recover against the insurer for failure to settle". (5)

The most recent case on bad faith is the one mentioned at the beginning in which the insurer's refusal to settle for $10,000 led to a verdict of $331,000. The court found bad faith in that case, and spelled out the insurance company's obligations in greater detail than the earlier cases (6). The court said:

> As necessary corollary of the insured's right to retain independent counsel for protection against excess "liability" it is clear that the insurer has a duty promptly and clearly to inform the insured of: (1) the possibility of a judgment in excess of the policy limits; (2) the insured's right to retain

> independent counsel; (3) the limits of the insurer's interest in the lawsuit; and (4) all settlement offers, including the insurer's response to such offers and the legal significance of those responses expressed in terms of the insured's liability. The extent and clarity of such notice is a substantial factor to be weighed in determining whether the insurer handled settlement negotiations in bad faith.

The courts deciding bad faith questions will also, as did the court in Wakefield, review the case itself and evaluate whether the settlement offer was one that should have been accepted. In doing this, the courts tend to give the benefit of the doubt to the insurer, so that it is for the insured to prove bad faith, rather than for the insurance company to justify its actions.

Therefore there are, broadly speaking, two tests that are applied to answer the question of bad faith. The first is whether the decision not to settle was in fact proper, in the light of the facts of the case. The second is whether the insurance company kept its insured adequately informed of the status of the claim. It appears that bad faith will not be found unless the insurance company fails both tests, although no case directly addresses that point.

SELF-INSURANCE AND BAD FAITH

The question is whether these tests are any different when self-insurance reverses the roles of insured and insurer, so that the insurer, by virtue of its excess coverage, stands to lose by the insured's bad faith in refusing to settle a case. There are no cases on this point, so conclusions must be tentative.

It seems clear that the requirement of good faith, at least in some form, does apply to the insured. The Wakefield court said:

> Prohibition against fraud or bad faith is imposed by law upon every legal relationship, is a part of every lawful grant of power, and it is not necessary to contract for it. (7)

Since the self-insured still has a legal relationship to its insurer and also has the power to settle cases, the same basis of the duty of good faith exists.

It seems likely that first test of bad faith—whether, on the facts, it was improper not to settle the claim--will be retained. This is a fundamental, if somewhat subjective, test of bad faith, and is therefore an essential element of a bad faith claim.

The requirement of communication between the parties should also continue to apply, although some modifications seem likely. Of the four duties established in the Jones case, two of them do not appear to be appropriate when an insurance company is receiving information. These are duties to inform of the right to retain counsel and to make clear the limit of the insured's liability. While this information may be important for an individual who may well be unfamiliar with litigation and insurance, it is not likely that an insurance company would be able to persuade a court that it needed to be told that it could hire a lawyer, and needed to be reminded of the point at which its liability began.

The other two communication duties, however, seem clearly appropriate even when the information is going to an insurance company. First, the insured should keep its insurer informed of the possibility of a judgment in excess of the self-insured amount. Since the possibility may change as the claim progresses, the duty is a continuing one. Second, all settlement offers, and the insured's response to them, should be transmitted to the insurer. The cases do not require that the insurer consent to a rejection of a settlement offer. The decision to accept or reject a settlement rests with the insured, as the party with primary liability. However, since the insurer's concurrence in rejection would foreclose a claim of bad faith, it is advisable to seek concurrence in appropriate cases. The purpose of supplying this information is to permit the insurer to make intelligent decisions ragarding its own interests so that it can participate in the defense of the case, if appropriate, and settle its own liability exposure separately if it chooses to do so.

In summary, it appears that a self-insured has a duty to its excess insured to use good faith in handling cases, and to keep its insurer informed of settlement offers and liability exposure.

The preceding discussion has dealt with bad faith as an isolated legal issue. In fact, of course, it arises in the context of a contractual

relationship and whether the theory itself is one of contract (9), the problems it addresses arise within that context. Therefore, solutions should be worked out in the contract between the insured and the insurer. Rather than rely solely on the principles discussed here, the insured should reach an agreement with its insurer. The agreement should establish a procedure, satisfactory to the insurer, by which the insurer can be informed of the status of various claims and be consulted on those that pose a substantial risk of a large verdict. The procedure could require that the insurer be notified of all claims, or could specify criteria by which certain claims would be selected for notification to the insurer. Those criteria could include a dollar value cut-off below which settlements made by the insured cannot be questioned, or other factors (such as the type of injury suffered).

The exact details of the agreement with the insurer will depend on the needs of the parties, in view of their contractual relationship. It is very much in the interest of the parties to have such an agreement, but particularly so for the insured. So long as claims do not exceed the self-insurance limit, of course, there is no problem. But if a claimant gets a verdict against the insured that is greater than the amount of his insurance coverage, then the absence of an agreement can only hurt the insured, since it will offer the insurer a chance to avoid liability on the theory of bad faith. If the insured has complied with a procedure that the insurer has agreed to, the insurer's claim of bad faith would be much harder to sustain.

SUMMARY

When an insurance company acts in bad faith in failing to settle a claim against its insured within its policy limit and the insured is then required to pay a judgment in excess of the policy limit, the insured can recover the entire amount from the insurance company. In determining whether the insurance company acted in bad faith, a court will review the facts relating to the settlement offer and will also consider whether the insurance company kept its insured sufficiently informed of the status of the case and his liability exposure.

Self-insurance reverses the roles of insured and insurer, since the insured has primary liability while the insurer is responsible for any excess beyond the self-insurance limit. The same question could therefore arise, but in reverse, with the insurer suing its insured for bad faith. While there are no cases directly on point, it is likely that the same principles would apply.

Because bad faith issues arise out of a contractual relationship, an insured who chooses to self-insure should take affirmative steps to reduce the risk of being sued for bad faith. This means that the insured should reach an express agreement with its insurer, containing an explicit procedure for giving the insurer an opportunity to protect its interests.

FOOTNOTES

1. City of Wakefield v. Globe Indemnity, 246 Mich. 645, 225 N.W. 643 (1929).
2. 246 Mich. at 653.
3. 246 Mich. at 651.
4. Bently v. Farmers' Insurance Exchange, 289 F. 2d 59 (6th Cir. 1961).
5. Jackson v. St. Paul-Mercury Indemnity Co., 339 F.Supp. 40 (E.D. Mich. 1977).
6. Jones v. National Emblem Insurance Co., 436 F. Supp. 1119 at 1124-1125 (E.D. Mich. 1977).
7. 246 Mich. at 650.
8. Jackson v. St. Paul-Mercury Indemnity Co., note 5.
9. The court in Wakefield noted that some courts considered it a contract theory, while others treated it as a tort theory; the Wakefield court did not seem to consider the distinction an important one. 256 Mich. at 648.

APPENDIX A

STATUTES RELATING TO ROAD AUTHORITY OPERATIONS

APPENDIX A
STATUTES RELATING TO ROAD AUTHORITY OPERATIONS

GENERAL HIGHWAY LAW

M.C.L.A. 224.21, M.S.A. 9.12

County Road Commissioner's authority to obligate county, limitation; roads under construction; duty of county to keep roads in repair; actions brought against board; liability for damages.

Sec. 21. Said board of county road commissioners shall have no power to contract indebtedness for any amount in excess of the moneys credited to such board and actually in the hands of the county treasurer: Provided, That the board may incur liability to complete roads under construction and upon contracts, after a tax is voted, to an amount not exceeding 3/4 of the said tax. It is hereby made the duty of the counties to keep in reasonable repair, so that they shall be reasonably safe and convenient for public travel, all county roads, bridges and culverts that are within their jurisdiction and under their care and control and which are open to public travel. The provisions of law respecting the liability of townships, cities, villages and corporations for damages for injuries resulting from a failure in the performance of the same duty respecting roads under their control, shall apply to counties adopting such county road system. Actions arising thereunder shall be brought against the board of county road commissioners of the county and service shall be made upon the clerk and upon the chairman of the board made defendant therein, which shall be named in the process as the "board of county road commissioners of the county of _____." and any judgment obtained thereon against such board of county road commissioners shall be audited and paid from the county road fund as other claims against such board of county road commissioners: Provided, however, That no board of county

road commissioners, subject to any liability under this section, shall be liable for damages sustained by any person upon any county road, either to his person or property, by reason of any defective county road, bridge or culvert under the jurisdiction of the board of county road commissioners, unless such person shall serve or cause to be served within 60 days after such injury shall have occurred, a notice in writing upon the clerk and upon the chairman of the board of county road commissioners of such board, which notice shall set forth substantially the time when and place where such injury took place, the manner in which it occurred, and the extent of such injuries as far as the same has become known, the names of the witnesses to said accident, if any, and that the person receiving such injury intends to hold such county liable for such damages as may have been sustained by him. It is the intention that the provisions of this section shall apply to all county roads whether such roads become county roads under chapter 4 of the general highway laws, Act No. 283 of the Public Acts of 1979, (1) as amended, or under the provisions of the Covert Act, so-called, the same being Act No. 59 of the Public Acts of 1915, (2) as amended.

(1) M.C.L.A. 224.1 to 224.31, M.S.A. 9.101 to 9.129 (11) repealed in part as obsolete or inoperative by P.A. 1958, No. 77, Eff. Sept. 13.

(2) M.C.L.A. 247.415 to 247.482, M.S.A. 9.711 to 9.776 repealed in part as obsolete or inoperative by P.A. 1958, No. 77, Eff. Sept. 13 and in part by P.A. 1963, No. 213, Eff. Sept. 6.

M.C.L.A. 247.291, M.S.A. 9.1421

Closing highways for construction or repair; barriers.

Sec. 1. The officials in charge of constructing, improving or repairing highways may close any highway or portion thereof, which is under process of construction, improvement or repair or upon which is located any bridge which is being

constructed or repaired. No highway shall be closed under the provisions of this act until suitable barriers have been erected at the ends of the highway or of the closed portion thereof, and also at the point of intersection of such highway or portion thereof with other highways. Suitable barriers are those which conform to the manual of uniform traffic control devices adopted pursuant to section 608 of Act No. 300 of the Public Acts of 1949, being section 257.608 of the Compiled Laws of 1948. For the purposes of this act "highway" includes roads and streets.

M.C.L.A. 247.292, M.S.A. 9.1422

Same; detours, notices, removal of barriers on completion of work.

Sec. 2. No highway shall be closed under the provisions of this act until suitable detours around the same, or the closed portion thereof, are provided and are placed in reasonably safe and passable condition for traffic. Notices in the form of plainly legible signs shall be placed by the highway officials having such work in charge at either end of the closed highway or portion of highway and at such intermediate points along the detour, or detours, as may be necessary to plainly mark the same. Upon the completion of the work of constuction, improvement or repair and as soon as the highway or bridge constructed, improved or repaired shall be in suitable condition for public travel, all barriers, marks and signs whatsoever erected under the provisions hereof shall be at once removed by the officials erecting or placing the same.

M.C.L.A. 247.312, M.S.A. 9.1423(2)

Mechanically operated barricading devices; authority to install, approval of public utilities commission.

Sec. 2. The public authorities having jurisdiction and control over any highway in this state, whenever they shall deem that the safety of persons and property require the

installation of the devices herein provided for at any intersection of such highway with any other highway, or at any bridge approach in such highway, or at any intersection of such highway with a railroad, are hereby authorized to construct, install, operate and maintain at each such place automatic or mechanically operated barricading devices, which, when giving warning, shall rise from a bed in the highway and become a barrier in such highway: Provided, That before any such devices is constructed, installed, operated and maintained at any such railroad intersection, the detailed plans of such device, a description of the proposed mode of operation thereof, and a map showing the proposed location thereof shall be submitted to, and approved by, the Michigan public utilities commission.

M.C.L.A. 247.313, M.S.A. 9.1423(3)

Same; warning signs, size, wording, distance.

Sec. 3. Whenever such barricading device shall be constructed, installed, operated or maintained, the public authorities having jurisdiction and control over the highway at any such place shall install and maintain at the side of such highway, immediately adjacent to such device, reflectorized warning signs with the words "automatic barrier" in letters not less than 3 inches high. Whenever such device is located at a railroad intersection, additional reflectorized warning signs, of a design to be prescribed by the state highway commissioner, shall be installed and maintained on both sides thereof at a distance not less than 400 feet therefrom when such intersection is located on a highway where vehicular traffic is permitted to travel at speeds in excess of 30 miles per hour, and not less than 200 feet therefrom when such intersection is located on a highway where vehicular traffic is permitted to travel at speeds not in excess of 30 miles per hour, and such device and warning signs shall be in lieu of all other protection

at such intersection. The advance warning signs required by any other law of this state shall also be installed and maintained.

M.C.L.A. 250.62, M.S.A. 9.902

Construction, Improvement, and Maintenance; contracts, work on state account.

Sec. 2. The state highway commission may contract with boards of county road commissioners, township boards, and municipalities of this state, or with any other persons, firm or corporation for the construction, improvement, and maintenance of trunk line highways, or it may do the work on state account. The state highway commission, subject to the approval of the state administrative board, shall do all acts or things necessary to carry out the purpose of this act. The highway commission, without such approval, may contract for extra work or labor, or both, not exceeding $10,000.00 for contracts having a value of $500,000 or less and not exceeding 2% of contracts having a value over $500,000.00 under a contract with a private agency authorized by this section, and for an amount not exceeding $500,000.00 under a contract, for an amount not exceeding $5,000.00 for each contract, for toilet vault cleaning, use of licensed sanitary landfills, pickup and disposal of refuse, pavement surfacing and patching, rental of equipment for emergency repairs and maintenance operations, curb replacement, maintenance of office equipment, installation of utility services, and installation of traffic control devices and, without approval, may authorize boards of county road commissioners, township boards, and municipalities, under contracts for the maintenance of trunk line highways, to subcontract in amounts not to exceed $5,000.00 for each subcontract.

M.C.L.A. 254.20, M.S.A. 9.1190

Posting of narrow bridge, "1-lane bridge."

Sec. 20. Every bridge which has a clear 2-way roadway width of less than 19 feet, but more than 17 feet at the narrowest part thereof, shall be posted as a narrow bridge; and every bridge which has a clear 2-way roadway width, as so measured, of 17 feet or less shall be posted as a 1-lane bridge. Such posting shall be in accordance with the manual of uniform traffic control devices adopted pursuant to section 608 of Act No. 300 of the Public Acts of 1949, being section 257.608 of the Compiled Laws of 1948.

M.C.L.A. 254.21, M.S.A. 9.1191

Movable bridge; warning, protection, penalty.

Sec. 21. All movable bridges shall be provided with warning lights, signs, protection gates and other devices as shall be prescribed by the state highway commissioner and as may be required by the board of supervisors in its permit for construction, which said lights, signs, protection gates and other devices shall be so constructed, placed, maintained and operated as to provide reasonable safety to the public. Protection gates or devices shall at all times be closed before the draw or swing span is opened for any purpose and shall be kept closed until the draw or swing is closed, and the bridge is ready for public travel. Any person who shall wilfully violate any of the provisions hereof shall be deemed guilty of a misdemeanor and on conviction thereof shall be punished by a fine of not more than 50 dollars or by imprisonment in the county jail for not more than 30 days, or by both such fine and imprisonment in the discretion of the court.

M.C.L.A. 257.608, M.S.A. 9.2308

Uniform system of traffic-control devices; manual.

Sec. 608. The state highway commissioner and

commissioner of state police shall adopt a manual and specifications for a uniform system of traffic-control devices consistent with the provisions of this chapter for use upon highways within this state. Such uniform system shall correlate with and so far as possible conform to the system then current as approved by the American Association of State Highway Officials and such manual may be revised whenever necessary to carry out the provisions of this act. It is hereby declared to be the policy of the state of Michigan to achieve, insofar as is practicable, uniformity in the design, and shape and color scheme of traffic signs, signals and guide posts erected and maintained upon the streets and highways within the state with other states.

M.C.L.A. 257.609, M.S.A. 9.2309

Same; placement and maintenance; restrictions; county road commission, permission, costs.

Sec. 609. (a) The state highway commission shall place or require to be placed and maintain or require to be maintained such traffic-control devices, conforming to said manual and specifications, upon all state highways as it shall deem necessary to indicate and to carry out the provisions of this chapter or to regulate, warn or guide traffic.

(b) No local authority shall place or maintain any traffic-control device upon any trunk line highway under the jurisdiction of the state highway commissioner except by the latter's permisision upon any county road without the permission of the county road commission having jurisdiction thereof. With the approval of the department of state highways the board of county road commissioners of any county, at its option, may install and maintain uniform traffic-control devices according to the standards promulgated by the department of state highways and as required by the commission on trunk line highways, if the cost would be less

than that estimated by the state highway commission, billing the state highway commission for its share of the cost of installation.

M.C.L.A. 257.610, M.S.A. 9.2310

Traffic control devices.

Sec. 610. (a) **Placing and maintaining; conformance to state manual and specifications.** Local authorities and county road commissions in their respective jurisdiction shall place and maintain such traffic control devices upon highways under their jurisdiction as they may deem necessary to indicate and to carry out the provisions of this chapter or local traffic ordinances or to regulate, warn or guide traffic. All such traffic control devices hereafter erected shall conform to the state of the manual and specifications.

(b) **Noncompliance, withholding tax refunds.** The state highway commissioner shall withhold from any township, incorporated village city or county, failing to comply with the provisions of section 608, 609, 612 and 613 (1), the share of weight and gasoline tax refunds otherwise due the township, incorporated village, city or county. Notice of such failure, and a reasonable time to comply therewith, shall first be given.

(c) **Sales and purchases, conformance to manual of uniform traffic control devices.** A person, firm or corporation shall not sell or offer for sale to local authorities and local authorities shall not purchase or manufacture any traffic control device which does not conform to the Michigan manual of uniform traffic control devices except by permission of the director of the department of state highways.

(1) M.C.L.A. 257.608, 257.609, 257.612, 257.613, M.S.A. 9.2308, 9.2309, 9.2312, 9.2313.

M.C.L.A. 257.612, M.S.A. 9.2312

Traffic control signal legend; signals over traveled portion of roadway.

Sec. 612. (1) When traffic is controlled by traffic control signals, not less than 1 signal shall be located over the traveled portion of the roadway so as to give drivers a clear indication of the right of way assignment from their normal positions approaching the intersection. The vehicle signals shall exhibit different colored lights successively 1 at a time, or with arrows. The following colors shall be used and the terms and lights shall indicate and apply to drivers of vehicles as follows:

(a) Green indication.

Vehicular traffic facing the signal, except when prohibited under section 664 (1), may proceed straight through or turn right or left unless a sign at that place prohibits either turn. Vehicular traffic, including vehicles turning right or left, shall yield the right of way to other vehicles and to pedestrians lawfully within the intersection or an adjacent crosswalk at the time the signal is exhibited.

(b) Steady yellow indication.

Vehicular traffic facing the signal shall stop before entering the nearest crosswalk at the intersection or at a limit line when marked, but if the stop cannot be made in safety, a vehicle may be driven cautiously through the intersection.

(c) Steady Red indication:

(i) Vehicular traffic facing a steady red signal alone shall stop before entering the crosswalk on the near side of the intersection or at a limit line when marked or, if none, then before entering the intersection and shall remain standing until a green indication is shown, except as provided in subparagraph (ii).

(ii) Vehicular traffic facing a steady red signal, after stopping before entering the crosswalk on the near side of the intersection or at a limit line when marked or, if none, then before entering the intersection, shall be privileged to make a right turn from a 1-way or 2-way street into a 2-way street or into a 1-way street carrying traffic in the direction of the

right turn; or a left turn from a 1-way or 2-way street into a 1-way roadway carrying traffic in the direction of the left turn unless prohibited by sign, signal, marking, light, or other traffic control device. The vehicular traffic shall yield the right of way to pedestrians lawfully within an adjacent crosswalk and to other traffic lawfully using the intersection.

(d) Steady green arrow indications.

Vehicular traffic facing a green arrow signal, shown alone or in combination with another indication, may cautiously enter the intersection only to make the movement indicated by the arrow, or other movement permitted by other indications shown at the same time. Vehicle traffic shall yield the right of way to pedestrians lawfully within an adjacent crosswalk and to other traffic lawfully using the intersection.

(e) If a traffic control signal is erected and maintained at a place other than an intersection, the provisions of this section shall be applicable except as to those provisions which by their nature cannot have application. Any stop required shall be made at a sign or marking on the pavement indicating where the stop shall be made, but, in the absence of a sign or marking, the stop shall be made at the signal.

(2) A person who violates this section is responsible for a civil infraction.

(1) M.C.L.A. 257.664, M.S.A. 9.2364.

M.C.L.A. 257.627, M.S.A. 9.2327

Speed restrictions; assured clear distance ahead.

Sec. 627. (1) A person driving a vehicle on a highway shall drive at a careful and prudent speed not greater than nor less than is reasonable and proper, having due regard to the traffic, surface, and width of the highway and of any other condition then existing. A person shall not drive a vehicle upon a highway at a speed greater than that which will permit a stop within the assured, clear distance ahead.

Business or residence districts; public parks, posted speed limits

(2) Subject to subsection (1) and except in those instances where a lower speed is specified in this chapter, it shall be prima facie lawful for the driver of a vehicle to drive at a speed not exceeding the following, except when this speed would be unsafe:

(a) 25 miles an hour on all highways in a business or resident district as defined in this act.

(b) 25 miles an hour in public parks unless a different speed is fixed and duly posted.

Prima facie unlawful to exceed speed limitations

(3) It shall be prima facie unlawful for a person to exceed any of the speed limitations prescribed in subsection (2), except as provided in section 629 **(1).**

Vehicles with trailers

(4) A person driving a passenger vehicle drawing another vehicle or trailer shall not exceed a speed of 55 miles per hour, unless the vehicle or trailer has 2 wheels or less and does not exceed the combined weight of 750 pounds for the vehicle or trailer and load, or a trailer coach of not more than 26 feet in length with brakes on each wheel and attached to the passenger vehicle with an equalizing or stabilizing coupling unit.

Trucks and combinations weighing over 5,000 pounds

(5) A person driving a truck, tractor, or tractor with trailer, or a combination of these vehicles with a gross weight, loaded or unloaded in excess of 5,000 pounds shall not exceed a speed of 55 miles per hour on highways, streets, or freeways, which shall be reduced to 35 miles per hour during the period when reduced loadings are being enforced in accordance with this chapter.

School buses

(6) A person driving a school bus shall not exceed the speed

of 50 miles per hour.

Maximum of speed

(7) The maximum rates of speeds allowed pursuant to this section are subject to the maximum rates established pursuant to section 629b.

Designated work areas; speed limit, traffic control devices

(8) A person who operates a vehicle on the highway shall not exceed a speed of 45 miles per hour when entering and passing through a designated work area where a normal lane or part of the lane of traffic has been closed due to a highway construction, maintenance, or surveying activities. The department of state highways and transportation, county road commission, or local authority shall identify a designated work area with traffic control devices which are in conformance with the Michigan manual of uniform traffic control devices on streets and highways under its jurisdiction. A person shall not exceed the foregoing speed limitation or those established pursuant to section 628 or 629**(3)**.

(1) M.C.L.A. 257.629, M.S.A. 9.2329.

(2) M.C.L.A. 257.629b, M.S.A. 9.2329(2).

(3) M.C.L.A. 257.628, 257.629, M.S.A. 9.2328, 9.2329.

M.C.L.A. 257.628, M.S.A. 9.2328

Speed limits, maximum, minimum, day and night.

Sec. 628. (1) When the state highway commission or county road commission, with respect to highways under its jurisdiction, and the director of the department of state police shall jointly determine upon the basis of an engineering and traffic investigation that the speed of vehicular traffic on a state trunk line or county highway is greater or less than is reasonable or safe under the conditions found to exist at an intersection or other place or upon a part of the highway, the officials acting jointly may determine and declare a reasonable

and safe maximum or minimum speed limit thereat which shall be effective at the times determined that the speed of vehicular traffic on a state trunk line or county highway, which is within 1,000 feet of a school in the school district of which that person is the superintendent, is greater or less than is reasonable or safe, the officials shall include the superintendent of the school district affected in acting jointly in determining and declaring a reasonable and safe maximum or minimum speed limit thereat. The maximum speed limits on all state trunk line highways or parts of state trunk line highways upon which maximum speed limits are not otherwise fixed pursuant to this act shall be 65 miles per hour during the daylight hours and 55 miles per hour during the night hours. The maximum speed limits upon freeways shall be 70 miles per hour, and the maximum speed limits on all highways or parts of highways under the jurisdiction of the county road commission upon which maximum speed limits are not otherwise fixed pursuant to this act shall be 65 miles per hour during the daylight hours and 55 miles per hour during the night hours.

Speed control signs

(2) If upon investigation the state highway commission or county road commission and the director of the department of state police find it in the interest of public safety, they may order the township board, city, or village officials to erect and maintain, take down, or regulate the speed control signs, signals, or devices as directed, and in default thereof the state highway commission or county road commission may cause the designated signs, signals, and devices to be erected and maintained, taken down, regulated, or controlled, in the manner previously directed, and pay for this out of the highway fund designated.

Public record in office of county clerk; temporary construction or repair signs, authorization; evidence

(3) A public record of all speed control signs, signals, or devices so authorized shall be filed in the office of the county clerk of the county in which the highway is located, and a certified copy shall be prima facie evidence in all courts of the issuance of the authorization. The public record with the county clerk shall not be required as prima facie evidence of authorization in the case of signs erected or placed temporarily for the control of speed or direction of traffic at points where construction, repairs, or maintenance of highways is in progress, if the signs are of uniform design approved by the state highway commission and the director of the department of state police and clearly indicate a special control, when proved in court that the temporary traffic-control sign was placed by the state highway commission or on the authority of the state highway commission and the director of the department of state police, or by the county road commission or on the authority of the county road commission, at a specified location.

Failure to observe speed or traffic control signs

(4) A person who fails to observe an authorized speed or traffic control sign, signal, or device is responsible for a civil infraction.

Minimum speed on freeways

(5) The minimum speed limit on all freeways shall be 45 miles per hour except when reduced speed is necessary for safe operation or in compliance with law or in compliance with a special permit issued by an appropriate authority.

Overriding maximum speed limit

(6) The maximum rates of speeds allowed pursuant to this section are subject to the maximum rate established pursuant to section 629b (1).

(1) M.C.L.A. 257.629b, M.S.A. 9.2329(2).

M.C.L.A. 257.629, M.S.A. 9.2329

Prima facie speed limits; establishment, signs.

Sec. 629. (1) Local authorities may establish or increase the prima facie speed limits on highways under their jurisdictions subject to the following limitations:

(a) All highways within business or residential districts on which the prima facie speed limit is increased shall be designated through highways at the entrance to which vehicles shall be required to stop before entering, except that where 2 of these through highways intersect, local authorities may require traffic on 1 highway only to stop before entering the intersection.

(b) The local authorities shall place and maintain, upon all through highways in which the permissible speed is increased, adequate signs giving notice of the special regulations and shall also place and maintain upon each highway intersecting a through highway, appropriate signs which shall be reflectorized or illuminated at night.

(c) Local authorities may establish prima facie lawful speed limits on highways outside of business or residential districts which shall not be less than 25 miles per hour, except as provided in subsection (4).

(2) The state highway commission, within its discretion, may establish the speed which shall be prima facie lawful upon all trunk line highways outside of business districts and located within cities and villages, as follows:

(a) A written copy of the authorization or determination shall be filed in the office of the county clerk of the county or counties where the highway is located and a certified copy thereof shall be prima facie evidence in all courts of the issuance of the authorization or determination.

(b) When the state highway commission increases the speed upon a trunk line highway as provided in this act, the department of state highways and transportation shall place and maintain upon these highways adequate signs giving notice of

the permissible speed as fixed by the highway commission.

(3) Local authorities are authorized to decrease the prima facie speed limits in public parks under their jurisdiction. A decrease in the prima facie speed limits shall be binding when adequate signs are duly posted giving notice of the reduced speeds.

(4) Local authorities are authorized to decrease the prima facie speed limits to not less than 15 miles an hour on each street or highway under their jurisdiction which is adjacent to a city owned park or playground. A decrease in the prima facie speed limits shall be binding when adequate signs are duly posted giving notice of the reduced speeds.

(5) The maximum rates of speeds allowed pursuant to this section are subject to the maximum rate established pursuant to section 629b.(1)

(6) A person who exceeds a lawful speed limit established pursuant to this section is responsible for a civil infraction.

(1) M.C.L.A. 257.629(b), M.S.A. 9.2329(2).

M.C.L.A. 257.631, M.S.A. 9.2331

Speed and load limitations on signposted bridges, causeways, and viaducts.

Sec. 631. (1) A person shall not drive a vehicle upon a public bridge, causeway, or viaduct at a speed or with a load which is greater than the maximum speed or load which can be maintained with safety to the structure, when the structure is signposted as provided in this section. A person who violates this subsection is responsible for a civil infraction.

(2) The department of state highways and transportation, county road commission, or other authority having jurisdiction of a public bridge, causeway, or viaduct may conduct an investigation of that bridge, causeway, or viaduct. If it is found after investigation that the structure cannot with safety to itself withstand vehicles traveling at the speed or carrying a load otherwise permissible under this chapter, the department,

commission, or other authority shall determine and declare the maximum speed of vehicles or load which the structure can withstand, and shall cause or permit suitable signs stating that maximum speed and load limitations to be erected and maintained not more than 50 feet from each end of the structure, and also at a suitable distance from each end of the bridge to enable vehicles to take a different route.

(3) The findings and determination of the department of state highways and transportation, county road commission, or other local authority, shall be conclusive evidence of the maximum speed and load which can with safety be maintained on a public bridge, causeway, or viaduct.

M.C.L.A. 257.640, M.S.A. 9.2340

No passing zones, marking; violation.

Sec. 640.(1) The state highway commission and county road commissions shall determine those portions of a highway under their jurisdiction where overtaking and passing or driving to the left of the roadway would be especially hazardous, and by appropriate signs or markings on the roadway shall indicate the beginning and end of those zones in a manner enabling an ordinary observant driver of a vehicle to observe the directions and obey them. A sign shall be placed to the left of the highway on those portions of a highway where additional notice is considered necessary.

(2) The no-passing zones provided for by this section shall be based upon a traffic survey and engineering study. Traffic-control devices installed pursuant to this section shall conform to the state manual and specifications as provided for by section 608 **(1)**.

(3) A person who fails to obey the traffic-control devices installed pursuant to this section is responsible for a civil infraction.

(1) M.C.L.A. 257.608, M.S.A. 9.2308.

M.C.L.A. 257.641, M.S.A. 9.2341

One-way roadways and rotary traffic islands.

Sec. 641. (1) The state highway commissioner may designate any highway or any separate roadway under his jurisdiction for 1-way traffic and shall erect appropriate signs giving notice thereof.

(2) Upon a roadway designated and signposted for 1-way traffic a vehicle shall be driven only in the direction designated.

(3) A vehicle passing around a rotary traffic island shall be driven only to the right of that island.

(4) A person who violates subsection (2) or (3) is responsible for a civil infraction.

M.C.L.A. 257.642, M.S.A. 9.2342

Laned roadways, traffic rules.

Sec. 642. (1) When a roadway has been divided into 2 or more clearly marked lanes for traffic the following rules in addition to all others consistent with this act shall apply:

(a) A vehicle shall be driven as nearly as practicable entirely within a single lane and shall not be moved from the lane until the driver has first ascertained that the movement can be made with safety. Upon a roadway with 4 or more lanes which provides for 2-way movement of traffic, a vehicle shall be driven within the extreme right-hand lane except when overtaking and passing, but shall not cross the center line of the roadway except where making a left turn.

(b) Upon a roadway which is divided into 3 lanes and provides for 2-way movement of traffic, a vehicle shall not be driven in the center lane except when overtaking and passing another vehicle traveling in the same direction, when the center lane is clear of traffic within a safe distance, or in preparation for a left turn or where the center lane is at the time allocated exclusively to traffic moving in the same

direction the vehicle is proceeding and the allocation is designated by official traffic control devices.

(c) Official traffic control devices may be erected directing specified traffic to use a designated lane or designating those lanes to be used by traffic moving in a particular direction regardless of the center of the roadway and drivers of vehicles shall obey the directions of the traffic-control device.

(d) Official traffic-control devices may be installed prohibiting the changing of lanes on sections of roadway, and drivers of vehicles shall obey the directions of the traffic-control devices.

(2) A person who violates this section is responsible for a civil infraction.

M.C.L.A. 257.668, M.S.A. 9.2342

Railroad grade crossings, stop signs.

Sec. 668. (1) The department of state highways and transportation with respect to highways under its jurisdiction, the county road commissions, and local authorities with reference to highways under their jurisdiction may designate certain grade crossings of railways by highways as "stop" crossings, and erect signs at the crossings notifying drivers of vehicles upon the highway to come to a complete stop before crossing the railway tracks. When a crossing is so designated and signposted, the driver of a vehicle shall stop not more than 50 feet but not less than 10 feet from the railway tracks before traversing the crossings. The erection of or failure to replace or maintain the signs shall not be a basis for an action of negligence against the department of state highways and transportation, county road commissions, or local authorities.

(2) A person who fails to stop as required by this section is responsible for a civil infraction.

M.C.L.A. 691.1401, M.S.A. 3.996(101)

Governmental function; liability for negligence; definitions.

Sec. 1. As used in this act:

(a) "Municipal corporation" means any city, village, township or charter township, or any combination thereof, when acting jointly.

(b) "Political subdivision" means any municipal corporation, county, township, charter township, school district, port district, or metropolitan district, or any combination thereof, when acting jointly, and any district or authority formed by 1 or more political subdivisions.

(c) "State" means the state of Michigan and its agencies, departments, and commissions, and shall include every public university and college of the state, whether established as a constitutional corporation or otherwise.

(d) "Governmental agency" means the state political subdivisions, and municipal corporations as herein defined.

(e) "Highway" means every public highway, road and street which is open for public travel and shall include bridges, sidewalks, crosswalks and culverts on any highway. The term "highway" shall not be deemed to include alleys.

M.C.L.A. 691.1402, M.S.A. 3.996(102)

Defective highways; liability for innjuries; limitations.

Sec. 2. Each governmental agency having jurisdiction over any highway shall maintain the highway in reasonable repair so that it is reasonably safe and convenient for public travel. Any person sustaining bodily injury or damage to his property by reason of failure of any governmental agency to keep any highway under its jurisdiction in reasonable repair, and in condition reasonably safe and fit for travel, may recover the damages suffered by him from such governmental agency. The liability, procedure and remedy as to county roads under the jurisdiction of a county road commission

shall be as provided in section 21, chapter 4 of Act No. 283 of the Public Acts of 1909, as amended, being section 224.21 of the Compiled Laws of 1948. The duty of the state and the county road commissions to repair and maintain highways, and the liability therefor, shall extend only to the improved portion of the highway designed for vehicular travel and shall not include sidewalks, crosswalks or any other installation outside of the improved portion of the highway designed for vehicular travel. No action shall be brought against the state under this section except for injury or loss suffered on or after July 1, 1965. Any judgment against the state based on a claim arising under this section from acts or omissions of the state highway department shall be payable only from restricted funds appropriated to the state highway department or funds provided by its insurer.

M.C.L.A. 691.1403, M.S.A. 3.996(103)

Same; knowledge of defect, repair, presumption.

Sec. 3. No governmental agency is liable for injuries or damages caused by defective highways unless the governmental agency knew, or in the exercise of reasonable diligence should have known, of the existence of the defect and had a reasonable time to repair the defect before the injury took place. Knowledge of the defect and time to repair the same shall be conclusively presumed when the defect existed so as to be readily apparent to an ordinarily observant person for a period of 30 days or longer before the injury took place.

M.C.L.A. 691.1404, M.S.A. 3.996(104)

Notice of injury and highway defect.

Time; form and contents of notice

Sec. 4. (1) As a condition to any recovery for injuries sustained by reason of any defective highway, the injured person, within 120 days from the time the injury occurred, except as otherwise provided in subsection (3) shall serve a notice on the governmental

agency of the occurrence of the injury and the defect. The notice shall specify the exact location and nature of the defect, the injury sustained and the names of the witnesses known at the time by the claimant.

Service, filling; examination of claimant and witnesses

(2) The notice may be served upon any individual, either personally, or by certified mail, return receipt requested, who may lawfully be served with civil process directed against the governmental agency, anything to the contrary in the charter of any municipal coporation notwithstanding. In case of the state, such notice shall be filed in triplicate with the clerk of the court of claims. Filing of such notice shall constitute compliance with section 6431 of Act No. 236 of the Public Acts of 1961, being section 600.6431 of the Compiled Laws of 1948, requiring the filing of notice of intention to file a claim against the state. If required by the legislative body or chief administrative officer of the responsible governmental agency, the claimant shall appear to testify, if he is physically able to do so, and shall produce his witnesses before the legislative body, a committee thereof, or the chief administrative officer, or his deputy, or a legal officer of the governmental agency as directed by the legislative body or chief administrative officer of the responsible governmental agency, for examination under oath as to the claim, the amount thereof, and the extent of the injury.

Injured person under 18 or physically or mentally incapacitated, time for service; determination of capability; effect as to charters, statues, and ordinances

If the injured person is under the age of 18 years at the time the injury occurred, he shall serve the notice required by subsection (1) not more than 180 days from the time the injury occurred, which notice may be filed by a parent, attorney, next friend or legally appointed guardian. If the injured person is physically or mentally incapable of giving notice, he shall serve the notice required by subsection (1) not more than 180 days after the termination of the

disability. In all civil actions in which the physical or mental capability of the person is in dispute, that issue shall be determined by the trier of the facts. The provisions of this subsection shall apply to all charter provisions, statutes and ordinances which require written notices to counties or municipal corporations.

M.C.L.A. 691.1405, M.S.A. 3.996(105)

Government owned vehicles; liability for negligent operation.

Sec. 5. Governmental agencies shall be liable for bodily injury and property damage resulting from the negligent operation by any officer, agent, or employee of the governmental agency, or a motor vehicle of which the governmental agency is owner, as defined in Act No. 300 of the Public Acts of 1949, as amended, being sections 257.1 to 257.923 of the Compiled Laws of 1948.

M.C.L.A. 691.1407, M.S.A. 3.996(107)

Governmental immunity from tort liability, continuance.

Sec. 7. Except as in this act otherwise provided, all governmental agencies shall be immune from tort liability in all cases wherein the government agency is engaged in the exercise or discharge of a governmental function. Except as otherwise provided herein, this act shall not be construed as modifying or restricting the immunity of the state from tort liability as it existed heretofore, which immunity is affirmed.

M.C.L.A. 691.1408, M.S.A. 3.996(108)

Civil or criminal actions against officer or employee of governmental agency; attorney; compromise and settlement; indemnity

Sec. 8. (1) Whenever a claim is made or a civil action is commenced against an officer or employee of a governmental agency for injuries to persons or property caused by negligence of the officer or employee while in the course of employment and while acting within the scope of his or her authority, the governmental agency may pay for, engage, or furnish the

services of an attorney to advise the officer or employee as to the claim and to appear for the represent the officer or employee in the action. The governmental agency may compromise, settle, and pay the claim before or after the commencement of a civil action. Whenever a judgment for damages is awarded against an officer or employee of a governmental agency as a result of a civil action for personal injuries or property damage caused by the officer or employee while in the course of employment and while acting within the scope of his or her authority, the governmental agency may indemnify the officer or employee or pay, settle, or compromise the judgment.

(2) When a criminal action is commenced against an officer or employee of a governmental agency based upon the conduct of the officer or employee in the course of employment, if the employee or officer had a reasonable basis for believing that he or she was acting within the scope of his or her authority at the time of the alleged conduct, the governmental agency may pay for, engage, or furnish the services of an attorney to advise the officer or employee as to the action, and to appear for and represent, the officer or employee in the action. An officer or employee who has incurred legal expenses after December 21, 1975 for conduct prescribed in this subsection may obtain reimbursement for those expenses under this subsection.

(3) This section shall not impose any liability on a governmental agency.

M.C.L.A. 691.1411, M.S.A. 3.996(111)

Limitation of actions

Sec. 11. (1) Every claim against any governmental agency shall be subject to the general law respecting limitations of actions except as otherwise provided in this section.

(2) The period of limitations for claims arising under section

2 of this act (1) shall be 2 years.

(3) The period of limitations for all claims against the state, except those arising under section 2 of this act, shall be governed by chapter 64 of Act No. 236 of the Public Acts of 1961(2).

(1) M.C.L.A. 691.1402, M.S.A. 3.996(102)

(2) M.C.L.A. 600.6401, M.S.A. 27a.6401

APPENDIX B

BIBLIOGRAPHY OF SELECTED LITERATURE RELATING TO HIGHWAY SAFETY DECISION-MAKING

APPENDIX B

BIBLIOGRAPHY OF SELECTED LITERATURE RELATING TO HIGHWAY SAFETY DECISION-MAKING

Agent, K.R. 1973. Evaluation of the high accident location spot improvement program in Kentucky. Frankfort: Kentucky Department of Highways research report no. 357. KYP-72-40, HPR-118. Part III.

A before-and-after evaluation of the Kentucky Spot Improvement Program is performed. A benefit-cost ratio is used to evaluate improved 3/10 and 1/10-mile segments in rural Kentucky. A comparison sample of other high-accident locations where no improvement program was implemented enhances the study. The results showed that the benefit cost ratios of the program were greater than 1.0 in all cases, with these results being statistically significant.

The "equivalent property damage only" (EPDO) method of assigning costs to accidents is described in detail. Weights of the various types of accidents are justified and a rationale is given as to why Kentucky found fatal accidents to be nine times as costly or as important as property-damage-only accidents.

Council, F.M.; Dutt, A.K.; Hunter, W.W.; Leung, A.Y.; and Woody, N.C. 1977. Project selection for roadside hazards elimination. Volume II. User manual for roadside hazard correction ranking program. Chapel Hill: University of North Carolina Highway Safety Research Center.

This is a presentation of a computer program by which a state can do the analysis described in the final report. The program, called the Roadside Hazard Correction Ranking (RHCR) program may be modified by changing inaccurate information or adding new hazards and treatments to the analysis. The program ranks improvements by annual benefit, benefit-cost ratio, and net discounted present value. The program also gives tables predicting the number of fatal, injury, or PDO accidents,

which will be reduced by the treatment for each year of the treatment's life.

Datta, T.K.; Bowman, B.L.; and Opiela, K.S. 1978. Evaluation of highway safety projects using quality-control techniques. In Transportation Research Record no. 672, pp.9-19. Washington, D.C.: National Academy of Sciencies; National Research Council

A new method of evaluating highway safety programs and identifying safety-deficient locations is presented as an alternative to Poisson and chi-square distributions because "they are neither suitable for locations with very low accident frequency nor responsive to local conditions or standards." The study was done in Oakland County, Michigan. Confidence intervals for accident patterns were established for two-lane, four-lane, five-lane, and freeway links, segregated by traffic volume. Thus, for these classes of roads, mean values were established allowing testing of the hazardousness of the location based on average conditions of Oakland County roads, as opposed to using some statewide average or theoretical average. This study was sponsored by the Traffic Improvement Association of Oakland County.

Datta, T.K., and Rodgers, R.J. 1979. Computerized street index for Michigan accident location index system. In Transportation Research Record no. 706, pp.20-22. Washington, D.C.: National Academy of Sciences; National Research Council.

Four deficiencies in highway recordkeeping and analysis of highway data are described as the impetus for Michigan's attempt to develop a computerized statewide reporting system. They are (1) most communities do not have access to accident recordkeeping, (2) many communities do not record property damage only (PDO) accidents, (3) different communities have different standards for keeping records of PDO accidents, and (4) the means to analyze traffic data are not present, even if the data are available to communities. Thus, the Michigan Department of State Highways and Transportation (MDSHT) and the Michigan Department of State Police developed the Michigan accident location index (MALI). The system generates a computerized physical description of accident locations. This is done through the requirement on all local

and state police that accidents be referenced by distance and direction from the nearest cross-street intersection when reporting accidents. Then, computer programs take these accident reports, and on a county-by-county basis provide statistical ranking of intersections by hazardousness, based on the total number of accidents that occur within 45 meters of an intersection. At the time date of publication of the Datta and Rodgers article, MIDAS, which does an accident pattern analysis, had not been developed. (See Michigan Department of State Highways and Transportation 1978. Fifth annual report of Michigan's overall highway safety improvement program. Lansing Michigan.)

Deacon, J.A.; Zegeer, C.V.; and Deen, R.C. 1975. Identification of hazardous rural highway locations. In Transportation Research Record no. 543, pp.16-33. Washington, D.C.: National Academy of Sciencies; National Research Council.

A procedure is established for the identification of hazardous rural highway locations using four indicators: (1) number of fatal accidents; (2) number of accidents; (3) number of "equivalent property damage only" (EPDO) accidents; and (4) EPDO accident rate. The decision process applies each of the above indicators, in the order listed, to each location. A high number of fatal accidents is itself enough to judge a location hazardous, while the "number of accidents" indicator must be combined with a high EPDO number of high EPDO rate to define a hazardous location.

Department of Civil Engineering. 1976. A procedure for the analysis of high accident locations. Detroit, Michigan: Wayne State University.

A procedure is described in which ranking of locations is done by using a matrix consisting of accident frequency and accident rate. The resultant rankings are reranked using an accident severity index. Once hazardous locations are ranked, computer collision diagrams, accident report summaries, field observations, and traffic conflicts analysis are recommended for identifying "contributing factors" to accident occurrences at high-accident locations.

Checklists are presented for engineers' use in choosing an appropriate

treatment once the cause is identified. However, the report stops here--economic analysis, implementation strategies, allocation and budgeting, staffing, timing and program evaluation are not considered.

FHWA Offices of Highway Safety and Development, and Goodell-Grivas, Inc. 1979. Evaluation of highway safety projects. Washington, D.C.: U.S. Department of Transportation, Federal Highway Administration.

Several methods of project evaluations are reviewed, including: (1) before-and-after tests with controls (comparison to untreated sites); (2) before-and-after tests without controls; (3) comparative parallel studies; and (4) before, during, and after tests.

Examples of evaluations are given, with explicit how-to-do-it procedures described. Phases of projects are also in the report. Evaluation is divided into six steps: (1) developing an evaluation plan; (2) collecting and reducing data; (3) performing a comparison of different measures of effectiveness; (4) performing tests of significance; (5) performing economic analyses; and (6) preparing the evaluation document. Each step is discussed in the framework of an instructional manual, with references for more theoretical discussion and description given.

Fleischer, G.A. 1977. Significance of benefit/cost and cost/effectiveness ratios in analyses of traffic safety programs and projects. In Transportation Research Record no. 635, pp.32-36. Washington, D.C.: National Academy of Sciences; National Research Council.

This report is a critique of various methods of cost-benefit analysis, including benefit-cost ratio, cost-effectiveness ratio, and net present worth methods. These methods are discussed in light of their misuse when applied to highway safety research. Specifically, Fleischer argues that ranking of projects by benefit-cost ratios is not feasible under most investment conditions. He also explains why ranking by benefit-cost ratio can lead to different project selection than ranking by net present worth. This report is good background reading for dynamic programming.

Hunter, W.W.; Council, F.M.; and Dutt, A.K. 1977. Project selection for roadside hazards modification. Volume I. Final report. Chapel Hill: University of North Carolina Highway Safety Research Center.

This analysis was concerned with fixed project hazards, including trees, utility poles, exposed bridge rail ends, substandard bridge rails, underpasses, rigid sign supports and guardrail ends. These hazards all are within thirty feet of the pavement. Benefit/cost analysis is used to rank improvements—accidents are valued in dollars. This program contrasts with most other programs because it is not a spot-improvement, but an area-improvement program. This is because accidents associated with fixed-object hazards are rarer than automobile collisions on the roadways.

Thus, hazards are aggregated and categorized as to location—that is, rural, urban, highway type, highway character, highway features, etc. Therefore, a program might be aimed at removing all trees from the roadside on all curved nonintersection segments of two-lane highways in rural regions. Improvements for each hazard are assessed using cost-benefit analyses based on past experience of improvement effectiveness.

Johnson, M.M.; Dare, C.E.; and Skinner, H.B. 1971. Dynamic programming of highway safety projects. Transportation Engineering Journal 97(4):667-79.

Dynamic programming, a computerized method of prioritizing and staging safety (or other) projects, is proposed as an alternative to the FHWA procedure for decision-making dynamic programming. This method has been used by the state highway departments in Alabama and Kentucky. Its foundations are in physics and mathematics; it is generally an alternative to linear programming and cost-benefit analysis.

The FHWA method used the following process: (1) choose a "best" project from a set of projects applicable to each location identified (by some earlier method) as hazardous based on a cost-benefit study; (2) rank-order each chosen project at each hazardous location by cost-benefit analysis (rate of return, present worth or benefit/cost ratio); and (3) implement projects by going down the rank-ordered list until funds are exhausted.

The weaknesses of this procedure are explained: (1) the alternative of choosing not to make any improvement at a hazardous location is not

considered; (2) it is assumed that only one project can be chosen for each site; (3) simple rank-ordering of projects will not necessarily achieve the best rate of return or benefit/cost ratio unless funds are unlimited; and (4) present worth, benefit/cost ratio, and rate of return methods would choose different priorities unless funds were unlimited. Dynamic programming does not display these weaknesses.

Dynamic programming chooses an optimal set of decisions over time. Examples are given and compared with cost-benefit analysis. Dynamic programming is shown to produce a higher economic return than cost-benefit analysis when applied to the same set of data. Computer programming flowcharts are provided in the report, and an agency with computer facilities and a programmer could use dynamic programming to allocate funds.

Roy Jorgensen Associates, Inc. 1978. Cost and safety effectiveness of highway design elements. National Cooperative Highway Research Program Report 197.

This report describes a research project carried out to meet the following objectives: (1) identify key geometric characteristics of road designs that affect accident experience; (2) quantify the effects of varying those design characteristics; and (3) develop a methodology that can be used by engineers in measuring the cost effectiveness of the various levels of each design element. A user's manual is presented in Appendix I. The focus of the manual is on "tailoring designs for individual projects rather than developing designs through the application of fixed design standards." The design process uses a cost-effectiveness methodology to select designs for sites. The process is: (1) determine construction costs; (2) determine accident costs; (3) determine candidate designs; and (4) select the final design. Design elements studies were: pavement width, shoulder width, and shoulder surface type, all for two-lane rural highways. Thus, this manual could be used to maximize a safety objective when new construction occurs in rural areas. Old two-lane, rural roads could be tested as to their safety effectiveness, and improved based on the research provided there.

Laughland, J.C.; Haefner, L.E.; Hall, J.; Clough, D.R.; and Roy Jorgensen Associates, Inc. 1975. Methods for evaluating highway safety improvements. National Cooperative Highway Research Program Report 162.

Although the title refers only to evaluation methods, all aspects of the highway safety process are discussed. The objective of this report is "to provide a detailed technique in the form of guidelines . . . that will allow officials to judge the effectiveness of highway improvements in terms not only of reduced accidents but also of the cost-benefits of such improvements."

The concept of a "highway safety evaluation system" is proposed, consisting of six phases: (1) identifying hazardous locations; (2) selecting alternative improvements; (3) evaluating alternative improvements; (4) programming and implementing improvements; (5) evaluating implemented improvements; and (6) evaluating the highway safety program. Each of these phases is discussed in detail. Benefit/cost ratio is recommended as a basis for establishing priorities for program selection, with some reservations. Dynamic programming is discussed in phase three. In appendices, detailed information on the many methodologies in the highway safety process is given. Overall, this report is comprehensive, well-organized, and understandable.

Norden, M.; Orlansky, J.; and Jacobs, H. 1956. Application of statistical quality control techniques to analysis of highway accident data. Highway Research Board Bulletin 117:17-31.

A "control chart" is established for road intervals, determining whether or not an accident rate is above or below an upper and lower bound to a mean accident rate for intervals of similar characteristics. The Poisson distribution is used to establish these upper and lower bounds. This article was the basis for current efforts at setting critical rates and using the rate-quality control method that is now very commonly used. Since the writing (1956), its statistical parameters have been revised, but the concept of statistical significance of accident rates is the same.

Organisation for Economic Co-Operation and Development. 1976. Hazardous road location: Identification and counter measures. Paris.

This study identifies and categorizes various methods of identifying hazardous locations. The categories are: statistical and numerical techniques; on-site observations; location sampling; conflict studies; and monitoring of physical characteristics. Drawbacks and advantages of each approach are discussed. Then, discussion turns to a categorization of remedial procedures, including: geometric design; road surfacing; road marking and delineation systems; road signs and furniture; and traffic management.

Guidelines for the choice of a proper remedial treatment (countermeasure) are given. This is done through checklists, flowcharts and tables comparing likely benefits from alternative countermeasures for each type of problem. An excellent bibliography is included. This is a very comprehensive, thorough approach, with recommendations of many possible treatments noted and evaluated based on empirical findings.

Pigman, J.G.; Agent, K.R.; Mayes, J.G.; and Zegeer, C.U. 1976. Optimal highway safety improvement investments by Dynamic Programming. In Transportation Research Record no. 585, pp.49-59. Washington, D.C.: National Academy of Sciences; National Research Council.

Dynamic programming is a method for selecting a safety program from a set of alternate highway safety projects. It produces an optimum list of projects and arranges their sequence of implementation so as to maximize economic return. This paper demonstrates how dynamic programming can achieve a greater return than cost/benefit analysis by testing a common set of data using both methods.

How is dynamic programming better than cost-benefit analysis? Under a limited budget selecting projects in order of cost-benefit score does not necessarily provide the greatest economic gain possible. A more economical set of projects, one that has been compared with all other possible sets by a computer program, emerges from dynamic programming. The logic of this is that money might be spent on one large project with a high benefit/cost ratio and on no other projects, while there may be enough money to afford several smaller projects with individually lower benefit/cost ratios that in the aggregate may make better use of the

budgetary funds and provide a greater economic return. Therefore, when dealing with complex programs where many alternatives are available at many locations, dynamic programming is useful.

Sarrazin, T.; Spreer, F.; and Tietzel, M. 1976. Logical decision-making techniques to evaluate public investment projects: Cost-benefit analysis, cost-effectiveness analysis, utility-analysis--a critical comparative approach. International Journal of Transport Economics 1(2).

A discussion of the benefits and drawbacks of three forms of economic analysis. No approach is deemed "better," but only more applicable to certain situations. The point is make that all of the techniques are (or claimable) objective and claim to "safeguard economic rationality in allocative decisions."

The strategy of cost-benefit analysis is to quantify public and private benefits, costs, and opportunity costs in terms of money; decisions are made on the basis of pure numerical superiority. The strategy of cost-effectiveness analysis is to select the optimum course of action from several options based on the realization of objectives that each option allows. Utility-analysis rank-orders alternatives in the same objective-achievement method as cost-effectiveness analysis, except that it rank-orders alternatives instead of selecting the best one. Potential applications of these methods to highway decisions are discussed.

Snyder, J.C. 1974. Environmental determinants of traffic accidents: An alternative model. In Transportation Research Record no. 486, pp.11-18. Washington, D.C.: National Academy of Sciences; National Research Council.

This research attempts to build an causal model of traffic accidents based on environmental characteristics. It was hypothesized by the author that these characteristics (such as amount of developed road frontage, value of homes, and age of population) could be used to predict the frequency of accidents on roadways. A test was made on a stratified random sample of 135 road segments in Oakland County, Michigan

A regression analysis and several other statistical techniques were applied to the data. The regression analysis indicated that nearly all of the variance in the accident rate was explained by regional-environmental

variables.

Unexpected results were obtained, showing that accident phenomena are not as well understood as was believed. Type of road was found to be the best predictor of accident rate, followed by road frontage characteristics and percentage of the population within a three-mile radius from the road sample between sixteen and twenty-four years old. Other variables had effects depending on the type of road tested. For example, population density was the only reliable predictor of accidents on freeways.

These results, if reliable, could have an important effect on policy. For example, the percentage of developed roadside frontage was found to be a significant prediction of accident rates, but not because it caused an increase in traffic volumes. How, then does roadside development contribute to accidents? Is it because of distractions to drivers? Does frontage development contribute to stop and go driving, and does this then cause more acccidents? Is it because people are pulling out of driveways onto roads more often? Is it a result of a speed limit difference? Engineers might test these possibilities, look for the relationship between design frontage and accidents, and decide what design should be used when building or improving in developed areas. In a larger sense, planners may want to restrict development along roadsides to a level associated with a tolerable accident rate, unless engineers or researchers can find a design solution to this problem. This study raises some very important questions, and the search for answers to them could lead to innovations in highway safety programming and design.

Taylor, J.I, and Thompson, H.T. 1977. Identification of hazardous locations final report. Federal Highway Administration unclassified report FHWA-RD-77-83.

This report describes the creation of a hazardousness index, devised in a series of workshops held at the University of Pennsylvania. Participating in the workshops were nationally known experts in the field of highway safety. Opinions of the experts were used in forming the index, and recommendations for its proper use are given.

The report describes the wide variety of procedures currently used by

the states in identifying and ranking hazardous locations. It is shown that these procedures, when applied to a common set of data, lead to different assessments of hazardousness. To address this problem, the experts were asked to rank "indicators" (measures of hazardousness of some road segment of intersection) with regard to four qualities: 1) merit, 2) definition and form, 3) ease of data acquisition and implementation and 4) an overall recommendation. From the rankings, nine indicators were chosen as most useful, and were then combined into a single index. Reasons for use of an index as opposed to a series of filters (locations ranked on each indicator separately, then re-ranked on another after some have been dropped) are given.

Taylor, J.I., and Thompson, H.T. 1977. Identification of hazardous locations. A user's manual. Washington, D.C.: Federal Highway Administration, unclassified report FHWA-RD-77-82.

The User's Manual describes a hazardousness index and each indicator in it. This includes a description of the previous usage of the indicator, its mathematical formulation, and critical values with which the user can rate locations based on this indicator. Graphs are provided showing how the indicator varies with ADT (Average Daily Traffic). The manual concludes with a chapter describing the combining of the indicators into an index and the weights assigned to each particular indicator. A case study is presented, showing the use of the index in a real-world situation.

Traffic and Safety, Local Government, and Maintenance Divisions, and the Railroad Contact Section, Bureau of Highways. 1978. Fifth annual report of Michigan's overall highway safety improvement program. Lansing: Michigan Department of State Highways and Transportation.

Five sections outline the State of Michigan's current and planned highway safety activities. Included are reviews of the various federal highway safety programs carried out in Michigan. Particularly relevant are the discussions of the Michigan Accident Location Identification System (MALI) and the Michigan Dimensional Accident Surveillance model (MIDAS). The two are used together to identify hazardous locations based on state averages for similar locations with similar types of accidents.

Types of locations differentiated by geometry, environment, cross-section, volume and accident characteristics are combined with a set of twenty possible accident codes (right-angle, rear-end, left turn, right turn, etc.). This combination establishes the data base for what is known as "accident pattern analysis." Frequencies of these accident patterns are available from computer printouts for all locations in the file throughout the state. The system can also run benefit cost analyses of improvements, based on previous before-and-after studies of these improvements in the state. National Safety Council values for accident costs are used. The MIDAS model currently is being expanded to be useful for all roads in Michigan. From the Traffic Improvement Association (TIA) literature made available, it appears that the state system has two advantages: 1) road locations can be compared with other locations in the state to determine their relative hazard, and thus what effects improvements will likely have, and 2) the MIDAS model includes a method of economic analysis of the effects of various types of improvement. TIA's system has the advantages of 1) computer-drawn collision diagrams and 2) more accessible and up-to-date accident data.

Traffic Improvement Association of Oakland County. Directory of traffic data services for Oakland County, Michigan. Bloomfield Hills, Michigan.

A summary of the computer techniques available to highway safety data users, for Oakland County, Michigan. The report presents sample outputs of some of these analyses run on the TIA data base. Techniques include: 1) a matrix combining accident frequency and accident rate to identify hazardous locations, 2) a roadway segment hazard report showing individual segments with figures on accident frequency, rate and severity, and rankings on these criteria, 3) total accidents by location (a printout describing characteristics of every accident that occurred over some time period), 4) computer-drawn collision diagrams, portraying paths and collision points of vehicles involved in accidents, and 5) a comparison printout of accident occurrences and enforcement activity, and other accident summaries designed for police to aid in traffic law enforcement and record keeping.

Winfrey, R. 1978. Concepts, principles and objectives of economic analysis applicable to traffic accidents. In Transportation Research Record no. 680, pp.40-53.

Winfrey distinguishes between "making an analysis of the transportation economy of alternative investments in highway improvements" and "pricing traffic accidents for other purposes or for viewpoints other than that of the economic community as a whole." He argues that economic decisions (decisions about investments) must be made based on the principles of economic analysis, including 1) evaluating all factors in market dollars, 2) including only those consequences of the investment that can be market priced, 3) expressing price factors in economic, not value dollars, and 4) including only factors related to the conservation of resources. In his opinion, economic factors are to be separated from human and social factors (pain, suffering, grief, value of a human life, etc.) by using cost benefit analysis on the former and cost-effectiveness analysis on the latter. Winfrey then outlines all of the factors that determine a person's economic productivity within the social system, and that determine his role as a consumer. He explains the wide range in determining the cost of an accident fatality as due to a lack of separation of economic and social costs. Treatment of the analysis of involvement from the viewpoint of the deceased's family, or from social aspects of society, is wrong, he says. The correct viewpoint is from that of the highway-user population, and the total economic costs occurring to them.

Winfrey does not address the questions of how the analyst is to compare the two different analyses—market and social (cost benefit and cost-effectiveness). How are they to be weighted? How is the final decision ultimately made? In the discussion section at the end of the report, William F. McFarland and J.B. Rollins of the Texas Transportation Institute, Texas A&M University attempt to attach a dollar value to the social and human factors, rather than separate them from market factors. For them, an economic analysis should include: 1) value of lost resources, 2) value of a person's life to others (future production less consumption) and 3) value of a person's life to himself. They estimate "about $257,000

in 1975 U.S. dollars . . . as the value the average motorist places on the value of his or her own life to himself or herself." Their discussion suggests that people who are not motorists (i.e., pedestrians) attribute different values to their own life. For example, the authors report "a study of choices between crossing a road directly or using a safer but slower subway crossing" showed the value of a human life to the person in this situation as $340,000 (1975 dollars). The authors do not discuss whether the perception of risk is different from actual risk.

Winfrey, R., and Zellner, C. 1971. Summary and evaluation of economic consequences of highway improvements. National Cooperative Highway Research Program Report 122.

This research brings together ten previous projects on various forms of economic analyses of highway improvements. The purpose is "to supply theory, methodology, and discussion of the analysis of the economics and consequences of highway improvements . . . in a way that will aid analysts in making studies and the decision makers in selecting highway improvement projects . . ."

Topics of discussion include: 1) systems analysis, 2) cost-benefit analysis, 3) road-user costs and benefits, 4) nonuser costs and benefits, 5) cost-effectiveness analysis, 6) engineering economy analysis, 7) program planning and budgeting systems, 8) management decisions and 9) evaluations. The reports are organized so that each topic builds on the preceding discussions. Thus, economic analysis, a form of systems analysis, is in chapter 3, while systems analysis is in chapter 2. Chapters 4 and 5 then present forms of economic analysis. These chapters are ordered "from concept and theory through analysis procedures to evaluation and the management decision." This is a very thorough discussion of the economics of highway improvements.

Zegeer, C.V. 1975. Identification of hazardous locations on city streets. Frankfort: Kentucky Bureau of Highways unclassified report no. 436. 108-ID-121-IDACC.

A new procedure for identifying hazardous city streets in the state of Kentucky is proposed. This is a complement to an earlier report,

co-edited by Zegeer, proposing a new procedure for identifying hazardous rural locations in Kentucky. Like the previous study, it uses a combination of measures of accident experience in arriving at the most hazardous locations.

The first cut at defining hazardous locations is made through use of the "number of accidents" measure. The second ranking is given by the "rate-quality control method," an accident-rate measure with critical values based on a statewide average of similar types of roads (arterial collectors or freeways) with similar volumes. Severity is not used in ranking locations because "severity in urban areas is usually determined by circumstances of the accident or particular traffic conditions."