

Welcome to the new issue of *Seeing Beyond Risk*, the quarterly electronic publication from the Canadian Institute of Actuaries (CIA). Each issue presents the latest actuarial thinking from experts.

In this issue, Craig A. Allen, Chair of the CIA's Actuarial Evidence Committee, describes the actuarial evidence area of practice, where actuaries assist the parties and the court in the resolution of financial disputes.

We are sure you will find this article informative and thought-provoking, and we encourage you to distribute it among your friends and colleagues.

Actuarial Evidence: Helping to Resolve Financial Disputes More Fairly, Inexpensively, and Quickly

By Craig A. Allen, FCIA

Actuaries are experts in financial valuations involving future contingent events, such as mortality, retirement, disability, automobile accidents, professional negligence, and investment returns. A frequent application of this expertise is in actuarial evidence, where actuaries assist the parties and the court in the resolution of financial disputes.

In 1978, Mr. Justice Brian Dickson of the Supreme Court of Canada cited "actuarial calculations as the best available means of determining amount" where lump sum awards are used to compensate accident victims. The following year, the CIA established its Actuarial Evidence Committee to take leadership, in the public interest, in the field of actuarial evidence in Canada.

At a time when the costs and objectivity of expert witnesses are under increasing scrutiny, actuaries have earned the confidence of the justice system.



Indeed, the provisions for objectivity and independence in the actuarial standards of practice were cited by the Honourable Coulter A. Osborne in his 2007 [Civil Justice Reform Project](#) in Ontario. Mr. Osborne held up actuarial standards as an example of the type of standards to be applied by all experts in the civil justice system.

Actuaries in the actuarial evidence practice area are usually retained by lawyers. However, these actuaries are sometimes retained directly by the parties in dispute, or by others with an interest in the matter, such as insurance companies. The actuary's work usually involves a report that the parties use to attempt a pre-trial settlement of their dispute. Where the dispute does not reach a settlement before trial, the actuary may also present his or her findings as oral testimony at trial.

MAJOR AREAS OF ACTIVITY

Civil Litigation Arising from Personal Injuries and Fatalities

Actuaries provide valuations of damages in personal injuries and fatalities, including motor vehicle accidents and medical malpractice. In these matters, the actuary may value the loss of past and future employment income, which for young or highly compensated individuals could be in excess of one million dollars. The actuary may also value the cost of future care for the injured individual. This may include durable medical supplies, in-home care, and/or care in a licensed facility, the lump sum value of which can run into several millions of dollars for severely and permanently injured individuals.

Lawyers for plaintiffs often face defence counsel who, in fulfilling their duty to advocate for their clients, may argue for factors that support the lowest amount of compensation. Plaintiff lawyers find that bringing in the unbiased analysis of an actuary, based on best estimates, can provide a credible counterpoint to the defence position. The actuary's role may be a factor that enables the plaintiff to receive adequate compensation, thus minimizing the need to access social services.

Similarly, lawyers representing the defendant will often be opposed by plaintiff counsel who, in carrying out their duty to advocate for their client, will argue for factors supporting the highest amount of compensation. Defence lawyers will find that the unbiased analysis of an actuary can provide a credible rebuttal to the plaintiff argument, protecting the defence position and possibly helping to contain the cost of automobile and other insurance.

Other areas of civil litigation practice include wrongful dismissal litigation, estate issues, and commercial litigation.

Family Law Proceedings

Actuarial evidence practitioners are actively involved in family law matters—most frequently in valuing



pension entitlements for division in marriage breakdown proceedings. Other actuarial evidence practice in family law includes the

valuation of life interests in the marital home, stock options, and lump sum support arrangements.

The Criminal Interest Rate

Canada's Criminal Code prohibits loans with an effective annual interest rate over 60 percent. Fees in addition to interest can lead to consumer loans that exceed the 60 percent threshold without the knowledge of borrowers. Short-term loans can also take borrowers by surprise by exceeding the 60 percent limit. Large and complex debt transactions with varying payment amounts and timing of payments can also inadvertently cause a financial transaction to exceed an interest rate of 60 percent.

For individual loans, the Criminal Code recognizes the certificate of a Fellow of the Canadian Institute of Actuaries as proof of the interest rate.

Pension and Insurance Litigation

Disputes that involve pension issues, such as wind-ups of pension plans, entitlements to plan surplus, and the rights of plan members, call upon the subject-matter expertise of actuaries in the pension area of practice. Similarly, insurance disputes such as those involving policyholder rights and those involving risk-sharing agreements (e.g., reinsurance) between insurance companies are aided by the knowledge of actuaries in the various insurance areas of practice. In these matters, actuaries are subject matter experts, as well as financial experts.

THE OBJECTIVITY AND INDEPENDENCE OF AN ACTUARY'S EXPERT OPINION

An assignment may involve the actuary providing an expert, independent opinion. Whether brought in by the plaintiff or the defence, the actuary is bound by professional standards to provide an objective assessment, transparently documented. These standards are reviewed regularly to keep up with current developments and are enforced by a discipline process.

The standards are built on a foundation of comprehensive training in mortality and disability contingencies, interest rates, and compound interest calculations at an advanced level, along with continuing education in those subjects. Further, the profession has invested greatly in training its members for clear communications. The clarity of

How AE Practitioners Benefit the Public

- Objective and independent expert witnesses.
- Reduced costs and time to resolve disputes.
- Assistance in asset/pension evaluation in marriage breakdown proceedings.
- Educating public, courts, and governments on high interest consumer loans and payday loans.
- May help contain costs of automobile and other insurance.
- May help plaintiff to receive adequate compensation, minimizing the need to access social services.

such an independent assessment, with assumptions and methods clearly declared, can leave less room for argument, and thereby can contribute to reduced costs and time to resolve disputes.

LITIGATION ADVICE

The actuary may be called upon for an engagement which provides services other than an independent expert opinion. The experience of actuarial evidence practitioners equips them to provide litigation advice to lawyers, with respect to damages. Such advice may involve a critique of the opposing party's expert opinion, to equip the lawyer to understand the evidence, as well as to provide issues to raise in cross examination. As another example, the actuary can perform analyses that help defence lawyers and insurance adjusters compare the cost of structured settlement annuities with the cost of settlements calculated by the courts under the rules of civil procedure.

A VITAL AND PROGRESSIVE AREA OF PRACTICE

The actuarial evidence practice area develops further through an [annual seminar](#) that is attended in person by more than half of the practitioners from across Canada. The seminar also provides an opportunity to connect with invited speakers from the legal community and with other practice areas in the CIA.



The actuarial evidence practice area has reached out to governments across Canada on matters in its expertise, in the public interest.

One such issue is the interest rate by which future damages are discounted. This interest rate represents the rate of investment income that a lump sum damages award is expected to earn over the period of time covered by the lost income or future care costs. The rate has a significant impact on the amount of compensation for personal injury claims, and also on the costs of automobile and other insurance.

The CIA has engaged in consultations with several provincial governments on the discount rates they mandate for civil trials, particularly in light of declines in historical market interest rates.

Calling upon its expertise in the criminal interest rate, the actuarial evidence practice area has also assisted organizations, such as Pro Bono Ontario, to educate the public, courts, and governments about high-interest consumer loans and payday loans.

CONCLUSION

Canadian courts hold the actuarial evidence practice area in high regard. Actuaries have comprehensive training in the subject matter of actuarial calculations, including mortality, disability, and advanced compound interest. Standards of practice, enforced by a discipline process, ensure that the expert opinion of an actuary is objective, independent, and well-documented, providing a high degree of credibility when presented to opposing parties in litigation. The actuarial evidence practice area continues to progress, through the Actuarial Evidence Committee and continuing education, as well as through consultation with the legal community, governments, and other actuarial practice areas.

With these attributes, actuaries help parties settle disagreements more fairly, inexpensively, and quickly. 



Craig A. Allen, FCIA, is an independent consulting actuary. Mr. Allen developed his practice in actuarial evidence based on his prior experience supporting claims counsel within liability insurance companies. Since 2015 he has served as chair of the CIA's Actuarial Evidence Committee. Between 2014 and 2017, he served as eastern vice-president of the National Association of Forensic Economics. In his leadership roles, Mr. Allen has worked to raise awareness of the insights that actuarial evidence can bring to issues around cost and claims outcomes in automobile insurance and other property-casualty insurance systems.