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Priority Decisions in Risk Management for Local Governments

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ABSTRACT

Traffic-accident related liability suits against local governments have reached epidemic proportions in some parts of the nation. In spite of the obvious risk of liability and financial loss, many jurisdictions have been slow to take action. Cities and counties need to take positive actions to promote safety and minimize risk. Guidance is given for forming a Risk Management System (RMS) to fit local conditions. A literature review, summarized by topic, is included to allow rapid review by engineers, administrators, and elected officials. Information has been provided to help local governments take positive steps to make risk management an accepted component of day-to-day operations. An effective RMS begins with knowledgeable, committed leaders who exercise discretionary authority. A RMS is a planned program based on a strong accident reduction program and employees who are conscientious about carrying it out. It uses a priority technique to systematically eliminate trouble spots while making maximum use of available funding.

The following scenario was taken from a recent southeastern newspaper. Names and dates have been omitted because of the potential for legal proceedings against the city.

ZZZ police said today a malfunctioning traffic signal was a "possible contributing factor" that left a woman dead and another woman in very critical condition. Officer XXX said he checked the traffic signal and at the time of the accident, the light facing the victim's lane was burned out. In addition, the sun screen over the green signal facing her was missing, causing the "green light to appear to be illuminated", XXX said.

Of the light, XXX stated, "At that time of day the sun was setting in the west and was shining directly on the light. It could appear green." He added that the light was repaired around noon on the day after the accident.

Witnesses are prepared to testify that the signal malfunctioned frequently. If the city had reason to know of the defective signal and should have repaired it, they will probably pay substantial damages to the victims or victims' estates.

This is not an isolated case. The number of law suits related to traffic accidents is staggering, and it is still growing. Since the early 1970s many states have lost their immunity by either court mandate or legislative action (1) as shown by Figure 1. The trend toward increasing numbers of lawsuits (2) is illustrated in Figure 2. By 1980 the number of suits and claims reached almost 2,100 in California, Louisiana had well over 500, and almost all states were wondering how to curtail the problem.

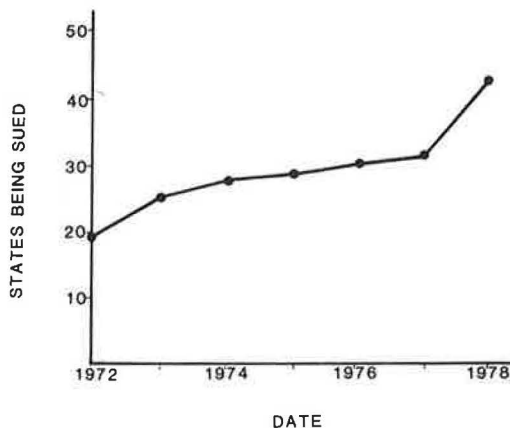


FIGURE 1 Status of sovereign immunity among the States (1).

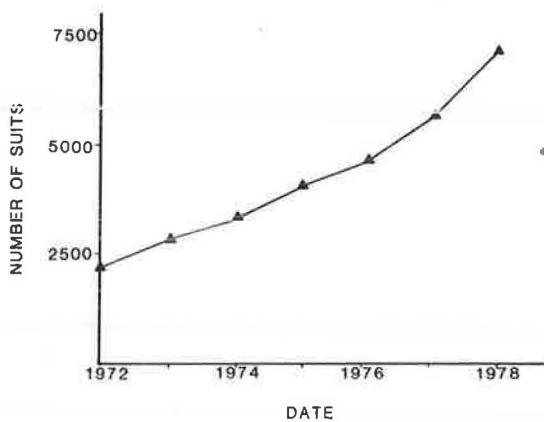


FIGURE 2 Number of traffic-accident related liability suits filed against governmental units in the United States (2).

Local governments have learned to fear these suits. Too many cases have been lost because of seemingly insignificant items that were overlooked. Many things cause accidents: bumps in the road, low shoulders, potholes, missing signs, malfunctioning signals, and so forth. Elected officials and administrators do not know where to start. The potential causes of accidents are numerous; consequently, entities maintain a high rate of exposure to liability suits.

In spite of the obvious risk of liability and the associated major financial losses, most jurisdictions have been slow to take action. There is a wealth of technical literature available to warn of the danger, to suggest potential remedies, and to guide administrators; yet local governments do not appear to be doing anything to improve the situation. The most apt comparison is that of an ostrich with its head buried in the sand. The problem will not go away on its own, and it is time to quit ignoring the issue.

Cities and counties need to take positive actions to minimize risk, not negative reactions to dodge liability after an accident occurs. Local jurisdictions can do this by making risk management an accepted component of day-to-day operations.

The Transportation Systems Management Association has been conducting a project to help achieve such a goal by identifying simple, direct ways to manage risk and reduce liability. A summary of existing techniques that have been made available to cities and counties is presented here. What remains is for the local governmental unit to take positive steps to establish a risk management system (RMS).

The local official must make many discretionary decisions while preparing a RMS and tailoring it to fit local conditions. It will probably be necessary to review large amounts of technical literature, to consult local law enforcement officials, engineers, attorneys, and others while forming the plan.

This paper contains a general section on terminology, a review of current RMS techniques, and a review of the literature related to the subject. It is organized to allow the reader to extract information that is applicable to the local RMS situation without having to master all of the technical aspects of the subject.

TERMINOLOGY AND CONCEPTS

A brief discussion of key terms and concepts is given to assist in understanding the problem and potential solutions.

Risk Management

There are two recognized risk management techniques: risk control by minimizing exposure and risk finance by purchasing insurance. The Insurance Company of North America has published an excellent summary of the topic (3), which points out the need to identify risks, measure them (frequency, severity, predictability, and probability), select a technique to manage them, and periodically evaluate the technique.

The same principles of insurance risk assessment can be applied to liability for automobile accidents. Many local entities have purchased insurance. This report will address the other half of risk management, risk control by minimizing exposure.

Negligence

Negligence is the failure to use reasonable care in dealing with others (4). Negligence in one form or another is usually the basis for tort liability cases. To win a judgment on the grounds of negligence (5), the plaintiff must prove

1. Defendant had a duty to use reasonable care toward plaintiff,
2. Defendant breached that duty (negligence),
3. Defendant's negligence was the proximate cause of plaintiff's injury,
4. Plaintiff was not guilty of contributory negligence that caused the injury, and
5. Plaintiff incurred damages as a result of defendant's negligence.

Traffic safety personnel should be interested in breaking the five-step chain of items. Removing all negligence (step two) would be the ideal way to prevent losses in court. The best defense to a lawsuit is a preventative defense, i.e., a positive approach to an RMS.

Sovereign Immunity

Sovereign immunity began in England, where the King would not allow a suit against himself. English courts afforded the same protection to those who governed with the King's authority. By 1812 the principle was in use in the United States and eventually became well established as follows (4):

1. No one can sue the government without the government's permission, and
2. Even if the government could be sued, it is not responsible for the acts of its employees.

By 1978 sovereign immunity was a valid defense in only 16 states (1). The courts had nullified or substantially weakened it in the other states. Since that time all but seven states have lost their immunity.

Governmental-Proprietary Distinction

British law distinguished between types of governmental actions. A municipal corporation could be held liable for actions that mainly benefited the proprietors or owners or a moneymaking venture. Actions that benefited all inhabitants of a state were termed governmental and did not produce liability. The general principle was accepted in the United States but is has not been easy to distinguish between the two types of actions in practice. Use of the governmental distinction as a defense appears to have waned.

Discretionary and Ministerial Acts

Decisions resulting from exercise of discretionary authority are immune to liability (6). Ministerial actions are not immune. The term discretionary function means the power and duty to make a choice among valid alternatives. The decision maker must consider alternatives and exercise independent judgment (7). No hard and fast rules dictate correct actions, but some actions are certainly incorrect (such as capricious action or abuse of discretion). A planning level decision is an example of the type of action the courts have generally held to be discretionary in nature.

Ministerial duties usually involve clearly defined tasks not permitting the exercise of discretion. Decisions made at the operational or maintenance level are usually viewed as ministerial by the courts.

Organizing improvement programs, assessing property values, selecting a highway route, designing highways, and carrying out these functions (in good faith) are examples of discretionary acts (8). On the other hand, routine repair and maintenance work, traffic operations, driving city vehicles, and similar actions are usually ministerial acts.

Summary of Terminology and Concepts

The terms and concepts in the previous paragraphs are those most useful in discussing the local entity liability problem. Many others could have been included; and where pertinent, these will be treated as topics in the literature review that follows.

LITERATURE REVIEW

Since the mid 1970s, numerous books, manuscripts, and articles have been written on the subject of automobile accidents and tort liability. Engineers and other leaders have not made full use of this material. Heavy use of legal jargon, the bewildering assortment of articles, and perhaps a fear of discovering a self-incriminating piece of information are a few reasons why such publications have not been more widely used.

The purpose of the literature review is to identify general principles, to point out the most appropriate references, and to provide an easy-to-read synopsis for practicing engineers, elected officials, and public administrators.

For those individuals desiring more information, the following five references are recommended: (a) Pivnik (4), (b) Pivnik et al. (5), (c) 3M Corp. (9), (d) NCHRP Research Results Digest Nos. 79, 80, 83, 95, 110, 121, 135, and 137 (10-17), and (e) Fitzpatrick et al. (18).

The remainder of this section contains summaries, by topic, of actions being used to reduce liability across the nation. Each topic title is followed by a listing of pertinent references. While reading the summaries, several points must be kept in mind:

1. These are the author's condensations of many pages of technical literature and do not have the same weight as statutes or guidelines issued by a body of technical professionals.

2. These are not to be considered as a euphoric solution to the liability problem. They are examples of things that appear to be working at various locations across the nation.

3. No local entity could adopt and carry out all of the items mentioned in the summary. Some items are counterproductive to other items.

4. In deciding which, if any, of the ideas to adopt, public entities should carefully consider

each item (or combination of items) in light of the local situation. Carefully considered decisions should be made at the planning level before beginning a program.

The items in the above list point out a dominant theme. There is no simple solution to the problem. The literature review was performed to assist responsible local officials in reducing traffic accidents and related liability exposure. Items appropriate to the local situation may be extracted for that purpose.

Accident Reduction Program (4,5,19-23)

The heart of any good RMS should be a program to reduce accidents, injuries, and fatalities. Realistically it must be recognized that total elimination of all traffic accidents is impossible, but it may be possible to decrease the number of collisions by altering the roadway environment. Specifically emphasis should be placed on improving situations and locations that have demonstrated high risk.

The accident reduction program might proceed in the following manner:

1. Ensure that local police know why accident data is needed and that accident reports are correctly filled out,
2. Prepare a high-accident situation or location list,
3. Look for patterns of accident types and causes for each situation or site,
4. Develop alternative corrective measures for each situation or site,
5. For each location, determine the most cost-effective treatment,
6. Develop a priority list among competing sites and program corrective actions based on the list,
7. Erect warning signs at sites that cannot immediately be repaired,
8. Review projects after completion and reassess the priority list and the need for warning at sites not yet completed, and
9. Keep good records of all portions of the program.

Obviously there are many details that might be added to the above list to specify the manner in which the individual tasks are performed. The details vary with city size, degree of hazard, and so forth.

High accident locations can be identified by reviewing accident data. In the simplest case, police reports may be examined and accident locations marked with pins on a city map. On the other hand, larger cities may have automated records of accidents and may use computers to determine high accident locations. Frequently the state department of transportation prepares lists of high accident locations for local jurisdictions.

Once the high-accident situations or locations are known, patterns of accidents should be identified and matched to their cause if possible. This may be as simple as comparing a few accident reports for a site, or it may require using supporting data (for example, collision diagram, condition diagram, summary of key facts, and field observations) for complex locations. Procedures for making these studies are well documented (18,21,23) and will not be repeated here. Likewise processes for matching corrective measures to accident patterns and for choosing the most cost-effective improvements are well documented in the same references. Each local entity should develop a program for improvements based on the local situation.

In addition to examining individual accident lo-

cations, it may be prudent to develop programs to remedy systemwide deficiencies. For example, railroad crossings, roadside obstacles, pavement markings, and slick pavement may be found to be local problems. If so, special studies may be directed toward them. A concerned, aggressive attitude on the part of local officials will help. Discretionary decisions must be made to establish a productive safety program and dedicated employees are needed to carry it out.

Example of Risk Management Approach (24-26)

The Road Commission of Oakland County, Michigan, developed a RMS program that might serve as a useful model for large local organizations. Management was handled by three levels of committees:

1. Executive Committee (chief engineer, general counsel, assistant director, RMS coordinator, and so forth) set policy and general procedures.
2. Coordinating Committee (department heads and RMS coordinator) reviewed procedures, developed new programs, and made recommendations.
3. Employee Committee (hourly and supervisory personnel) reviewed the road safety program, identified problems, and made recommendations. Field employees were the key to identifying problems but frequently did not do so because of frustration when previously noted problems went uncorrected.

The Oakland program included training for all employees in road-hazard reporting, analysis of accident-related claims, road inspection programs, planning and programming improvements, and evaluating completed improvements.

Employee involvement was emphasized. A few of the key aspects of the program were (a) employee involvement in decision making, (b) encouraging employees to take more responsibility for failures in the system, (c) employee participation in repeated educational and training programs, and (d) continued reinforcement from top management.

Notice of a Defect (4,5,16)

Once a public entity has notice of a defect, a duty arises to repair it or to warn the public until it can be repaired. Notice can be obtained in three ways:

Actual notice: This is the simplest form, such as a complaint call to city hall. It is important that the notice be properly recorded and that an appropriate response be taken. A planned program of stand-by crews and spare parts may be necessary for calls after normal work hours.

Constructive notice: If a defect exists for an unreasonable length of time, the agency should have discovered it. Police and other public employees are considered agents of the local government; and if they observe defects (or should have observed them), constructive notice may have occurred. Educational programs become important in making employees aware of the need to notice and report defects.

Notice by own actions: If the entity's own actions cause the defect, notice is not required. For example, if a poor repair job leaves a defect, then notice of the defect exists already.

A separate section of this paper has been devoted to notice of defects to emphasize that notice does not have to be actual or direct and that the local government may be liable for failure to act after receiving notice. All public employees should be

trained to look for defects and to report them promptly. Reporting forms should be provided to all employees. Provisions should be made for immediate response and for warning the public.

Action on Complaints (4,5,27)

A procedure should be established for receiving complaints, and one person (or agency) should be designated to receive and handle them. When a notice of a defect is received, this person should:

1. Record key information such as the location, type of complaint, name, address and phone number of the caller, time, and date.
2. Determine the severity of the defect and the appropriate response action. If the nature of the complaint is
 - Routine, initiate a work order for repair.
 - Critical, call for a maintenance crew to investigate and repair the problem.
 - Questionable or unknown, call for (or perform) a field visit to confirm the nature of the problem.
3. If needed, call for police control of dangerous sites and instruct maintenance crews on the use of temporary control devices.
4. Maintain records of all complaints and response actions. Periodically review these files to ensure that corrective actions have been completed and to look for and analyze patterns.

In addition to having experience and good judgment, the person handling complaints, and a sufficient number of backup personnel, should receive detailed training.

Maintenance Records (4,5,27,28)

One of the most important aspects of a RMS is a complete and accurate maintenance record keeping system. Standard forms should be developed for acquiring and storing pertinent information. Three areas where record keeping is important are summarized below: routine maintenance, response to complaints, and gathering information on defects.

All entities should perform routine preventative maintenance. Checklists should include all items to be inspected at each site. The date and remarks by work crews should be recorded, and the forms should be filed for future reference.

The following items might be among the records of response to complaint calls:

- Time complaint was made, and by whom,
- Description of complaint,
- Time it was received by dispatcher,
- Time it was given to repair crew,
- Time crew arrived on scene,
- Time repair was completed,
- Description of defect, and
- Description of repair and materials used.

It is important to develop and use standard forms for both the dispatcher and work crew at the site.

The third record keeping area requires a simple form to be used for reporting defects. All employees should have access to the forms while on the job; for example, police cruisers and all transportation department vehicles should have a supply. Employees should look for and report defects noted on trips to and from work.

The use of a record system encourages employees to respond to all complaints, to be attentive to detail, and to be thorough in taking action. Managers will benefit by periodically reviewing rec-

ords. In addition, the records can be important in court to indicate that the local agency properly responded to notice of a defect. The records may be a two-edged sword in court, however, if they show that the local agency failed to follow established standards and let a defect remain in place.

Inventory of Traffic Control Devices (5,29-32)

An inventory is a useful way to minimize liability suits. It should locate and identify control devices, note those that do not conform with the standards, find devices that are unnecessary and should be removed, and note those that need replacing because of age or wear. This inventory can serve as the basis for a continuing maintenance and replacement program. Where defective devices are noted, the public must be warned until the defect can be repaired. The warning should not be considered as a permanent substitute for remedial action.

The inventory may be conducted by manual or photologging techniques. The data base may be automated, making it possible to sift large volumes of control devices and produce reports of maintenance and replacement requirements. It is helpful to place notices on the back of signs that clearly state the penalty for theft or possession. A permanent identification number on the back of signs simplifies prosecution and makes it easier to determine the location for replacement.

The inventory should be kept current. The local entity should attempt to find and replace defective devices before constructive notice occurs. As old devices are replaced or new devices installed, records should be changed. As defective devices are identified, the inventory should be coded to indicate the need for correction.

An up-to-date inventory is highly recommended as a way to minimize exposure to traffic accident liability suits. One method for keeping an inventory current is to divide the city into twelve (or six) zones. A zone per month is inventoried by the sign crew after the completion of each day's routine installations and repairs. At the end of the month, field maps (with inventory information) are turned over to the office staff for copying and filing. In this way the inventory is constantly kept up to date at a minimum cost.

Operational Reviews (4,5)

Public entities are usually immune to liability suits resulting from the design of a highway, where the design is prepared in conformity with established current standards and approved in advance by a public authority. This immunity, however, does not last forever; a change in conditions can demonstrate the need for additional or remedial action. Also, using outmoded standards can lead to liability.

The purpose of the operational review is to check basic design and traffic control elements. If changes in conditions produce a dangerous situation, the local entity should investigate the hazard. Where modifications could produce substantial improvements, they should be programmed. It may be necessary to modify or improve design standards if operational reviews indicate that another design would provide a safer condition.

Operational reviews are used in several situations. First, a review should be conducted after completion of construction (opening day) to determine if the design is functioning properly and to look for unexpected adverse effects. Another review should be performed after traffic has had an oppor-

tunity to stabilize. The third type of operational review is a periodic examination of sample sites throughout the jurisdiction. Representative sites should be selected based on accident history, complaints, geographic balance, and other criteria.

A camera, a tape recorder, and a checklist are all valuable tools for performing reviews. It is helpful to develop a standard series of items to check in the field and to use the list at every site to ensure uniformity.

Educational Programs (4,33)

The first aspect of a good educational program is to get public support for the local accident reduction program, which should be perceived as a high priority item. The consequences of sign vandalism, techniques for reporting defective devices, and the cost of traffic law suits are examples of information that might be kept before the public.

The second part of the educational program might include local government employees. Because the courts consider them agents of the transportation department, they need to be aware of their role as observers and reporters of defects. They might be informed of how to complete the reporting form and of the importance of prompt reporting.

Employees of the local transportation agency need to be aware of the total safety effort. An accident reduction program or a RMS will not be fully successful until transportation employees understand it and adopt it as their own. They must feel responsible, involved, and useful in the program. Specific technical training will be needed for employees involved directly with the RMS such as the person handling complaint calls. Maintenance personnel must learn to examine all functions of the traffic control device, not just repair the specific portion reported as defective.

The educational program must include both initial and follow-up training. New employees should complete a required training program and existing employees should be kept up to date. Brief (10 to 20 minute) training sessions on a frequent basis have proven to be more effective than a longer program at less frequent intervals.

Statutes (28,34-36)

The loss of sovereign immunity and the increase in governmental liability have occurred in stages. There is no clear national picture because the courts have taken different approaches from state to state. In response the states have tried several techniques to control liability through tort claims acts, establishing claims commissions, ceilings on amount reimbursed, and so forth.

Because there is no uniform method for approaching the liability question, local entities would benefit from a comprehensive examination of the legal constraints in their jurisdiction:

1. Review local statutes and policies for obvious weaknesses. Include items such as vandalism of control devices, whether the contractor has complete liability for the work zone control, whether local ordinances conform with state codes, and investigation and reporting of accidents.

2. Review state codes and policies. Organizations such as the State League of Municipalities, Association of County Commissioners, and other professional or technical groups would be excellent forums to discuss common problems and propose legislation.

The American Insurance Association and the All-Industry Research Advisory Council have prepared recommendations for state legislative action. Arizona and California have adopted systems that other states might follow (34,36):

1. Limits for local government liability,
2. A claims review commission (90-day limit to file),
3. Persons may sue if claims are denied,
4. RMS manager may negotiate claim or carry it to court, and
5. Elected body must approve prior to payment.

Standards (4,5,15,29,37,38)

One way to minimize risk of liability is to operate within accepted standards and guidelines. For design, this means following the Manual on Uniform Traffic Control Devices (MUTCD) (29). In a liability suit, the MUTCD may be introduced as defense to show that the entity took reasonable action. Merely going by the book, however, does not guarantee freedom from liability. The courts have held that on occasion action beyond the manual is required to create "a reasonably safe condition." For example, a city using MUTCD signal clearance intervals lost a suit because they failed to consider a heavy volume of high-speed trucks that might need a longer clearance.

The minimum standard of the MUTCD may need to be supplemented to fit a local situation. There appears to be no absolute way to avoid all liability; however, a comprehensive approach, such as the following, for each locality would alleviate most of the problems.

1. Perform sound research to establish standards,
2. Require standards to be a minimum base,
3. Inspect to ensure compliance with standards, and
4. Have a continuing maintenance program to ensure speedy rehabilitation of defective conditions.

In addition to the design area, agencies may need to give serious consideration to construction, maintenance, and other areas. Alleged negligence in maintenance practice is frequently cited in liability cases. Adopting a realistic standard, and adhering to it, will improve service to the public while curtailing liability suits.

A word of warning is in order. Adopting a standard is a good way to define the performance level for the local entity, but failure to adhere to adopted standards or guidelines constitutes negligence. Therefore, the standards should be kept current and be obtainable.

Insurance (4,5,10,22,28,39,40)

Courts usually hold that a governmental body waives immunity (up to the insurance limit) if it purchases insurance. On the other hand, if sovereign immunity is not a valid defense, purchase of insurance is a prudent action. Many cities and counties now make it a standard practice to acquire liability insurance. Municipal insurance covers not only traffic accident suits but other liability areas as well. Larger cities may consider self-insurance instead of purchased insurance.

Contractors hired by local entities must carry insurance during construction and for 60 days thereafter. The contractor should be required to deliver a hold harmless agreement, post bond, and assume all costs, expenses, and attorney's fees associated with

claims against the contract, whether against the contractor, the public entity, or other parties.

Individuals may be liable for their actions and may be taken to court. Therefore persons in leadership roles should ensure that they are covered by the public entity's insurance or should purchase professional malpractice insurance. Goddard (39) in explaining insurance for British highway authorities, points out the need for a system of inspection and repair, keeping proper and accurate records of routine repair, keeping good records of complaints and responses, and knowing the difference between a complaint call for routine maintenance and a call involving eminent danger. He suggests three guidelines for potential claims:

1. Never admit liability to anyone, especially the claimant.
2. Never invite or suggest claims.
3. Always complete complaint forms fully and accurately.

Traffic Control in Work Zones (4,27,29,41-44)

Work zones are of particular concern for traffic control because they are frequently at variance with driver's expectations and they require adequate warnings and safeguards.

This topic has received much emphasis in the last few years. The FHWA has prepared a training course (29), and some states have generated reports (41) on the subject. The extensive treatment covers urban and rural areas, contract construction, routine maintenance, lane closures, flagging, moving vehicles, and many other activities. One portion of the MUTCD sets out responsibilities, principles, training, signs, markings, channelizing devices and barricades, lighting devices, and planning for and scheduling traffic control in work zones; in addition it gives examples of proper use of devices.

There is no substitute for understanding construction zone control principles. Local entities will need to provide continuing training for their construction and maintenance personnel and to supplement the MUTCD if necessary to provide warning and protection for both workers and approaching vehicles. They must also make certain that contractors are responsible for control in work zones, as covered in other portions of this report. Contractors, public utilities, and private developers should be required to obtain a permit for any street operation. Failure to do so can be construed as approval and leave the city open to suits.

At the present time, traffic control is costing 15 percent to 20 percent of the contract price for road construction in north Alabama. This high cost is a measure of the emphasis being placed on work zone safety. Many individuals feel that a condition of overprotection exists and that construction money is being diverted needlessly. There are times when this indeed seems to be the case; however, individuals should guard against altering the MUTCD prescribed control devices without due reason.

Selected Topics

A number of items appear frequently in liability suits on a national basis. Each of these topics has been discussed in detail elsewhere, and the reader may consult the reference list for specific guidance on any particular subject. Example topics include but are not limited to

- Malfunctioning signals;
- Lack of adequate signs, missing signs, improper signs;

- Trees and utility poles adjacent to the pavement;
- Improper or poorly maintained guardrails;
- Low shoulders, pavement drop-offs, and pot holes;
- Restricted sight distance;
- Skid reduction;
- Snow and ice control; and
- Rocks or debris on the roadway.

These examples are illustrative, and the reader should not feel restricted in developing other categories to investigate. These topics have been listed to draw attention to potential areas of concern as evidenced by liability suits. Local officials may wish to expand these topics while preparing a RMS to address the local situation.

MONITORING CHANGES IN GOVERNMENTAL LIABILITY FOR TRAFFIC ACCIDENTS

A continuing difficulty for those in responsible positions in transportation agencies is to keep up with changing interpretations and rulings about traffic accident liability. Court rulings, publication of administration regulations, new developments in traffic safety research, and scholarly meetings of professional technical organizations all represent substantial impact on policies of local transportation agencies.

Eck and Malaeb have prepared an excellent guide to law libraries (45). For example, they explain how to use court reports, case digests, case finders, and legal periodical indexes. Their article is an excellent way to become familiar with legal literature.

A publication that might help keep up with changes in local governmental traffic accident liability is the Law Reporter, published by the American Trial Lawyer Association. One section is entitled Government and contains a few traffic cases mixed with other suits. A periodic review of this source might be helpful.

A clearinghouse for liability information would be desirable for traffic engineers. There are none at present, but the Transafety Reporter has just been introduced and has promise. It will be a monthly newsletter for attorneys, highway departments, and cities. It is intended to explain things such as what constitutes a hazard, what can be done to abate the problem, and whether there are easy remedies. Research, litigation, and technical reports will be summarized in monthly issues for a subscription of about \$150 a year. The parent organization, Transsafety, will also issue periodic special reports on specific topics. The Transafety Reporter could be the single most important periodical for those local entities interested in reducing liability exposure.

At one time, the Institute of Transportation Engineers was considering a monthly column in the ITE Journal to discuss liability cases as they occurred. Apparently, there was a problem finding someone with enough time to prepare the monthly article.

If a clearinghouse is to be established, ITE, TRB, NCHRP, or other organizations are available. It is a matter of determining whether there are enough interested local officials, administrators, and traffic engineers. If there are, someone must take the initiative and request that the clearinghouse be established.

SUMMARY

This paper has outlined actions that are currently being taken across the nation to reduce local governmental liability due to traffic accidents. It has explained that positive, preventative actions are preferred to evasive reactions in negative situations. It has documented Risk Management System (RMS) techniques that have been successful for local jurisdictions.

Terminology was discussed, 46 technical articles were reviewed, and pertinent periodicals were identified. The topical nature of the report allows rapid review by local officials. It is easy to locate and extract information pertinent to the local situation.

A good RMS begins with knowledgeable, committed leaders who exercise discretionary authority. A RMS is a planned program based on a strong accident reduction program and employees who are conscientious about carrying it out. It uses a priority technique to systematically eliminate trouble spots while making maximum use of available funding. In summary, this report provides the tools to guide governmental leaders in establishing RMSs.

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