

Identify the Signs of a Roadway Hazard Case

On April 29, 2001, supermodel Niki Taylor was almost killed when the car she was traveling in left the roadway and struck a utility pole. Because of Ms. Taylor's celebrity, her tragedy captured the nation's attention as we all waited and hoped for her full recovery. In spite of all of the media coverage devoted to this collision, however, none of it addressed questions such as whether the utility pole was properly positioned or whether it should have been protected by a guardrail or crash cushion. While the popular media may not need to ask these questions, those of us who represent the severely injured and killed must.

It is estimated that the Bridgestone/Ford tire defect-rollover problem has resulted in approximately 150 fatalities.¹ Fatalities from vehicles striking fixed objects, on the other hand, costs this country almost 12,000 lives *annually*.² When that figure is combined with the other dangerous roadway and roadside conditions discussed below, the annual loss of life is staggering. Compared to the financial response to the Bridgestone/Ford problem, little is being done to address the issues of defective roadway and roadside design and maintenance.³

There are more cars in America today than at any other time in our history. Government agencies and private developers are scrambling to construct more roads to handle the ever-increasing number of travelers. The more new roads built, the more their budgets are strained. The more their budgets are strained, the less money is available for maintaining the existing road structure.

Lack of maintenance is not, however, the only problem. Hurried engineers and construction crews, needing to move on to their next project, sometimes fail to comply with standards governing roadway and roadside design and construction site safety. These failures can have disastrous results.

The problems described above have created a large amount of litigation in this area. While the cases are often complicated, costly and difficult, there can be significant opportunities for victims and their families to be compensated. For example, the projected social cost of utility pole accidents alone over the next five years is 28 billion dollars.⁴ Similar projections can be made when considering the prevalence of other roadway hazards that cause injury and death.

This article is a general overview of roadway hazard cases and will identify some of the issues that trial lawyers face when evaluating a potential roadway hazard case.

Know Your Rules, Regulations and Standards

The American Association of State Highway and Transportation Officials (AASHTO) is the main national organization that publishes roadway and roadside design policies and guidelines; the numerous AASHTO books and reports published over the last 50 years continue to be the standard upon which most states base their own highway design regulations.⁵ When the issue is signage, signaling, or pavement markings, counsel should consult the Manual on Uniform Traffic Control Devices (MUTCD).⁶ Published by the Federal Highway Administration, the MUTCD serves as the basis for most states' own MUTCD. While a competent expert witness will have all of these publications available to them, it is important for counsel to get the publications themselves and read them carefully.

Plaintiffs' counsel can use AASHTO publications and the MUTCD as evidence of industry practice in an effort to establish duty, however, defendants are quick to argue that they are policies and guidelines and do not carry the same weight as "standards". Each of the publications contain the typical disclaimer stating that the policies and procedures contained in the text are not intended to be used as standards or to impose legal liability. Nonetheless, because AASHTO is *the* industry authority, the publications can be extremely useful and persuasive in roadway hazard cases.

Defendants also routinely allege that they are not obligated to bring their roads into compliance with current AASHTO or state highway design standards unless it is a newly-constructed road or an existing road that is being significantly upgraded, more than simply resurfacing. Plaintiffs can counter this argument by pointing to language in the AASHTO and state publications that encourage upgrading roadway and roadside features.⁷ AASHTO publications also extensively discuss the importance of roadway and roadside maintenance which defeats the claim that AASHTO publications pertain only to newly-designed roads.

Besides AASHTO guidelines and state regulations, counsel should also examine the defendant's own policies and procedures. For example, in a Federal Tort Claims Act (FTCA) case involving an accident on an Army installation, counsel should thoroughly research relevant Army Regulations, Department of Defense (DoD) publications, and local installation supplements. Many times, these publications will not only adopt AASHTO guidelines and the MUTCD, but they may also impose even higher duties on the defendant in certain areas.⁸

Finally, counsel should look to their state transportation codes for additional evidence of the duty owed to plaintiffs. Some states have statutes that prohibit activities such as depositing debris or injurious material on the roadway.⁹ Depending upon the statute and the state's law, plaintiffs may be able to use the statute as the basis for including a negligence *per se* allegation.

Get Familiar with Common Themes

Because roadway hazard cases are often against governmental entities, sovereign immunity is always a concern. The FTCA and most states' Tort Claims Acts provide for a limited waiver of sovereign immunity under certain circumstances. If a complained of act or omission is a "discretionary function", however, the FTCA and most states' Tort Claims Acts immunize the Governmental defendant. Governmental defendants have often been successful in ending a plaintiff's prosecution by claiming its negligent act or omission was actually a "decision" and,

therefore, protected under the discretionary function exception to its limited waiver of sovereign immunity.¹⁰ The best way for plaintiffs to avoid this snare is to locate statutes, regulations, or industry guidelines that *require* the defendant to do or not do the act or omission of which the plaintiff is complaining. If the language of the regulation or statute is unequivocal, then the plaintiff can argue the defendant has no discretion.

Even if the plaintiff cannot point to such a regulation, immunity can still be avoided. If the defendant's act or omission is deemed to be "discretionary", plaintiffs can still argue that the decision did not involve any "public policy considerations", but rather, was a decision made at a lower level by someone concerned only with operational issues. Unfortunately, the case law is far from clear on what constitutes a discretionary function or public policy consideration.

Even if a private defendant is involved, as is often the case with construction zone cases, the defendant often will argue that, because it has contracted with the state for this project and is acting upon its behalf, it's entitled to the same protections as the state, including immunity.¹¹ Early in the case, counsel should research their state's law on this subject and tailor their discovery accordingly.

Additionally, many states have "recreational use statutes" that protect landowners (public and private) who allow others to use their land for recreational purposes.¹² The typical recreational use statute requires the plaintiff to prove gross negligence to recover. Depending upon the statute, "recreational use" can often include activities as ordinary as pleasure driving. The high costs of prosecuting roadway hazard cases makes it extremely important to consider these defenses when evaluating the feasibility of a particular client's case.

Some of the state highway design regulations create different standards according to the type of road such as urban versus rural roads.¹³ Also, within the urban and rural classifications, there will often be different standards according to the road's purpose –e.g., is it a main arterial providing high mobility with limited access or simply a local street allowing access to homes and businesses.

Defendants will often argue that the road in question is a low classification and, therefore, less stringent standards apply. Plaintiff's counsel can point to criteria such as the road's high Average Daily Traffic (ADT) to show that a higher classification more accurately describes the road.

AASHTO and some state regulations provide detailed formulas that allow traffic engineers to determine whether a particular remedy is economically feasible.¹⁴ Counsel should ask their expert to calculate the economic feasibility of the remedy for which they are arguing the defense failed to provide. Defendants will typically argue that if they did what the plaintiff wants on all of their roads, they would go broke. Plaintiffs can respond by arguing that the only relevant figure is the economic feasibility of this particular remedy at this particular site or on this specific road, not whether the defendant can afford to employ the remedy across its entire statewide infrastructure.

Keeping the judge and jury focused on the specific collision and road hazard in question can be very difficult, especially if the plaintiff wants to present evidence of previous accident history on this and other roads maintained by the defendant. Ideally, the plaintiff will have evidence of previous accidents involving the particular hazard in question at the same location. However, this often is not the case, and plaintiff is left to argue the defendant had notice their act or omission could create a dangerous condition because of other accidents involving the same dangerous condition at other locations and times. Counsel should be careful not to appear intellectually dishonest to the judge or jury when arguing to limit defendant's argument about economic feasibility to just the particular road hazard in question, but accept plaintiff's argument that defendant had notice because of previous accidents at other locations and times.

Another defense argument that seems to surface in most road hazard cases is that the particular hazard in question had never been involved in an accident before, therefore, the condition must not be dangerous, and/or it was not foreseeable that the condition would cause an accident.

While most attorneys can see the absurdity of this position (do we have to wait for that specific tree

to kill someone before we remove it?), a jury may hear it as an effective argument. Counsel, therefore, should address this defense tactic as early as *voir dire* to identify those prospective jurors who might be sympathetic to this argument.

Another challenge present in virtually every roadway hazard case is determining who will be your highway design expert(s). Many of the country's top highway design experts regularly work with, and are retained by, the states' departments of transportation. Having served in these roles, they are likely to be conflicted and unable to assist plaintiffs. Because counsel will likely face highly-technical issues in this type of case, it is critical to retain a highly credentialed expert who can simplify the issues and explain them in layperson's terms to the judge or jury.

Look Out for Common Roadway Hazard Issues

Roadway hazard cases can come in many different shapes and sizes. Roadway hazards can be the sole cause of a collision or simply a contributing factor that combined with another driver's negligence and resulted in a collision. Because the same case can present issues from numerous areas of roadway design and maintenance, counsel must either ensure that their expert is qualified to testify about every facet of the case or that they retain a combination of experts covering all of the various issues. Some experts may have designed a road before, but never designed or tested a guardrail. Roadway hazard cases often involve other sciences also. For example, an accident reconstructionist can work with a highway design expert and effectively tell the story of how the vehicle/driver reacted upon encountering the hazard and how the hazard caused the accident. Because of the hugely diverse issues that can arise in a roadway hazard case, it is important for counsel to be familiar with at least the major areas of concern.

Roadside Design

Whenever a vehicle leaves the traveled roadway during an accident, roadside design and maintenance becomes a potential issue. The following are some of the more important concepts of roadside design:

Clear Zone. The clear zone is the area of land along each side of the roadway provided as a recovery area, ideally free from obstacles, for errant vehicles. AASHTO's most recent formula for calculating the proper clear zone depends on the roadway's design speed, roadside slope, and ADT.¹⁵ In general, the higher the speed, slope and ADT, the wider the clear zone must be. Its required distance is measured from the edge of the traveled roadway, regardless of the direction of travel. Clear zone width can be adjusted by the designer for factors such as curves or severe fill or cut slopes, therefore, counsel should always inspect the site in question and not simply rely on the number produced by the formula.

Roadside Obstacles. Roadside obstacles can be either non-traversable hazards or fixed objects and should be corrected or removed if within the minimum clear zone width. If these obstacles can not be corrected or removed, then barriers are often warranted. Know that AASHTO and most state regulations discourage the use of barriers to protect travelers from roadside obstacles unless specifically warranted.¹⁶ Sometimes a long guardrail can become a more dangerous fixed object than, say, a single tree. Due to its large target area, the guardrail may be more likely to be hit resulting in injury. It is, therefore, often better to argue that a roadside obstacle should have been corrected or removed, rather than argue that a guardrail should have been installed.

Longitudinal Barriers and Crash Cushions. AASHTO and most states have established standards that indicate what type of barrier should be used and when and how a barrier should be installed, maintained and repaired.¹⁷ Numerous studies have been published concerning the effectiveness of guardrails and other types of barriers in reducing the likelihood of injury. A knowledgeable expert, therefore, can reference these studies and provide persuasive testimony that

had the defendant properly installed a barrier, it is probable that the plaintiff would have either lived or suffered less severe injuries.

Roadside Maintenance. AASHTO and most states have published guidelines and standards for things like vegetation removal, drainage maintenance, and shoulder grading.¹⁸ The publications typically establish somewhat elaborate inspection and maintenance programs, as well as provide standards for how maintenance should be accomplished. If a defendant does not routinely mow the shoulders and trim the vegetation, trees can grow into fixed objects or signing can be obscured by foliage. If shoulders are not routinely graded, significant edge drops or washboarding can develop creating a dangerous condition. As discussed in the AASHTO and state standards, the duty to properly maintain the roadside is a *continuing* duty. By showing inadequate maintenance, counsel can therefore overcome the Defendants' argument that the standards don't apply because they were not in effect when the road was originally built.

Roadway Design

Roadway design includes the design, construction and maintenance of the traveled roadway itself as well as the signing and markings directing travelers. Some of the main areas of concern within this topic include:

Improper Design. Sometimes a vehicle will leave the road because the road left the vehicle. Improper design issues can appear in many different forms¹⁹, such as:

1. Horizontal curves that are too sharp for the posted speed limit or have inadequate banking (superelevation);
2. Vertical curves (slopes, dips) that are too extreme resulting in substandard sight distance;
3. Lack of proper drainage causing pooling and a risk of hydroplaning,

4. Insufficient sight distances around horizontal curves or at intersections and railroad crossings;
5. Pavement that possesses inadequate skid resistance;
6. Entrance ramps that are too short or lack visibility for freeway and ramp travelers; and
7. Shoulder composition that does not provide sufficient contrast in color or texture.²⁰

Inadequate or incorrect pavement markings. Pavement markings include visual indicators such as lane and curb markings, and reflectorized, raised pavement markers. The MUTCD sets forth specific standards for the type of pavement markings needed under almost any circumstance.²¹ Sometimes the issue is whether the design plan was correct and other times it can be whether the correct markings were installed. Therefore, it is critical to obtain the design plans during discovery. Many times the issue is simply a failure to maintain the markings. The MUTCD states that pavement markings should be kept in a legible state and some states' MUTCD's or roadway design regulations will go even further by establishing an actual schedule for when the pavement markings should be re-painted based upon the road's ADT.

Inadequate or incorrect signing or signaling. The MUTCD establishes specific guidelines for sign color, size, reflectorization, illumination, lettering and placement,²² so it's important for counsel to inspect the MUTCD and their states' regulations to ensure the signing was appropriate at their accident site. Signaling is also a highly-regulated area. Examples of improper signaling include unprotected, left-turn arrows without proper warnings, improper traffic light sequencing resulting in two directions receiving green lights, and short-cycling traffic lights which cause pedestrians to be caught in the roadway when traffic has a green light. Obviously, it is important to visit the intersection immediately if a potential cause of the accident is incorrect

signaling. All measurements should be taken by an expert so as to ensure the correct information is obtained and to avoid counsel or firm employees becoming witnesses in the case.

Roadway maintenance. Pavement that is not routinely inspected and maintained can crack, develop holes and lose skid resistance. These conditions can cause, or contribute to, an accident. Sometimes, however, the defendant's act of maintaining or repairing the pavement actually creates the dangerous condition. Construction accidents compose a large percentage of the roadway hazard cases. Improper warnings, misplaced barriers, and debris on the road surface are common issues.

Major advances in roadway and roadside safety have been made in the last twenty years partly because of the efforts of plaintiffs' counsel zealously representing their clients. In spite of the explosion in the number of vehicles on America's highways, the fatality rate per million kilometers has decreased in the last decade.²³ While this is a step in the right direction, trial lawyers must continue to pressure the industry to improve their road design and maintenance methods to reduce the number of accidents. With a working knowledge of the most common areas of roadway and roadside hazards, counsel will be better prepared to identify road hazard cases and develop a successful prosecution.

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¹ Scott & Ivey, *Utility Poles and Roadside Safety, The Road to Responsibility*, paper presented at 80th Annual Meeting Transportation Research Board, Washington, D.C. (January 2001).

² Id.

³ Id.

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⁵ AASHTO's publication catalog can be accessed on-line at www.transportation.org or www.aashto.org. AASHTO's mailing address is 444 North Capitol Street NW, Ste. 249, Washington, D.C. 20001.

⁶ FHA, MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) (2001).

⁷ For example, in AASHTO's 1977 "Barrier Design Guide", it states, "The guide will have applications to both new and existing roadways." AASHTO, GUIDE FOR SELECTING, LOCATING, AND DESIGNING TRAFFIC BARRIERS 4 (1977). It also advises that, "[e]xisting highways should be upgraded when feasible to eliminate hazardous conditions that require barrier protection." *Id.* at 3.

⁸ For example, Army Regulation (AR) 420-72 requires that materials and specifications used in roadway maintenance and repair meet federal, state, military, AASHTO, and ASTM standards. DEP'T OF THE ARMY, ARMY REGULATION 420-72, SURFACED AREAS, BRIDGES, RAILROAD TRACK AND ASSOCIATED APPURTENANCES, para. 2-14c. (March 28, 1991). Agency publications may contain more specific and unequivocal language than the industry standard. For example, Army TM 5-624 states that brush or shrubs *will not* be permitted to grow at culvert inlets or outlets. DEP'T OF THE ARMY, TECHNICAL MANUAL 5-624, MAINTENANCE AND REPAIR OF SURFACE AREAS, para. 6-6b. (October 27, 1995) (emphasis provided). AASHTO's general guidance does not provide language as specific or unequivocal.

⁹ For example, Texas Transportation Code §600-001 (2001).

¹⁰ See, Rydstrom, *Claims Based on Construction and Maintenance of Public Property as Within Provision of 28 USCA § 2680(a) Excepting from Federal Tort Claims Act Claims Involving "Discretionary Function or Duty"*, 37 A.L.R. Fed. 537 (2001); *United States v. Gaubert*, 499 U.S. 315 (1990).

¹¹ See Korpela, *Right of Contractor with Federal, State, or local Public Body to Letter's Immunity From Tort Liability*, 9 A.L.R.3d 382 (2001).

¹² See Miller, *Effect of Statute Limiting Landowner's Liability for Personal Injury to Recreational User*, 47 A.L.R.4th 262 (2001).

¹³ TEXAS DEP'T OF TRANSPORTATION, ROADWAY DESIGN MANUAL (2001).

¹⁴ For example, AASHTO, ROADSIDE DESIGN GUIDE, App. A (1996).

¹⁵ AASHTO, ROADSIDE DESIGN GUIDE (1996).

¹⁶ AASHTO, ROADSIDE DESIGN GUIDE (1996); AASHTO, GUIDE FOR SELECTING, LOCATING, AND DESIGNING TRAFFIC BARRIERS 4 (1977).

¹⁷ AASHTO, GUIDE FOR SELECTING, LOCATING, AND DESIGNING TRAFFIC BARRIERS 4 (1977).

¹⁸ AASHTO, HIGHWAY SAFETY DESIGN AND OPERATIONS GUIDE, chap. 6 (1997); TEXAS DEP'T OF TRANSPORTATION, ROADSIDE VEGETATION MANAGEMENT (1993).

¹⁹ *See* TRANSPORTATION RESEARCH BOARD NATIONAL RESEARCH COUNSEL, THE INFLUENCE OF ROADWAY SURFACE DISCONTINUITIES ON SAFETY, Washington, D.C. 1984 (a state-of-the-art report by a task group led by Don Ivey).

²⁰ AASHTO, A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS (2001)

²¹ FHA, MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), (2001).

²² Id.

²³