

The Litigator

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ROAD Authorities

Winning the tale of two cities:
An introduction to
municipal liability experts

Road authority liability:
Some practical strategies

Your first salting and
sanding case: What do
you need to know?

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Nominal and substantive

Any transportation system is made up of vehicles, users, the transportation facility and the environment. They all play a role in determining the efficiency and safety performance of a system. Human errors account for a large percentage of collisions on our transportation systems; however, they do not act alone. It has been estimated that roadway environments may be a contributory factor in more than 30% of roadway collisions. Those involved in personal injury and road safety litigation need to have a firm understanding of the potential for one or more of these factors to contribute to collisions, and to what extent. The following is a brief summary of the state of the road safety practice with specific attention to how nominal and substantive safety reviews may play a role in tort liability.



ROAD SAFETY:

Understanding their
implications in liability

BY RUSSELL BROWNLEE

Unavoidable hazards and conflicts are a negative by-product of mobility that will ultimately result in some collisions.

Driving in a vehicle, walking and biking are by nature hazardous situations.

The operative term is “reasonably safe”.

A firm understanding of expected safety performance and relative safety is required to properly assess a transportation facility and its role, if any, in a specific collision.

of the day or they did not. In the latter case, the inference is that the road deficiency was a contributory cause to the incident or collision.

There are benefits to limiting the scope of your case to nominal safety. In many cases a quick site review and compliance check requires the least effort and time and allows a preliminary assessment to be made regarding potential liabilities. The findings can be used to determine if the road authority should be named as a party and/or if a more in-depth engineering assessment should be undertaken. Secondly, it does not require defense of an expert opinion that lies outside design minimums, warrants, and policies. Some practitioners and experts do not have the education, training, and/or experience to venture outside these domains to discuss motorist behaviour, positive guidance and the interaction with the roadway environment. The viability and durability of your claim relies on your ability to ensure that you are being provided with a comprehensive review of the contributory factors.

MacNeil v. Bryan 2009 CanLII 28648 (ON SC) represents a tort action related to nominal safety. In August 2002, a vehicle travelling northbound on Concession Road 4 in the Township of Adjala-Tosorontio ran a stop sign at the T-intersection with Highway 89 and came to a final rest position in a field north of the intersection. The plaintiff, MacNeil, was a rear passenger in the Bryan vehicle and was catastrophically injured as a result of the single motor vehicle collision. The stop sign that faced the Bryan vehicle was readily visible on the approach to the intersection. Had Bryan complied with the stop sign, the incident may not have occurred, or at a minimum,

What is nominal safety?

Nominal safety is a measure of a transportation facility design's compliance with prevailing design standards, warrants, guidelines, and jurisdiction-specific policies and procedures, i.e., a “compliance check”. In Ontario, the primary references for nominal safety assessments are typically the Minimum Maintenance Standards,¹ the Geometric Design Standards for Ontario Highways,² the Geometric Design Guide for Canadian Roads,³ and the Ontario Traffic Manual (OTM).⁴ For many road authorities, if the road design or operations comply with the requirements in the above documents and meet their policies and practices, the facility is deemed “safe”. This safety concept promotes uniformity and consistency in our transportation systems, which is a good thing, but experience has shown that it will not guarantee safety at a particular location.

What is substantive safety?

Substantive safety is a quantitative safety assessment comparing the collision risk at a particular location to the expected safety performance at peer locations. In simple terms, we now have the tools to estimate the number of right angle collisions to “expect” at a rural stop-controlled intersection based on the volume of vehicles entering the intersection. If the right-angle collision history at a specific intersection is substantially greater than expected, all else being equal, there may be physical or operational deficiencies at the intersection that are contributing to a higher collision risk.

Nominal safety in litigation

Many litigators and their transportation experts tend to focus on nominal safety in their files, as it is viewed as an absolute. Either the roadway design and traffic control devices met the standards

would have been less severe. In this case, road authority liability involved the absence of a CHECKERBOARD sign that was required at such a location to assist motorists in identifying that there was no opportunity to travel straight through the intersection. The policy of the Ministry of Transportation of Ontario (MTO) required the CHECKERBOARD sign; however, the MTO practice at the time did not reflect this obligation. As a result, the MTO and other road agencies have now been actively placing CHECKERBOARD signs at their rural T-intersections.

Common problems of relying solely on nominal safety measures

In applying nominal safety, one must recognize where it may fall short in establishing your claim and maintaining your case against a formidable defence.

Firstly, road users do not read road transportation manuals! They take a provincially-issued driver test from a handbook that begins with: “This booklet is a guide only”, and specifies the need to read several other lengthy Acts, including the *Highway Traffic Act* (HTA). I would venture to say the most conscientious Ontario motorists never bothered to crack open a copy of the HTA, let alone the OTM or the Geometric Design Standards. In short, failing to meet the standard or guidelines does not necessarily mean you have another party to your matter. There will be situations whereby a prudent road user had the ability to properly assess the ensuing conflict and avoid the collision, notwithstanding the deficiencies identified with the roadway facility.

Secondly, the manuals and standards available to us are intended to give

“minimum typical” conditions and are necessarily general because they cannot incorporate all site-specific conditions. This is particularly apparent in established urban areas, in unique topography zones, and in challenging work zones. There are less “cookie cutter” situations in transportation planning and design/maintenance than one might expect. You must be aware that our guiding documents are just that, and design exceptions and engineering judgment are commonplace to meet overall project objectives and address site-specific constraints. Design dimensions and operating conditions that do not meet the standard of the day do not automatically point to an operational or safety concern; they may have been conscious and well-researched deviations.

Finally returning to a previous point, compliance with the standard of the day does not guarantee safety or ensure motorist understanding/compliance. There are situations where the basic design and signing features of an intersection or road section may comply with the prevailing guidelines, but the location experiences a higher collision risk due to the location and nature of the facility or motorist behaviour/human factors. A substantive safety review may assist in identifying contributory factors and potential hazards, such as the following that may not be identified by a basic compliance check:

- Combination horizontal and vertical (i.e., hills) curves that conceal the severity of the road alignment;
- Challenging roadway characteristics that divert the road user’s attention away from other hazards or conflicts, instead of toward them;
- Unexpected and atypical traffic control devices or right-of-way

assignments, even though in isolation the intersection appears to meet the guideline provisions;

- Poorly identified transition areas at urban boundaries, at lane terminations, or approaching intersections;
- Ambient lighting conditions that distract the motorist, impair visibility or conceal potential hazards;
- Inconsistent application of design or operations along a corridor or within a network that may confuse a driver; or
- Ambiguous or verbose signing that create long read times, lack of comprehension, and/or driver distraction.

Substantive safety in litigation

There is no such thing as “safe” in transportation. Unfortunately, unavoidable hazards and conflicts are a negative by-product of mobility that will ultimately result in some collisions. Driving in a vehicle, walking and biking are by nature hazardous situations. The operative term is “reasonably safe”. A firm understanding of expected safety performance and relative safety is required to properly assess a transportation facility and its role, if any, in a specific collision. Specifically, a substantive safety analysis will help answer such questions as:

- Should the facility owner or operator have known of the safety issue? I.e., did the jurisdiction have a sound method to identify higher-risk road sections or intersections and dominant collision trends?
- Did the transportation authority have a strategy to identify, program, and fund safety improvements? In many jurisdictions considerable

effort is focused on efficient traffic flow and pavement management, with little regard for proactive safety improvements; and

- Were localized or systemic safety issues addressed with useful countermeasures or remedial action directed specifically at the collision issue? There have been cases where overzealous politicians, transportation engineers, and sign crews have applied remedial measures in the name of safety, and have had a negative effect on road user safety.

Most larger and proactive road authorities in Ontario have the ability to compare the actual safety performance (i.e. collisions) of a particular roadway or intersection with the expected performance for that facility type. They have a database of the frequency and types of collisions that are occurring at a specific site and can determine whether the frequency is beyond that expected, and which types of collisions are over-represented. In all cases, your expert should determine if collision data is collected and analyzed by the jurisdiction or not. If such analysis is conducted, it would be beneficial to understanding the strengths and weaknesses of your case in the event that 1) your collision is representative of the only collision of that type in the past ten years or, 2) it is one of twenty of that type that occurred in the past three years.

Although the state of the practice in road safety has made considerable progress in transportation design and traffic control in the past 10 years, faulty practices and applications continue to persist on some Ontario roadways, particularly at the local municipal

level. With further advancements and awareness, including the 2009 release of the Highway Safety Manual⁵ in the U.S., it will be increasingly difficult for transportation practitioners and facility owners to plead ignorance to safety performance on their roadways. Some smaller and reactive jurisdictions rely solely on resident complaints and police services to identify safety concerns in their road networks. While effective to a certain degree, this qualitative approach to safety is not state-of-the-practice and will inevitably overlook safety concerns and hazards.

Common problems of relying solely on substantive safety measures

Road authorities should understand that one cannot rely on the collision history to identify all safety concerns and potential hazards in the road network. A substantive safety assessment is only one component of an overall safety program.

Firstly, the lack of collision history may be a function of exposure. In rural and/or low volume environments, the frequency of a collision event occurring is lower and the majority of the road users will be local “repeat customers” who are familiar with the road network and its nuances. While the probability of an unfamiliar user encountering the deficient road section and being involved in a collision is low, the deficiency exists and the consequences and severity may be significant. Notwithstanding, collision history, the road authority should be periodically reviewing their network for potential hazards and economical remedial actions, such as maintenance, roadside protection, and warning signs.

Secondly, a statistical analysis may numerically conceal a localized but

significant safety issue at an otherwise well-performing intersection or road section, i.e., a poorly signed curve within a 5 km section of a generally innocuous roadway. Collision rates are generally expressed as a function of “million vehicles entering” an intersection or “million vehicle/kilometers” using a road section. Longer road sections and higher volume intersections have the potential to hide a specific safety issue due to their size or volume.

Deering v. Scugog (Township), 2010 ONSC 5502 (CanLII) (appeal dismissed at 2012 ONCA 386 (CanLII)) demonstrates how nominal and substantive road safety was applied in civil litigation. During the evening of August 10, 2004, Deering was driving a group of friends along Coates Road, a low volume, rural roadway. As she approached the crest of a hill, Deering saw the headlights of an oncoming vehicle. To her, it appeared that the opposing vehicle was on her side of the road. She steered to the right, lost control, and rolled the vehicle into the roadside. The opposing vehicle continued and was never identified. The plaintiff’s experts alleged that the roadway was hazardous in the area of the collision citing a combination of factors, including the limited sight distance over the hill, a horizontal shift in the roadway within the hill, narrow lane and shoulder widths, significant roadside hazards, the lack of a center line, and an 80 km/h speed limit that greatly exceeded many of the design features of the roadway. The roadway surface had been recently rehabilitated by the road authority; however, no other remedial measures were instituted as a part of this initiative. The above deficiencies were primarily established on nominal safety measures.

The road authorities argued that Coates Road was similar to countless other low volume rural roadways in Ontario, the collision history was unremarkable, and the probability of the above sequence of events occurring during an evening condition were remote. From a substantive safety perspective they were correct.

Justice Howden indicated in his decision that this particular collision location was an “accident waiting to happen”, although he recognized the absence of previous collisions on this road section. The decision found that the standards and guidelines adopted by road authorities must be followed, absent a valid or compelling reason to do otherwise. In this case, the lack of a collision history was not sufficient reason.

Summary

While the above only touches on a few examples, it underlies the importance of fully understanding the range of safety “measures” and their application when determining the relative strengths

and weaknesses of your liability case involving a road authority.



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NOTES

- ¹ Minimum Maintenance Standards for Municipal Highways, O. Reg. 239/02
- ² Geometric Design Standards for Ontario Highways, Ministry of Transportation of Ontario, 1994
- ³ Geometric Design Guide for Canadian Roads, Transportation Association of Canada, 1999
- ⁴ Ontario Traffic Manual, Ministry of Transportation of Ontario, 2001
- ⁵ Highway Safety Manual, American Association of State Highway and Transportation Officials, 2010.



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