

Signage and Traffic Control Defects in Catastrophic Injury Cases



By Mark Emison

Appropriate signage and traffic control can be the difference between life and death. Decades of studies show that drivers must have sufficient notice of a hazard or roadway change to perceive and react to unexpected

changes in the road. Whether for direction, speed or to safely navigate a construction zone or lane change, signage is critical.

We have all had cases where crash reports only scratch the surface and fail to mention

signage and road construction issues. The real cause of a crash or injury accident may not be obvious until viewing the scene and talking to witnesses. A crash in or near a construction zone should raise a red flag during the case screening process. Many

times, the basis for a traffic control or signage claim is that a required sign did not exist, making the screening process key.

This article explores two issues in signage and traffic control cases. The first covers signage issues in the traditional sense, when required traffic control fails to provide motorists proper notice of hazards or changes in the roadway. Second, this article discusses situations where traffic control methods and signage become hazards themselves by improper placement or installation, and therefore cause or enhance injuries that could have been prevented.

Where to Begin?

In addition to the initial steps of an investigation — collecting reports, photographs, witness statements, and preserving evidence — it is critical to document the condition of the roadway at the time of the crash. Road construction areas and traffic control circumstances change daily, and the condition of the roadway on the day of the crash could become an issue later if the scene is not properly documented.

Traffic control and signage cases are many times intuitive. The simplest first step is asking “why”?

- Are there any explanations other than simple driver error that help explain why the crash occurred?
- Is there anything unexpected or unusual about the roadway?
- Are motorists forced to make quick decisions, or make quick movements on the roadway?

•Are motorists given little notification or warning about a change in the roadway?

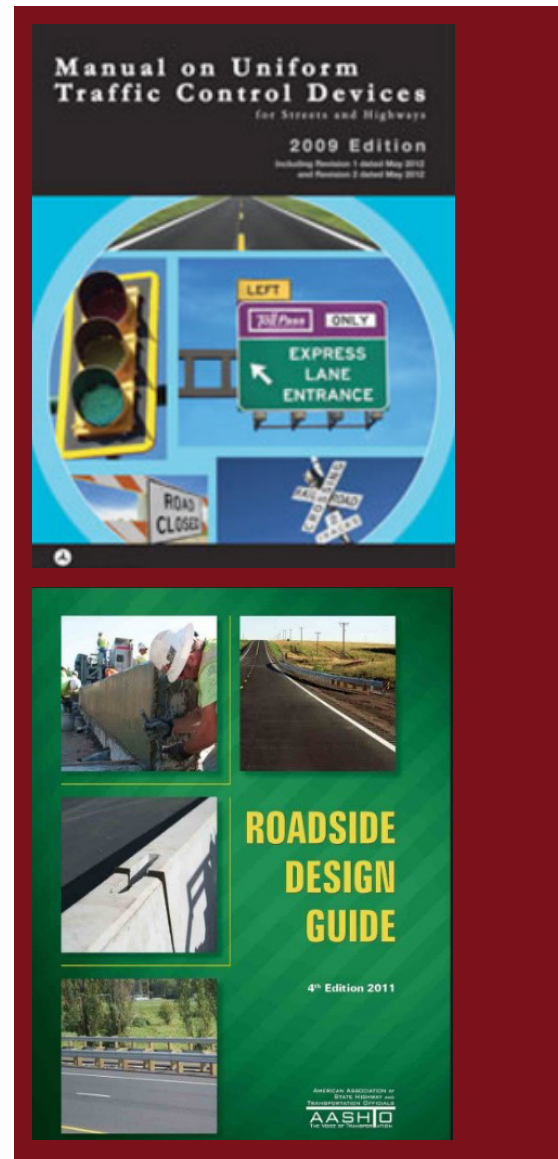
•Are motorists’ vision obstructed or impaired?

A “yes” indicates a potential highway design or traffic control issue and warrants additional investigation.

Sources and Rules for Establishing Liability in Signage Hazard Cases

There are several steps attorneys can take when establishing liability in signage hazard cases. First, obtain a highway construction traffic control plan and any contracts or subcontracts related to the road construction. These can usually be obtained before litigation via a Freedom of Information Act request, or a state’s equivalent sunshine law. Traffic control plans and temporary traffic control plans provide measures to be used to safely guide motorists through a construction area. Traffic control plans routinely contain drawings, diagrams and highway design that show what signage and traffic control methods should be used at various stages in the construction. These plans provide a baseline to check for deviations in the actual roadway from the plan.

Highway contracts are excellent sources for rules and duties, and typically list specific regulations and guidelines that must be followed in the construction. Contracts and subcontracts also explain the responsibilities of different entities and identify potential defendants.



The Manual on Uniform Traffic Control Devices (MUTCD) and the Federal Highway Administration’s Standard Highway Signs manual provide minimum standards that must be followed in traffic control. Most states have their own highway design manuals, as well as state regulations that must be followed. State departments of transportation also issue memorandums and bulletins that may provide for additional rules and standards that must be followed in constructing roads and maintaining proper signage. It is important to compare the traffic

Because highway designers know cars will eventually leave the roadway, for decades, national standards have recognized the “clear zone” principle of highway design...

control plan to both the MUTCD and state standards to note if the traffic control plans themselves violate the standards.

Other excellent sources for rules and safety principles are the *Roadside Design Guide*, by the American Association for State Highway and Transportation Officials (AASHTO) and Part 6 of the *Greenbook*, which provides standards for temporary traffic controls.

Case Example: Inadequate Construction Zone Signage. While driving to work, an Arizona man came upon construction on a two-way divided road that was barricaded. Traffic control funneled vehicles to the inside lane at the point in the roadway where a 6-inch raised median jettied out into the travel lane; however, there were no signs or markings to give the motoring public notice of the raised median.

The driver’s left front tire made contact with the raised median, which caused his vehicle to lose control and flip. The crash caused the man to become paraplegic.

Due to the unusual nature of the highway, our firm obtained the roadway construction project’s traffic control plan and engaged an expert in highway design and civil engineering to compare the plan to state design requirements and the MUTCD. On the day of the crash, the subject roadway had

numerous shortcomings that violated both the traffic control plan and the MUTCD.

For example, the traffic control plan showed a “Keep Right” sign that should have been located at the widest point of the raised median at nearly the exact location where the plaintiff’s front tire made first contact with the raised median. The intent of the sign was to notify motorists of a sudden lane shift. Scene photographs confirmed that the sign was absent the day of the crash. The figure below illustrates the deficiency.

In addition, the traffic control plan’s distance between speed reduction signs — reducing a 35 mph speed limit to a 25 mph speed limit — was half the distance required by state standards and the MUTCD. Although this may seem minor, fractions of a second make a significant difference to motorists’ perception/reaction time.



Screen Whether Signs and Traffic Control Placement and Installation are Hazards

In the 1970s, AASHTO’s *Roadside Design*

Guide recognized that approximately 1 in 3 traffic deaths stemmed from single-car crashes in which a vehicle left the roadway. If vehicles leave the roadway, signage or other traffic control devices that are improperly placed or installed in the vehicle’s path become dangerous hazards and can significantly enhance injuries.

Because highway designers know cars will eventually leave the roadway, for decades, national standards have recognized the “clear zone” principle of highway design to “minimize the consequences of a motorist leaving the roadway inadvertently” (*Roadside Design Guide*, 1974). A “clear zone” refers to the area surrounding the highway where a vehicle could regain control or safely come to rest. The *Roadside Design Guide* provides the following principles to limit the danger of roadside obstacles:

1. Remove the obstacle.
2. Redesign the obstacle so it can be safely traversed.
3. Relocate the obstacle to a point where it is less likely to be struck.
4. Reduce the impact severity by using an appropriate breakaway device.
5. Shield the obstacle with a longitudinal traffic barrier designed for redirection or use a crash cushion.
6. Delineate the obstacle if the above alternatives are not appropriate.



FIGURE 4.9 Multidirectional slip base for small signs

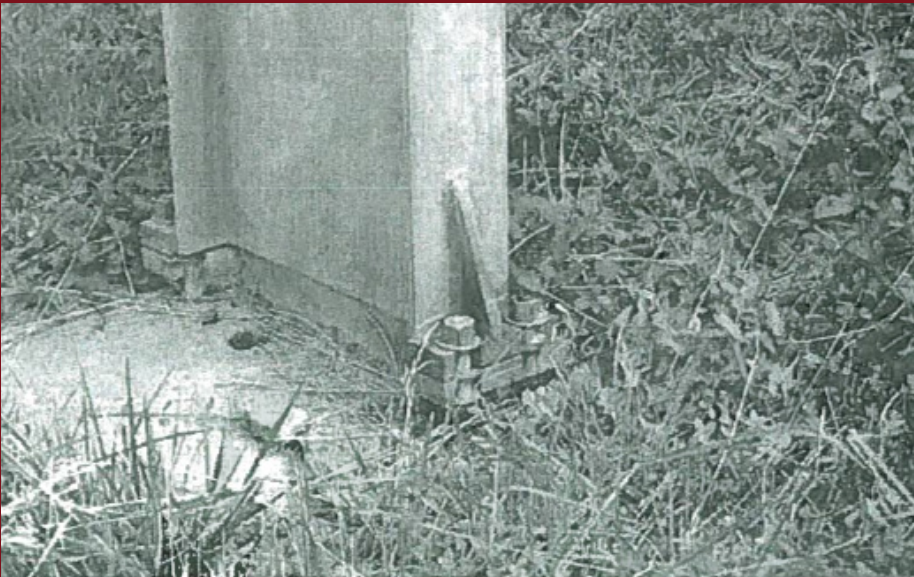


FIGURE 4.5 Typical uni-directional slip base

A breakaway device is placed at the bottom of a sign and designed to harmlessly breakaway if struck by a vehicle. The MUTCD states that “[g]round mounted sign supports shall be breakaway...if within the clear zone” (see MUTCD, at 2A-19). Further, there are two types of breakaway devices—uni-directional

and multidirectional. A uni-directional breakaway device will only breakaway from one direction. In contrast, multidirectional breakaway devices breakaway from any direction. A multidirectional breakaway device should be used if a sign is subject to traffic from multiple directions.

Case Example: Improper Signage Placement and Installation.

A teenager drove north on a four-lane highway when an unknown motorist pulled out in front of his truck from an intersecting two-lane country road. When the teen swerved to avoid the collision with the vehicle, his truck traveled off the highway into the four-lane highway’s median and struck a highway sign post installed in the intersection. The highway sign identified the names of the intersecting highways. The sign snapped down and crushed the roof of his truck, which broke his neck and caused him to become paralyzed.

At first glance, it appeared that perhaps the only potential claim was an uninsured motorist claim. Upon deeper investigation, there were multiple violations of federal and state guidelines pertaining to the selection, placement and installation of the sign and the concept of a “clear zone.”

First, the defendant could have designed the subject sign post so that it was located outside of the grass median and alongside the two-lane roadway on its approach toward the four-lane highway. AASHTO’s *Roadside Design Guide* states, “If a sign is needed, then it should be located where it is least likely to be hit.”

Second, to the extent the subject sign post was to be placed in the grass median, it should have been constructed in a manner that allowed it to breakaway in any direction. Had the defendant selected a post that would have allowed for use of a multi-directional breakaway device, this could have been

accomplished.

An expert in biomechanics and reconstruction analyzed the crash and opined that if an appropriate breakaway device had been installed, the impact with the sign would have been equivalent to a fender bender. Because there was no breakaway device, the sign crushed the pick-up truck's roof and broke the plaintiff's neck.

Be Aware of Damage Caps and "Acceptance Doctrine" Defenses

In these cases, it is important to know state law. Most state departments of transportation or highway entities are subject to being sued, but damages caps may apply. Private defendants — general contractors or subcontractors — may assert defenses that they were merely following the DOT's instructions and are immune from liability

via the acceptance doctrine. It is important to take these issues into consideration when pleading and developing your case to attack these defenses.

Conclusion

Roadway signage cases can be good cases and provide additional avenues for obtaining a recovery for your clients. State and national signage and design standards, as well as traffic control plans, can show clear violations and deviations from the standard of care. These violations can be central arguments to your case. As such, any crash involving a catastrophic injury or death should be evaluated for roadway and signage hazards that could have caused or contributed to a crash, or enhanced the resulting injuries.



Mark Emison is an attorney at Langdon & Emison, located in Lexington, MO. Mr. Emison can be reached at (660) 259-6175 or mark@lelaw.com.