

TABLE 2. DISCUSSION GROUPS

Topic 1 - Planning, Design and Construction

| Group 1 | Group 2 | Group 3 | Group 4 |
|---------------------------|-------------------|-----------------|-----------------|
| <u>Discussion Leaders</u> | | | |
| <u>H. Anderson</u> | <u>E. Nordlin</u> | <u>D. Woods</u> | <u>R. DeFea</u> |
| D. Adams | M. Alfred | D. Berkman | F. Campbell |
| J. Beaton | J. Bryden | R. Bishop | R. Coleman |
| J. Carney | G. Cory | K. Dewell | R. Edgar |
| O. Denman | P. Hale | B. Gowan | L. Ferguson |
| W. Hickey | D. Henry | J. Hatton | S. Fox |
| W. Hunter | T. Hirsch | J. Humpshreys | D. Ivey |
| R. Lewis | J. Michie | S. Lyles | H. Ross |
| J. Stapleton | D. O'Brien | E. Post | J. Underwood |
| H. Taylor | C. Quan | R. Stoughton | J. Viner |
| W. VanWagoner | L. Spaine | D. Thomas | |
| | F. Tamanini | E. Tye | |

Topic 2 - Operations and Maintenance

| Group 1 | Group 2 | Group 3 | Group 4 |
|---------------------------|------------------|-----------------|----------------|
| <u>Discussion Leaders</u> | | | |
| <u>F. Tamanini</u> | <u>J. Hatton</u> | <u>J. Viner</u> | <u>P. Hale</u> |
| H. Anderson | D. Adams | F. Campbell | M. Alfred |
| J. Beaton | D. Berkman | R. DeFea | J. Bryden |
| K. Dewell | R. Bishop | L. Ferguson | R. Edgar |
| J. Humpshreys | J. Carney | T. Hirsch | S. Fox |
| R. Lewis | R. Coleman | W. Hunter | B. Gowan |
| D. O'Brien | G. Cory | S. Lyles | W. Hickey |
| E. Post | O. Denman | E. Nordlin | D. Ivey |
| L. Spaine | D. Henry | H. Ross | C. Quan |
| W. VanWagoner | J. Michie | J. Stapleton | H. Taylor |
| | J. Underwood | R. Stoughton | E. Tye |
| | D. Woods | D. Thomas | |

II. OVERVIEW OF PROBLEM

National Perspective: The Uncertain Sea of
Tort Liability Law
Jim Stapleton

Highway tort liability law has been referred to as "an uncertain sea" where "uncertainty and bewilderment ... persist to confound the stormtossed wayfarer."¹ The uncertainty and bewilderment are understandable in light of the many conflicting and frequently illogical court decisions from the various states and often even within the same state. I will attempt today neither to part this uncertain sea nor to walk upon its waters, but perhaps I can post some beacon lights to give you some direction.

Potential legal liability is a factor in inducing greater compliance with safety standards and, thus, in reducing highway deaths and injuries. As Professor William Prosser, the leading authority on tort law, once said: "When the decisions of the courts become known, and defendants realize that they may be held liable, there is of course a strong incentive to prevent the occurrence of the harm. Not infrequently one reason for imposing liability is the deliberate purpose of providing that incentive."²

Concern for potential liability is healthy and legitimate. If that concern turns to hysteria and paranoia, it is unhealthy and counterproductive. Inaccurate and distorted perceptions of liability can adversely affect the quality of the engineer's decisions concerning highway design, construction, and maintenance. It is important to keep litigation concerns in proper perspective, and to remember that there is no substitute for good common sense combined with sound engineering judgment.

For many years the states had little fear of suits for injury or death caused by negligence in the design, construction, and maintenance of highways. The states' salvation was the doctrine of sovereign immunity which sprang from the ancient maxim that the King can do no wrong. Over the past 20 years the doctrine has undergone considerable erosion. Most states have abandoned it either by judicial decision or by statute.

A survey conducted in 1983 by AASHTO on the status of sovereign immunity in the states reported that only seven states still have sovereign immunity as to torts. However, of those seven, one (Mississippi) reported that as a result

of a court decision it would not have sovereign immunity after July 1, 1984. The other six reported that they had a tort claims act, statutorily created claims board or commission, or other legislative scheme for litigating claims against the State.³

The AASHTO Survey indicates that pending tort liability claims reported by 40 states total over \$6.4 billion. Nearly half of that total was reported by California (\$2.1 billion) and New York (\$1.2 billion). This is nearly double the amount reported in the 1980 survey. To keep these figures in perspective, it should be noted that the survey does not provide a breakdown of tort claims pending against the state highway departments. Also, it should be borne in mind that the amount claimed bears little relation to the amount ultimately paid by the states. For example, the survey reflects that states reported paying a total of \$24.6 million in judgments or awards of tort claims during fiscal year 1981-82.

Highway departments have a duty to design, construct, and maintain highways properly and to give adequate warning of hazardous or dangerous conditions. Although highway agencies must exercise reasonable care, they are not insurers of the roads or guarantors of absolute safety.

One of the principal factors which the courts consider in determining whether the highway department acted reasonably is whether the actions were in accord with generally accepted engineering standards and practices, such as the Manual of Uniform Traffic Control Devices (MUTCD), AASHTO standards, guidebooks, and technical publications. An action that is not in accord with these standards, if causally related to the accident, will very likely result in liability. However, these standards are considered as the minimum expected, and compliance with the minimum does not mean that you are home free.

For example, it has been held that you cannot abandon sound engineering judgment and use mere compliance with the requirements as a shield to avoid liability where it can be shown that something more than the minimum requirements was necessary to provide reasonable safety under the circumstances.⁴

The major defense to tort liability by highway departments is based on the exemption from liability for discretionary activities. The discretionary exemption doctrine has been adopted in many states by judicial decision and in several others by statutes patterned after the Federal Tort Claims Act. For several years the doctrine was read so broadly as to almost reinstate complete immunity with regard to design defects.⁵

As a tool for identifying discretionary acts of government which should be immune from tort liability, many courts apply an analysis which distinguishes between decisions made at the "planning level" and those at the "operational level." Planning level functions are generally interpreted to be those requiring basic policy decisions, while operational level functions are those that implement policy. As a general rule, under this operational-planning level test, the approval of the design of the highway has generally been held to be discretionary and not subject to "second guessing" by the courts. The

operational-planning distinction is more a method of arriving at a desired result--a balancing of the equities in the particular case--rather than a reasoned application of a precise rule. Application of the rule has resulted in many seemingly conflicting decisions.⁶

A recent decision in Iowa in the case of Butler v. State⁷ is a good illustration of the planning vs. operational level activities test and of how the "reasonable and prudent care" standard is applied in judging the conduct and the liability of the highway department.

The facts are as follows:

The Butler family was traveling in a mobile home on Interstate 80 on a wet and windy night. While trying to pass a truck a gust of wind pushed the mobile home onto the shoulder and the mobile home struck a guardrail placed just off the shoulder. The guardrail "speared" the motor home injuring the several members of the Butler family. The guardrail struck by plaintiffs was designed to protect motorists from a bridge pier in the center of the median. When the guardrail was installed in 1965, it was in conformance with the plans approved by the Federal Highway Administration, and it met the then existing standards of the traffic engineering profession.

The guardrail struck by plaintiffs consisted of a piece of W-beam steel directly attached to 6-inch diameter round posts. The entire structure was 75 feet long. The "end treatment" consisted of a piece of guardrail flared toward the median, away from the westbound traffic, a distance of 18 inches on an 85-foot radius curve.

The state of the art concerning the design and placement of guardrails changed rapidly between 1965 when the guardrail in question was installed and 1974 when the accident occurred. In that time the state made five major changes in the guardrail standards for new construction.

The Court held that the decisions made concerning the design and placement of the guardrail and decisions made over the course of the years not to update the guardrail were decisions made at the operational level, and were not covered by the discretionary function exemption.

However, the Court said that "The determination that the state is not protected by the discretionary function exception, which gives tort immunity to the state, has no bearing on the state's liability. Whether the state was negligent is a question of fact to be determined under tort principles.

The Court went on to say: "The reasonableness of the state's decisions at the operational level requires the fact finder to balance such factors as (1) the danger imposed by the outmoded device; (2) the increase in safety a new device or design would provide; (3) the cost of upgrading; (4) the state's available resources; (5) other known hazards which pose a greater danger to motorists; and (6) any other relevant factors, including other needs in the highway system ... At any one time the DOT may be aware of many facets of the state's highway network which have become outdated due to recent design changes or advancements. At

the same time, however, the DOT will have a limited budget with many competing demands placed on it. The DOT acts as a reasonable agency when it attempts to prioritize the needs of the entire highway system and make maximum use of its limited resources to best serve all of the traveling public. Whether the DOT succeeds in meeting this standard is a question for the fact finder." (336 N.W. 2d. 416 at 420-21.)

The case of Zaleski v. State⁸ arose out of an accident on a bridge in which a car collided with a truck, mounted the curb, and came in contact with the bridge railing and, after shearing off five bridge posts, plunged into the Mohawk River. The bridge railing was constructed with three-rail aluminum bridge railing supported by posts made of cast aluminum alloy and bolted to the bridge.

Although the state's witness testified that the bridge was constructed in conformity with good engineering practices, when it was completed in 1960, there was testimony, and the state conceded, that cast aluminum alloy bridge posts were extremely brittle and that discontinuous rails would not absorb and distribute impact.

The state contended that at the time the bridge was designed and built it was constructed in accordance with good engineering practice and, therefore, the correctness of design was not subject to review by the courts.

The Court set forth the rule that the state is obligated to provide barriers of sufficient strength to hold an automobile traveling at a reasonable rate of speed at points of particular danger along its highways and bridges. The Court went on to say that design immunity from liability does not apply where it can be shown that the plans of the bridge were approved without adequate prior study or lacked a reasonable basis and that subsequent events demonstrated the existence of a dangerous condition known by the state.⁹

The case of Ducey v. Argo Sales Co.,¹⁰ a 1980 California decision, provides a good example of the trend in court decisions dealing with the question of the duty of a state to erect median barriers, and a state's financial feasibility defense.

The facts are as follows:

In February 1972, Patricia and Dennis Ducey were seriously injured when a car driven by Dolores Glass crossed a freeway median in Fremont and collided head-on with their car. Dolores Glass was killed. The Duceys sued her estate, her employer, and the State of California.

The claim against the state was based upon the state's failure to provide a median barrier.

The freeway is a four-lane highway with tall oleander bushes growing in the middle.

The freeway was built in 1958. The 1968 warrants provided that construction of a barrier on a 46-foot-wide median was justified when average daily traffic exceed 40,000 vehicles. Daily traffic on this section of the freeway exceeded the amount beginning more than three years before the accident. There were 18

cross-median accidents between 1964-1967 in an 8-mile stretch including the crash site.

A contract for construction of a cable-type barrier was awarded in late 1968, but the appropriation was cancelled in February 1969 because of plans for widening the highway in 1972-73, which, under DOT standards, would necessitate metal-beam guardrail. The accident occurred three years later.

The Court concluded that the jury could properly find that the barrierless, heavily traveled freeway constituted a dangerous condition, and that the state could be held liable for failing to erect a median barrier.

The state argued that as a matter of financial reality it could not afford to construct median barriers on all freeways on which they are needed, and urged the Court, as a matter of policy, to relieve it of liability resulting from its failure to install such barriers.

The Court held that the question of the reasonableness of the state's action in light of the practicability and cost of the applicable safeguards is a matter for the jury's deliberation.

Just before he retired in 1979 as the Federal Highway Administration's Associate Administrator for Safety, Howard Anderson, in an address to the National Highway Safety Advisory Committee, focused attention on the problem of incompatibility between the design of the highway and the vehicle. He pointed out that in 1979 about 50 percent of our vehicle fleet was made up of mid or full-size vehicles, whereas by 1990 about 70 percent of the vehicles produced will be of minicar and subcompact size. He pointed out that recent research indicates that "forgiving" highway hardware such as sign supports and traffic barriers, which work well when struck by full-size vehicles in the 4000-pound range, are not so "forgiving" when struck by a vehicle in the 2000-pound range.

Small car incompatibility with highway design has serious tort implications.

I submit that a state is courting tort liability if it designs and constructs roadside safety features today based on criteria which fail to take into consideration whether such features will effectively fulfill their intended safety function when struck by a vehicle in the 2000-pound range.

Judicial decisions increasingly reflect a recognition of the important societal goal of compensating injured parties for damages caused by negligent acts. The decisions also indicate a clear trend towards a "risk distribution" justification for imposing liability. An example of this is found in the case of Hicks v. State which abolished the doctrine of sovereign immunity in New Mexico. The Court said: "(I)t would appear that placing the financial burden upon the State, which is able to distribute its losses throughout the populace, is more just and equitable than forcing the individual who is injured to bear the entire burden alone."¹¹

The highway engineer's position is not an easy or an enviable one. He has a responsibility to

provide the safest driving environment available resources will permit. He has a duty to discover hazards or defects by reasonable inspection and to correct them, or at the minimum adequately warn the highway user of their presence.

Knowledge of highway liability law can help to make the highway engineer a more effective decisionmaker. For example, knowledge that deviation from the standards of the MUTCD may result in a finding of negligence encourages the engineer to carefully document decisions that adopt treatments not specified in the Manual.

Knowledge that although the engineer may be engaged in a discretionary activity the state may have the burden of showing that discretion was in fact exercised, enables the engineer to understand the importance of documenting that he made a considered decision after consciously balancing the risks and advantages.

Knowledge of tort liability law integrated with the consistent exercise of sound engineering judgment will result in more effective decisions and reduced potential liability.

REFERENCES

1. Harrison v. Escambia County School Board, 419 So. 2d 640, 655 (1982).
2. W. Prosser, Law of Torts, 23 (4th Ed. 1971).
3. AASHTO, Survey on the Status of Sovereign Immunity in the States (1983).
4. Fraley v. City of Flint, 221 N.W. 2d 394, 397 (Mich. 1974).
5. See Dalehite v. United States, 346 U.S. 15 (1983).
6. Harrison, 419 So. 2d 640, 650 (1982) (Ervin, J., dissenting).
7. 336 N.W. 2d 416 (Iowa).
8. 384 N.Y.S. 2d 545 (1976).
9. Id. at 546.
10. 602 P.2d 755 (Cal. 1979).
11. 544 P.2d 1153, 1155 (N.M. 1976).

A Highway Engineer's Perspective
David Henry

The problem of tort claims involving roadside safety is one of obsolete roads and deep pockets. I say obsolete not from the standpoint that the roads are worn out, hazardous, or nonfunctional, but from the standpoint that our standards have changed. Design standards affecting safety have been in a continuous state of change for the past 30 years while most of our existing roads were being built. Consequently, very few roads completely conform with the latest standards regarding shoulder width, slopes, guardrail, and fixed objects.

The drivers using our roads vary greatly in skill and their willingness to take risks. Consequently, accidents are inevitable. And, whenever accidents result in very large economic losses or severe disabilities, there is a good chance that someone will be looking at the road to see if lack of modern standards can be tied into the accident cause or severity.

According to law, nonstandard does not equal hazardous, i.e., "a substantial risk of injury when used with due care." However, when a jury is

feeling very sympathetic toward a badly injured plaintiff which they would sincerely like to help, it doesn't take much to give them an excuse to award damages.

This is where the "deep pockets" come in. It sometimes appears that the mere need of an injured plaintiff is sufficient justification to award damages when the defendant is perceived as the "rich" state.

The number of new tort cases against the State of California has doubled in the past ten years and continues to rise as shown in Exhibit A. In the 1982/83 year there were 512 new cases filed with prayers totaling \$1.25 billion. Our estimate of exposure, of course, is much smaller than the actual prayers.

Our best defense against tort suits is a systematic, prioritized program of highway safety improvements. Not only can you reduce accidents, and the severity of accidents, but you can also demonstrate to a jury that you are acting in a reasonable and responsible manner.

Our effort to upgrade roadside safety on freeways started in 1966 with a program we called CURE (Clean Up Roadside Environment). Under CURE we converted all ground-mounted sign posts to breakaway, installed slip bases on all electrolliers, and installed guardrail at all bridge rail ends, piers, and abutments. Upon the completion of CURE, we went into our program of clearing fixed objects from freeway off-ramp gores, or protecting them with crash cushions.

The CURE program together with the incorporation of safe roadside standards in all new freeway construction resulted in a dramatic reduction in the fatality rate from run-off-the-road accidents. Exhibit B compares the fatal accident rate for various kinds of accidents on California freeways in 1980 with the rate in 1965. Note that in most categories, including run-off-road, the rate has dropped to about half the 1965 rate.

It is interesting to note that the category of accident with the lowest rate (cross median) is the one most often involved in tort suits. Our most vulnerable situation from the standpoint of tort suits is the lack of median barrier where our own "warrants" would indicate that a barrier is needed. In the median barrier case, you usually have the totally innocent victim who was in no way responsible for the accident.

Our safety program includes a Median Barrier Monitoring System in which we conduct an annual review of cross-median accidents and traffic volumes to identify locations which warrant the installation of a barrier. All locations which meet the warrants are added to our inventory for programming as soon as funds are available. Our current inventory of median barrier needs amounts to about \$50 million.

Blanket-type programs of improving safety on freeways by upgrading standards has proven to be very cost-effective, but applying the same concepts to the conventional highway system is a vastly different matter since (1) usually speeds are lower on conventional roads, (2) traffic