Perspectives on Accident Reconstruction and Liability for Kansas Public Works Employees and Elected Officials

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Municipal Liability for Vehicular Accidents
A Summary of Kansas Case Law

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The search for deep-pocket defendants is a time-honored tradition in our legal system. A recent trend has seen litigants in vehicular collisions claiming fault on the governmental body having jurisdiction over the accident site. Such claims against the municipality generally fall into two categories: improper or removed signage; or negligent design, maintenance or inspection of roads and intersections. The most common accident locations are construction sites, busy intersections and railroad crossings.

The principal defense asserted by municipalities to such suits is the Kansas Tort Claims Act. The Act contains five types of immunity that may apply to vehicular claims: discretionary, design, inspection, natural condition and sign removal immunities. In particular, discretionary immunity has been hotly contested in the Kansas courts.

A second defense involves lack of proximate cause.

Although municipalities have been fairly successful in defending vehicular suits, the claims keep coming, and the law is still uncertain in many areas. This article explores the types of claims brought, the immunities available and the status of the case law in Kansas. Full citations of statutes and cases appear at the end of the article.

Tort Claims Act Immunity

The Kansas Tort Claims Act provides for liability of governmental entities under the same theories as recognized at common law. However, specific exceptions from liability exist. In particular, five provisions of the Act may produce municipal immunity in a vehicular accident claim. The burden rests firmly on the governmental entity to fit within a specific provision. The five types of immunity grant governmental entities and their employees immunity for damages in claims resulting from these situations, respectively:

**Discretionary Function Immunity:** The exercise or performance or the failure to exercise or perform a discretionary function or duty on the part of a governmental entity or employee, whether or not the discretion is abused and regardless of the level of discretion involved.

**Design Immunity:** The plan or design for the construction of or an improvement to public property, either in its original construction or any improvements thereto, if the plan or design is approved in advance of the construction or improvement by the governing body of the governmental entity or some other body or employee exercising discretionary authority to give such approval and if the plan or design was prepared in conformity with the generally recognized and prevailing standards in existence at the time such plan or design was prepared.
**Inspection Immunity:** The failure to make an inspection, or making an inadequate or negligent inspection, of any property other than the property of the governmental entity, to determine whether the property complies with or violates any law or regulation or contains a hazard to public health or safety.

**Natural Condition Immunity:** Snow or ice conditions or other temporary or natural conditions of any publicway or other public place due to weather conditions, unless the condition is affirmatively caused by the negligent act of the governmental entity.

**Sign Malfunction or Removal Immunity:** The malfunction, destruction or unauthorized removal of any traffic or road sign, signal or warning device unless it is not corrected by the governmental entity responsible within a reasonable time after actual or constructive notice of such malfunction, destruction or removal. Nothing herein shall give rise to liability arising from the act or omission of any governmental entity in placing or removing any of the above signs, signals or warning devices when such placement or removal is the result of a discretionary act of the governmental entity.

**Signage and the MUTCD**

According to the experts commonly utilized by plaintiffs' attorneys, every traffic sign in your city is the wrong one, or you don't have enough signage, or you have distracted motorists by having too many signs. Consequently, a multiplicity of signage facts are alleged against municipalities, the most common involving stop signs, turn signs, speed advisories and construction notices.

For instance, a recent case on the issue involved an accident in which a motorcyclist sustained serious head injuries after turning left in front of a van. The plaintiff sued the city, alleging negligence in failing to install a protected left-turn arrow at the intersection.

As discussed in the cases below, signage cases against governmental entities typically involves issues of discretionary immunity, the *Manual on Uniform Traffic Control Devices (MUTCD)* and expert testimony. The Federal Highway Administration publishes, and periodically revises, the MUTCD. It contains standards on nearly every type and use of traffic sign. The manual has long served as the "bible" of signage, and has been adopted officially as the controlling standard in most states, including Kansas.

The reported cases in Kansas give insight into the interplay between discretionary immunity and expert testimony on the provisions of the MUTCD.

In the 1982 case *Carpenter v. Johnson*, the plaintiff alleged negligence on the part of a county and KDOT for failure to erect a curve sign at the accident location. Such signage was discussed but not mandated in the MUTCD. The court held that a factual issue remained for trial on whether the signage decision was one of "discretion" or one of "professional judgment."

Two years later, in *Toumberlin v. Haas*, directed verdict was granted in favor of the governmental entity in a stop-sign case because the plaintiff failed to retain an expert to testify that the MUTCD or other engineering standard required the signage in question.
*Finkbiner v. Clay County*, 1986, involved an allegation that a dead-end sign would have prevented the accident. Summary judgment rendered in favor of the county was reversed, because the plaintiff's expert testified that the signage was warranted under MUTCD principles.

In *Hustey v. Cawley County*, 1990, the issue was the placement and maintenance of rumble strips at an intersection. The court held that the county had discretionary immunity regarding the original placement of the rumble strips. However, once they had been installed, the county had the non-discretionary duty to maintain the warnings properly. Thus, the failure to maintain signs and other warnings properly can lead to liability.

In *Collins v. Douglas County*, 1991, the issue was whether the county had a duty to erect a sign warning not to dive off a bridge into a shallow creek. The court granted summary judgment to the governmental entity because plaintiff failed to submit proper evidence to refute defendant's contention that no specific guidelines or standards addressed the issue.

Lastly, in *Force v. City of Lawrence*, the 1992 case mentioned above, the Court of Appeals held for the city on a left-turn-arrow case because the MUTCD established no duty for the placement of such a signal.

No case to date has addressed whether strong engineering testimony from reliable sources outside the MUTCD would defeat discretionary immunity.

**Malfunctioning or Removed Signs**

It is not uncommon for stop signs to be knocked down by vandals, motorists, or age, or for street lights to malfunction. It is also not uncommon for accidents to occur as a result. The Tort Claims Act grants immunity if the municipality corrects the problem "within a reasonable time after actual or constructive notice." Some plaintiff's attorneys have been creative in raising fact issues on what constitutes "reasonable time" and "constructive notice." It is thus important for a city to have a program to discover downed signs and lights and to repair them in prompt fashion.

**Railroad Crossing Cases**

The collision of a railroad engine with a passenger car typically results in catastrophic injury to the motorist. In fact, the motorist is 11 times more likely to die in a collision involving a train than in other highway collisions. Kansas ranks third among the states in miles of main and branch line track. Consequently, Kansas municipalities have considerable potential exposure to railroad crossing cases, which represent serious suits. The defendants usually include the railroad, KDOT and the local governing authority. The relationships among these defendants, as well as the applicable legal issues, are very complex. This article is intended to summarize only the basic concerns of the municipal defendant.

The key allegation in railroad-crossing cases is that additional crossing protection should have been installed, including "passive" and "active" warnings. Passive warnings may include stop signs, for which the local authority usually is principally responsible. The MUTCD contains a section discussing stop signs at railroad crossings. Crossbucks are another form of passive warning discussed in the MUTCD; these are the responsibility of the railroad.
Active warning signs include flashing lights and gates. These are not primarily the responsibility of the local authority. Such devices are typically installed with federal aid funds under a priority system administered by KDOT. However, plaintiffs sometimes create a variety of theories in an effort to impose liability on local governments for active warning issues.

Other allegations against municipalities at crossings include: the approach is dangerously steep; the roadway is too narrow or bumpy; sight obstructions are present; or the crossing should have been closed altogether. A variety of Kansas statutes and standards are applicable to such allegations.

As previously stated, railroad crossing issues are complex. Therefore, a municipality may want to retain an expert traffic engineer to study the crossings within its jurisdiction. It should be kept in mind that such studies may be protected under 23 U.S.C. Section 409, and thus undiscoverable in litigation.

**Design and Maintenance Cases**

The most common design issues in vehicular accident cases involve bridges, curbs, shoulders and intersections. A classic example of a "design and maintenance" issue is a drop-off claim, involving an accident in which a motorist loses control when the vehicle's wheels drop into a sunken shoulder.

The first factor in establishing design immunity is showing that the design met the recognized standards "in existence at the time such plan was prepared." Thus, if a bridge was built in 1960, the municipal defendant must locate the applicable standards for that era to determine compliance. If the design meets 1960 criteria, the municipality is immune, even though the bridge may not meet current standards. A governmental body cannot be expected to redesign bridges and other structures each time the standards change.

Although no reported law exists, the same philosophy would probably not be applied to signage cases. Because signs do not represent a substantial cost burden to municipalities, a court would likely rule that new signage is required when MUTCD signage standards are amended.

The second factor in establishing design immunity is showing that the plan was approved in advance by the proper authority. This could mean the city council or another entity having jurisdiction over the project (such as KDOT or the Federal Highway Commission). Often, the proper authority is the governmental entity who had jurisdiction over the property prior to annexation by the city. It would appear that a city can "borrow" the original design and approval discretion of that governmental entity.

As mentioned previously, a governmental entity is not likely to receive immunity for pure maintenance activities, even when the original installation was discretionary. Therefore, plaintiffs may assert that their cases involve maintenance facts in an attempt to circumvent design or signage immunity.
Natural Conditions
Kansas law grants governmental bodies immunity for vehicular accidents occurring as a result of natural conditions on the public road (unless the condition is caused by the negligent act of the municipality). For instance, in the 1987 case *Taylor v. Reno County*, the plaintiff unsuccessfully brought suit for injuries caused by the city's failure to clear ice accumulation on a public bridge after a storm. Conversely, in *Draskowitch v. City of Kansas City*, the court held in 1988 that the city's failure to warn drivers about accumulated ice from a broken city water main was an affirmative act caused by the governmental entity; immunity did not apply.

Inspection of Property
Although a municipality may be liable for failure to inspect its own property, Kansas law grants immunity for the inspection of the property of others.

This provision often comes into play in cases involving safety inspections by city officials. For instance, in 1964 the case *Siple v. City of Topeka* arose when a tree fell and damaged a car. The city was held immune, despite prior city inspections of the tree, because the tree was on private rather than city property.

The provision also arises in railroad crossing cases, when plaintiffs allege that the city inspected (but failed to cure) improper signage or obstructions on the property of the railroad or the state. Immunity applies to such allegations. The 1988 case *Sisk v. National Railroad Passenger Corp.* dealt with failure to remove sight obstructions on the railroad right-of-way.

High-Speed Pursuits
Cases arise involving vehicular collisions that occur while law enforcement officers are pursuing a violator of the law. The first applicable immunity (outside the Tort Claims Act) is K.S.A. Section 8-1506, which allows officers to ignore traffic laws when using both audible and visual signals (lights and sirens). However, the officer might still be liable for the consequences of “reckless disregard for the safety of others.”

The leading case on this source of immunity is *Thorton v. Shore*. In that 1983 wrongful death case, the plaintiff brought claims against the driver of the car being pursued, as well as the City of Lawrence and its police officer. In upholding summary judgment, the court noted that in any emergency run the risk of injury to innocent persons is inherent. However, as a matter of public policy, the benefit in allowing such pursuits is greater than the risk. Thus, a law enforcement agency, if using sirens and lights, will be immune except in the most egregious of pursuits.

Vehicular collisions during high-speed pursuits sometimes give rise to challenges because of the decision to pursue in the first place. Such decisions would normally involve discretionary immunity, unless the law enforcement manual dictates against the pursuit. For instance, if the city’s procedure manual specifically states that an officer can pursue only for a felony, the decision to chase a speeder might waive this immunity.
Proximate Cause

Governmental entities have been successful in some vehicular cases, without benefit of Tort Claims Act immunity, under principles of proximate cause. A key case from 1987 is *Baker v. City of Garden City*, in which the plaintiff blamed a serious injury on improper design and signage at the intersection where the vehicular collision occurred. In upholding directed verdict granted to the city and to KDOT, the Supreme Court held:

The trial court, while finding negligence in the improper installation of the temporary signals, also found that plaintiff had failed to show any causal connection between that negligence and the injuries and damage suffered by plaintiff. The plaintiff had the burden of proving that the negligence of the city and/or KDOT caused the damage suffered by the plaintiff...

We concur with the trial court that there was insufficient evidence to establish that the timing and/or improper installation of the temporary traffic signals caused Tyson's failure to stop. It would be sheer speculation to conclude that some defect in the installation and function of the temporary signal caused Tyson to fail to see the signal in time to stop his vehicle and avoid the crash. There were at least three signs warning approaching traffic of a reduced speed zone and traffic controls ahead. Why Tyson ignored them will probably never be known. There is nothing in the record to indicate there would have been any different result if the signals had been properly installed and if the yellow sequence on the signal had been longer. It is indeed unfortunate that the plaintiff has suffered severe injury and damage, but that alone does not justify a recovery from these defendants.

Conclusion

The number of vehicular claims against municipalities has been increasing for several years. In defending such suits, the city should look to the available immunities under the Tort Claims Act and to the issue of proximate cause. From these two legal sources, summary judgment or directed verdict is often available.

If a dispositive defense is not granted, the city should retain an expert on design, maintenance, or signage. It also should build its case against the driver defendant, whose negligence is typically the actual cause of the collision. In many cases, juries quickly recognize that the presence of the governmental entity as defendant is simply the other litigant's search for a deep pocket.

There is much that a city can do to minimize the risk of such suits. A city attorney who knows the law, working with a traffic engineer who knows the MUTCD, make a strong preventive team. At the direction of these two city officials, traffic and safety studies can be conducted and maintenance systems can be developed that will keep litigation to a minimum.
A Summary of Kansas Statutes and Pertinent Cases

23 U.S.C. Section 409
Traffic studies not discoverable in litigation under certain circumstances.

Establishes circumstances under which governmental entities have immunity to liability.

Section 75-6102 Defines "municipality," "governmental entity" and "employee" (broadly in each case).

Section 75-6104(d) Establishes discretionary function immunity.

Section 75-6104(f) Establishes sign malfunction or removal immunity.

Section 75-6104(j) Establishes inspection immunity.

Section 75-6104(k) Establishes natural condition immunity.

Section 75-6104(l) Establishes design immunity.

K.S.A. Section 8-1506 Law enforcement officers may ignore traffic laws when using both audible and visual signals.

K.S.A. Section 8-2003 Establishes the Manual on Uniform Traffic Control Devices (Federal Highway Administration) as the controlling standard in Kansas.

The following citations fully identify the cases discussed in this article.

Immunity

Proximate Cause

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Accident Investigations

An agency may wish to conduct its own investigation of an accident because police reports fulfill a different purpose and may not provide the information that an agency needs to alleviate potential problems. Further, certain corrective actions in the area of traffic control may be required before the agency has had time to review the police report. Also, an accident may establish constructive notice of a potential problem or defect, particularly if it is one of a series of similar accidents occurring at the same location. Finally, investigation enables the agency to feed back the appropriate information to the designers and to have its own personnel testify from firsthand knowledge.

Public works officials sometimes fear that by making an improvement after an accident, they are actually admitting that there was a defect. Public policy requires that defects be eliminated as soon as they are detected. Therefore, if an agency remedies a situation on the basis of an accident investigation, the law does not allow the remedy to be used as evidence that there was a defect in a piece of public property.

When should an agency conduct an investigation? An investigation should be conducted if:

- The engineer concludes after an accident that certain remedial work will prevent a future accident;
- There was a notification by the investigating police department of an accident involving a condition on the road system that requires an engineering evaluation;
- The legal authority representing the public agency asks that it be done.

If the investigation is done at the defending attorney’s request, the accident investigation should contain a disclaimer, as follows: “The report is being made in accordance with the request of and for the confidential use by (legal authority or attorney) for the purpose of defending (agency’s name) and its employees.” This helps identify the report as an attorney work product. Under normal circumstances, an attorney work product cannot be discovered and used by the other side in the preparation of their case.

Information Required

Information typically obtained by the police officer and included in the police report will be the identification of the vehicles involved; their operators, their occupants and their owners; names and addresses of witnesses; the paths and final positions of the vehicles; skid marks and the position of accident-related debris; weather conditions; posted speed; and the existence of any traffic control devices.

To build a proper defense, other information is needed. The agency’s attorney needs to know the type and condition of the pavement; the type and location of all traffic control devices including their height, condition, reflectivity and lateral placement; the pavement markings that are utilized; the type and location of traffic signal displays and the controller; and other hardware and appurtenances present (for example, guardrail or edge-of-pavement delineators). The agency’s attorney may also be interested in the grades, cross slopes, dropoffs, super elevation and dimensions of the roadway, shoulders and median.
The engineer should consider conducting workshops with police investigators who prepare the accident reports in an attempt to obtain objective comments on the accident report and provide additional information that is required to identify and eventually solve problems on the street and road system. Many times, the police department is not as objective as it should be. For example, in the accident report, the police may relate conflicting statements made by the drivers that put the traffic control devices in a bad light. Most drivers involved in an accident tend to claim they had the green. The police report, under this circumstance, will say, "Both drivers claim they had a green indication." This could indicate a serious defect in the traffic control device. But if the police officer walks around the intersection to see whether or not a defect exists, the report might then say, "Drivers report they both have the green indication; however, upon examination of the intersection, I found the traffic signals to be functioning in an appropriate and safe manner." This is a legitimate comment for the police officer to make in the report.

When conducting its investigation, it may be appropriate for the agency to measure carefully the skid marks, the travel paths of vehicles, rollovers, etc. These measurements can be utilized by an accident reconstructionist to determine the speeds. A reconstruction of the accident may indicate that the driver, in some way, contributed to his own injuries (contributory negligence). This may result either in dismissal of the suit or in the award of a smaller judgment to the injured parties.

**Photographs**

When the agency is conducting its own investigation of an accident scene, it should take photographs of the accident site, damage to the facility and, if possible, the vehicles involved. Most police photographers show the intersection where the accident occurred. But other photographs are pertinent to a proper investigative report and a proper defense. These are, generally, photographs of upstream signs, which advise motorists of conditions ahead—warning signs, directional signs, STOP AHEAD signs, etc. These photographs show that the motorists have been properly warned of impending dangers, hazards, or traffic control devices and that the warning is commensurate with what the driver will face. Photographs should be taken as soon as possible after the notification of an accident, particularly in work zones where conditions change very quickly.

Close-up photographs are also useful. Close-ups of roadway gouge marks, skid marks, debris location, etc., help in accident reconstruction.

Photographs should be labeled with the date, time, location, direction and name of the photographer.

**Documents**

If a claim is filed against the county, attorneys need documents to prepare their defense. Assembly of these documents before the attorneys request them greatly expedites the preparation of the defense. Copies of police reports and any forms used to report damage to public property should be obtained. These forms should be as legible as possible. Roadway plans that cover the accident site (and, if available, aerial photographs) are also needed. Any maps or drawings of the scene of the accident, including the path of travel, location of debris, final resting place of the vehicle and type and location of all traffic control devices
should be prepared or obtained and included in the file. Also included in the file should be copies of all statements from the agency employees who witnessed the accident, have knowledge of the accident, or conducted the investigation; and maintenance records for that location, including all correspondence related to that location from citizens or other parties.

An agency may be expected to assemble additional data to assist the attorney representing the agency. An investigation checklist could contain the following items:

1. Name, work address, work telephone number of the person in charge of the particular road system.

2. The educational background, work experience and years on the job for that employee.

3. Number of road miles within that engineer's jurisdiction.

4. The names, work addresses, work telephone numbers and job titles of all employees within that engineer's department who are responsible for the roads in question.

5. The names of employees who have dealt with problems involved in this particular case and an explanation of the manner in which the employees have dealt with these problems and the date of such problems.

6. If the agency has records dealing with the location of the accident in question, the nature of such records should be specified and copies of said records obtained.

7. If the location where the accident occurred was not within the jurisdiction in terms of ownership, maintenance and control of the public agency (for example, the county highway department), explain why not.

8. Any agreements with any other municipal bodies performing any work or doing any service as to the location in question should be provided. If it is written, a copy should be obtained. This should also include any agreements or contracts with parties responsible for maintenance, such as private maintenance or construction contractors.

9. If the county has a map showing the location of all roads in the county system, a copy of such a map should be obtained.

10. Copies of any records dealing with the history and maintenance of the roadway in question or the signing of the roadway in question should be obtained.

11. If there has ever been a past history of accidents, difficulties, repairs, or maintenance problems at the location in question, full details should be given with respect to these prior accidents, repairs or maintenance problems. Copies of these records should be provided.
12. A description of the location in question should be provided, including the placement of all traffic control devices, signs, or signals in close proximity to the location.

13. If available, the latest traffic count information should be attached, which would indicate the volume of cars which daily pass through the location in question.

14. The county engineer may be able to provide records that show the number of traffic control devices and signs and their nature for the jurisdiction surrounding the location in question.

15. Copies of any speed studies conducted at or near the location should be attached, as well as the dates and the person conducting such studies.

16. If there is any specific or definite program or procedure for maintaining and inspecting the roadway in question, the details of that program should be provided.

17. If there is any program for determining whether or not signs are missing or damaged, the details of the program should be provided.

18. If it appears that redesigning the location in question could have mitigated the accident, the approximate cost of such a roadway improvement should be provided.

19. A description of the nature of artificial lighting, if any, and its arrangement within the location in question should be provided.

20. Any records or information indicating that the county engineer was aware of the condition involved in the accident prior to the accident should be fully provided.

21. Indicate whether the sign types involved in this case (or the signs within the entire county) meet the guidelines set out in the Manual on Uniform Traffic Control Devices for streets and highways. If they do not, reasons for the discrepancy should be given.

22. If this is a sign case, it should be noted whether the dimensions of the sign are in full accordance with the Manual's guidelines with regard to distances, placement, angles and height.

23. Indication should be made that regulatory signs and, in particular STOP signs, are reflectorized pursuant to the Manual. If not, reasons should be given.

24. The county engineer's source of signs could be included.

25. How the roadway was built and developed over the years and its present surface and dimensions.

26. The condition of the surface of the roadway in question.

27. People personally familiar with the roadway and the location involved in this case.
28. Records of complaints regarding the roadway in question.

29. Improvements to the locations that were in the planning stages when the accident took place.

30. The county engineer's opinion of each of the factual allegations that appear in the complaint in this case and determine, in his opinion, the truthfulness of such allegations.

31. County board resolutions or ordinances dealing with the roadway or location in question.

32. Has the county or county engineer ever overseen or supervised any maintenance, construction, or repair with respect to the location in question? If so, provide details.

33. Newspaper articles and photographs with respect to the accident or the location in question.

34. Does the county engineer maintain any type of telephone log that has a record of any incoming calls regarding roads, defective conditions, missing signs, or malfunctioning signals? If so, copies of the log should be obtained and, in particular, entries relating to this intersection.

This investigation report should be marked to indicate that it is for the confidential use of the legal office. This provides some protection and prevents the plaintiff's attorney from obtaining or discovering the document before presenting the court with a compelling need.

Under all circumstances, engineers should remember to be totally frank, accurate and complete in discussing the accident situation with the legal representatives of their agency. Even items that may not be considered good for their case should be brought to the attention of the attorneys. What attorneys are told in advance of the trial will permit them to develop their strategy and prepare an effort to mitigate any unflattering situations. It is better for them to know what they face in advance than to be surprised at the trial.

Article taken from *National Association of County Engineers Action Guide Series titled “Tort Liability,”* by Sheldon I. Pivnik, J.D., P.E., Metro-Dade County Public Works Dept.
How to Reduce the Possibility of a Successful Claim

✓ Define Duties and Authorities
   Clearly define the duties, responsibilities, and authority of elected officials and agency employees and make sure that all employees clearly understand and perform them well.

✓ Care About What You Do and Who You Really Are Doing It For

✓ Maintain Adequate Facility Records
   Establish adequate record systems to provide facts about existing conditions. These systems should include:
   ♦ traffic accident records,
   ♦ procedures for identifying high-accident locations,
   ♦ traffic control device inventory and conditions, and
   ♦ information receipt and dissemination.

✓ Provide an Inspection System
   Establish and maintain a continuous system of regular inspection. These inspections should cover the physical conditions of facilities and traffic control devices. Such inspections could include regularly checking traffic signs, pavement markings, temporary traffic control devices, construction and reconstruction/maintenance zones, and establishing a chain of command for inspections so that defects can be reported to the proper authority and promptly corrected.

✓ Establish a Citizen Response System
   Develop and maintain a procedure for handling reports from the public on any transportation facility, problem or concern, designating one person to receive all such reports, record all information accurately and in writing, and to take appropriate action. Above all, do not delay action that must be done!

✓ Keep Reliable Maintenance and Construction Records
   Complete and current maintenance and construction records can provide information about the character of repair, including what the trouble was, what repairs were made, the materials used, and exactly when, where, and how a project was built. This is much more valuable (and legally more reliable) than two or three year-old memories.

✓ Use Current Design Criteria
   Make sure that the designs of facilities, traffic control devices and zones of repair or construction, as well as vehicles and equipment, are consistent with currently adopted policies, guidelines, standards, and specifications.
✓ Follow Rational Procedures for Setting Priorities
   Establish common sense procedures for deciding what improvements should be made. This would include an analysis of the cost-effectiveness of alternatives and timing/scheduling of work.

✓ Conduct Design and Operational Reviews
   Review the design and operation of new or proposed facilities and traffic control devices. Inspect new projects both during work or construction and after work or construction is completed.

✓ Use Competent Professionals for Decisions
   Use competent professionals to assist in making decision about anticipated projects, plans or programs. Don’t be reluctant to call on other cities, towns or state agencies (i.e., Kansas University Transportation Center) to help.

✓ Avoid False Economies
   Beware of false economy. Cutting necessary expenditures to appear fiscally responsible to the taxpayers may raise issues of questionable work, higher reconstruction costs at a later date and leverage to increase the likelihood of a successful tort claim.

✓ Insurance
   Consider the pluses and minuses of obtaining adequate liability insurance based on your potential exposure.

✓ Develop Standards of Performance
   Adopt standards of performance in the areas of design, construction, operations, maintenance and record keeping.

✓ Get Good Advice
   Contact your attorney before you are faced with a large lawsuit to review your protective measures taken to reduce the threat of tort liability.

Article taken from the Maine Local Roads Center workshop notebook titled “Claims, Pains and Automobiles,” March 1991.
Preparing for the Stand
Questions Likely to be Asked in Road Case Depositions
and of Experts Testifying in a Case

1. Full name, home address, phone. Business address and phone.
2. Profession or business and employer; employer's address and phone.
3. Educational background: school(s), degree(s), year of degree(s).
4. Licensed professional or engineer: what state(s), license number, year obtained, written or oral exam.
5. Any additional education.
6. Any specialty that you practice within your engineering profession.
7. Any work experience in your specialty.
8. Number of cases similar to the one involved.
9. Did you visit the scene in this case?
10. Had you ever been to the scene prior to that visit?
11. Describe the visit: date, how long you were there, what you did while you were there, any notes you took while you were there (be prepared to produce your notes on the visit or visits)?
12. What information did you have regarding this accident before you went to the scene? What reports, photos, and/or conversations?
13. Was anyone present at the scene with you? Who?
14. What else did you do at the scene?
15. Did you gather enough information at the scene to form a conclusion as to the cause of the accident in this case?
16. Did you gather enough information at the scene to form an opinion as to any defects in the roadway or in the placement of signs?
17. Therefore, you formed your opinions or conclusions in this case after about (amount of time) at the scene, isn't that correct?
18. Prior to going to the scene, had you formed any opinion or conclusion with respect to any defects? Therefore, you formed your opinions or conclusions in this case before going to the scene.
19. Do you belong to any professional societies or organizations?
20. Do you hold any offices in these organizations?
21. Are you associated with any schools? What schools? Do you teach? What courses? What year students? Number of hours per week?
22. What textbook or text books do you use?
23. What is your title?
24. How many years have you been at the school? What was your background before coming to this school?
25. Have you written or published any articles?
26. How many articles have you published?
27. Do any of those articles deal with any of the matters involved in this case?
28. Approximately how many articles have you published that would relate to this case? Could you name them?
29. Have you written or contributed to any books? If so, what?
30. Have you ever appeared in court on any cases?
31. Number of times you have appeared in court? Last time appeared in court. Kind of case. Any case similar to this one? If so, give details.
32. State five books or works which you consider authoritative in your field.
33. State the names of any books, articles, works, publications or whatever which you have used to either formulate your opinion or verify or sustain your opinion in this case.
34. Do you know what the duties of a county superintendent of highways (or similar position involved in this case) are?
35. Other than your work in the educational field, have you had work experience in any other areas of your specialty; that is, actual work such as consulting, and so forth, as opposed to educational type work?
36. Have you furnished a report to anyone regarding this case, either written or oral?
37. In that report, basically, what have you indicated? Where are copies of such report?
38. Have you expressed an opinion with respect to the cause of the accident in this case? What is that opinion?
39. Have you expressed an opinion with respect to any inadequacies of road design or types of signs regarding this accident? What opinion have you expressed? What factors have gone into reaching that opinion? Detail each factor in the decision and explain how all factors combine to result in your opinion.
40. Can you say that the opinion is based upon a reasonable degree of road design engineering certainty?
41. Have you consulted with any other persons with respect to reaching your conclusions on this case?
42. Have you been furnished with any photographs?
43. Can you tell us the name(s) of the road(s) where this accident took place?
44. In what directions does the road(s) involved run?
45. What is the width of the road(s) in question?
46. What is the width of the shoulders on the road(s)?
47. Do you know the date on which this accident occurred?
48. Do you know if the road, when you saw it, was in the same condition as on the date of the accident?
49. You don't personally know this, but have been informed of this, is that true?
50. Can you tell us what the nature of the intersection is in terms of a full intersection, a traffic controlled intersection, and so forth?
51. Do you know if it was the same way on the date of the accident?
52. Can you tell in what type of setting this is located, such as a residential, commercial, rural or whatever?
53. Were you informed of what direction the automobile(s) was headed at the time of the accident?
54. Do you know who the driver(s) of the automobile(s) were?
55. On the date of accident, were there any signs as one proceeded down the roadway in question?
56. What were those signs, and at what distances were those signs placed?
57. Were those signs placed in accordance with the Manual on Uniform Traffic Control Devices, as used in the State of Kansas?
58. Was there anything wrong with the design of those signs?
59. With respect to the design of the road for traffic approaching the intersection, was there anything wrong with the design of the road?
60. How would you make corrections with respect to signs or any defect in the design of the roads?
61. Was the road in any way a graded road, or was it level? Curvy or hilly?
62. Do you know the percentage of grade of the road?
63. Is the concept of passing sight distance involved in this case? Why?
64. Is the concept of stopping sight distance involved in this case? Why?
65. Are you able to say with a reasonable degree of engineering certainty that the accident involved in this case could have been avoided?
66. Do you do reconstruction work of automobile accidents?
67. Have you done any reconstruction work of this automobile accident?
68. Do you expect to do any such reconstruction work?
69. Have you seen photographs of the automobile(s) after the accident?
70. Have you formulated an opinion as to the approximate speed of the automobile(s) just by looking at the damages sustained by the automobile(s)?
71. Do you know what the speed limit was on the road in question on the date of the accident?
72. Do you know if there were speed limits posted?
73. If the speed limit was not posted, what would be the controlling factors in determining what the speed was?
74. With respect to the intersection, was there any type of shrubbery, trees, or growth on the roadway as one approached the intersection which would obstruct the view of the driver of the intersection itself, and if so, what was this shrubbery or growth and where was it located?
75. Can you say based on a reasonable degree of engineering certainty that the roadways in question were constructed in an unsafe and dangerous manner? If so, why do you say this?
76. Can you say, based on a reasonable degree of engineering certainty, that the accident occurred because of improper maintenance to the roadway itself? If so, why do you say this?
77. Can you say, based on a reasonable degree of engineering certainty, that the accident involved was caused by a failure to provide proper and adequate signs? If so, why do you say this?
78. Can you say that the intersection in question was dangerous for a long time prior to the accident in this case? If so, why do you say it was a dangerous intersection?
79. Was it any more dangerous than any other "T" intersection?
80. Are "T" intersections basically dangerous type intersections?
81. Is there any engineering principle by which one would not design or have roads with "T" intersections?
82. Is a "T" intersection any more dangerous than full four-way intersections?
83. Do you feel that there was a warning which should have been given to the public or to the plaintiffs involved in this case with respect to the roadway in question?
84. Do you know the condition of the driver at the time of the accident? Would it affect your opinion in this case if you knew that the driver was exceeding the speed limit? How would this affect your opinion? Do you know the condition of the driver in terms of drinking alcoholic beverages, any types of drugs, medication, lack of sleep and so forth? Would these factors be important to your determination or your opinion in this case?

85. In other words, isn’t it important that the driver’s conditions and actions be taken into account before determining whether or not the roadway is safe?

86. Isn’t whether or not the road is safe also dependent upon whether or not a driver follows the normal rules of the road or normal traffic regulations?

87. Do you know whether it was dark or light out at the time of the accident? Would this not be an important consideration? Do you know if there was lighting or feel that the failure of lighting caused or contributed to the accident? Is it bad design in your opinion to have no lighting at such an intersection? Do you feel that all intersections in the county (or wherever) should be lighted?

88. Isn’t it important to take in the practicalities of whether or not there are funds available in making determinations as to whether lighting can be provided from a design standpoint?

89. Do you know how the intersection is different today from the way it was on the date of the accident? How did you acquire this knowledge?

90. With respect to the signs present today and on the date of the accident, if you know, can you tell us what the signs were, the colors of the signs, the size of the signs, the writing on the signs and the marking of the signs?

91. Did you measure the feet or distance from the intersection to such signs?

92. What is the purpose of the signs?

93. Do the signs comply with State laws? How does one determine whether a sign complies with or follows State laws? Is the Uniform Manual the sole and only guide to whether this sign complies?

94. Do you know if there were any houses or residences close to the scene of the accident?

95. Are you familiar with any State law which requires a reduction of speed on hills or curves by a driver? Would this be taken into account in your opinion? Would not one designing a road presume that people would use the road in terms of State law?

96. Was the road wide enough?

97. Was any hill close enough to the intersection to cause a problem? Was any hill high enough to cause a problem at the intersection?

98. Did you make any determinations as to what the costs would be to correct the intersection? What is the amount that you arrived at? What is the nature of the correction that you would make? Do you know who is responsible for making this correction? Do you know if these roads are County roads or Township roads or whatever?

99. Wouldn’t stopping sight distance be affected by the range of the lights on the automobile in question? In other words, stopping sight distance could be adequate in daylight but not adequate at night because the driver’s lights could not pick up the distance? Do you know if the car in question had its high beam or low beam lights on? Do you know how far high beams and low beams extend?
100. Do you know if there were any other prior accidents at this intersection? Do you know if they were similar to the accident involved in this case? Would that not be an important consideration from a design standpoint? In fact, if there were never any prior accidents similar to this one at the intersection, wouldn't that indicate that over the years the intersection was adequately designed? Or are you saying it was just sheer luck that no accidents occurred?

101. Do you know what year the intersection was built? Do you know what rules or guidelines were to be followed at that time? Do you know if the road was properly designed and properly signed at the time it was originally built? Do you feel that accident frequency has increased on secondary roads over the last ten years? To what do you attribute this? Do you feel the development of expressways and tollways causes people to have a tendency to overdrive secondary roads?

102. Do you know if there is any obligation to update the road in terms of design in terms of ordinary maintenance? If the road has new construction, must it then be updated?

103. Is the speed zone important in this case? Is your opinion affected by the speed? How is the speed zone determined? Do you know if there ever were any tests performed to determine whether speed zones should be set up? In your opinion, would the road be safe if the speed limit were exceeded? Would the road be safe if the speed limit were not exceeded? How fast do you believe one could safely travel the roadway approaching the intersection?

104. Did you do any measurements or calculations to see how far from the intersection one is when one can first see it at day or at night?

105. Do you know if there ever were any attempts to widen this intersection or to improve it?

106. Is there any type of book, publication or manual which sets the design standards for a roadway such as this? What is the name of the book or publications? Have you looked in that book and made a determination as to what standards would apply to this road? Were these standards in effect on the date the roadway was built? How do you know they were in effect? If these standards were not in effect on the date the road was built, would that affect your opinion in this case?

107. Was there anything wrong with the actual surface of the road? What was the surface of each road involved in this case? Was that a violation in any way of good engineering principles?

108. Do you know how many feet it would take for an automobile such as the one involved in this case to come to a stop upon perceiving the need to stop? Do you know if the vehicle in this case ever attempted to stop? Do you know if there were any skid marks? What is the braking distance necessary to stop this vehicle at say 65 miles per hour? What is the perception time? What is the reaction time? How do you arrive at these calculations?

109. Assuming that the road is or was designed as it was on the date of the accident, was there anything that could be done to correct any error or problems with design in terms of signing the road? Do you know if the road was wet or dry on the date of the accident? Would that make any difference?

110. Would the nature of the surface make any difference?

111. Do you feel that it is necessary for one to see the intersection in order to properly determine any possible defects or problems?

112. Do you intend to furnish any written report in this case?

113. Do you intend to go back to the scene of the accident in this case for any other materials?
114. Is your opinion completely formulated, or must you gather additional materials in order to make your ultimate conclusion in this case?

115. Are there any other manuals or publications other than the Uniform Manual which would apply in this case?

116. Taking the automobile in this case, can you tell what the driver height is?

117. Can you conduct any measurements in terms of sight distance with respect to using the calculations of the height of a driver in the automobile involved?

118. Other than ______, do you feel that there were any other defects or problems with respect to the design of the road or signing of the road?

119. Have you reached an opinion based on a reasonable degree of engineering certainty as to whether or not the roadway in question was safe on the date of the accident in question? Can you tell us what that opinion is?

120. How do you define the word "safe" as used in this case? Isn't "safe" a relative term? Doesn't "safe" depend upon a number of factors? What are those factors? Simply because an accident occurs doesn't mean a road is unsafe, does it? Is a freeway safer than a secondary road under your definition?

A Brief Bibliography

The following works contain material that may be of interest to public works employees and elected officials concerned with traffic accident reconstruction and liability issues.


