



## INTERNATIONAL ACTUARIAL ASSOCIATION

### What Is An Actuary?

Actuaries are multi-skilled strategic thinkers, trained in the theory and application of mathematics, statistics, economics, probability and finance. They have been called financial architects and social mathematicians, because their unique combination of analytical and business skills are used to address a growing variety of financial and social challenges worldwide.

Using sophisticated analytical techniques, actuaries confidently make financial sense of the short term as well as the distant future by identifying, projecting and managing a spectrum of contingent and financial risks. In doing so, actuaries provide decision-makers with valuable information with which to make long-term strategic decisions, as well as providing practical solutions to problems involving the possible consequences of future uncertain events.

For more than 150 years, actuaries have brought their expertise to the management of risks associated with life insurance, health insurance, general (or property and casualty insurance), and employee retirement and benefit plans. However, there is a strong and growing demand for actuarial skills across a diverse range of business disciplines such as management consultancy, investment, finance, brokerage, regulation, education and software development.

Actuaries are trained to provide a range of valuable services:

- ■ Analyze and manage financial and related risk
- ■ Construct financial modeling frameworks to suit particular circumstances
- ■ Provide analyses which take into account changes in interest rates, inflation, investment returns and unanticipated events
- ■ Communicate complex analyses in an easily understood form for senior decision-makers in management, legislation and regulation
- ■ Provide financial advice to facilitate secure long-range decisions

### The Actuary's Role in Business and Public Policy

Actuaries provide professional services in a wide range of business and social contexts.

#### Life Insurance

Actuaries have long been recognized for their expertise in managing the solvency of life insurance companies. For decades, governments around the world have accorded actuaries statutory authority to certify that life insurance companies have sufficient resources available to meet their obligations to policyholders.

#### Health Insurance

Actuaries assist health insurers worldwide to meet their financial obligations despite ever-increasing costs of medical care and accelerating demands for coverage. They are particularly well-equipped to help insurers address the health care needs of the elderly and the chronically ill in a financially responsible way.

#### General Insurance

Actuaries are deeply involved in the increasingly complex general insurance business, particularly in the areas of pricing analysis, establishing the level of claims reserves and structuring reinsurance programs. Increasingly, actuaries are using sophisticated modeling techniques to help general insurers plan for and address natural disasters and effects of climatic changes.

## Employee Retirement and Benefit Plans

Actuaries bring their skills in statistics, mathematical analysis, probabilities and finance to assist employers and governments in providing financial security for the elderly and the retired. Actuaries make recommendations on the adequacy of funding levels for pension plans and provide statutory certifications to support pension and benefit plan legislation in countries around the world.

## Investment and Finance Services

As the financial services industry becomes increasingly complex and international in focus, actuarial practice is rapidly expanding in new and diverse industries. Actuaries work in funds management and provide advice on interest performance measurement and asset allocation as well as quantitative modeling. Brokerage firms increasingly use actuaries as analysts. In banking, actuaries analyze mortgage portfolios and lending risks and project investment returns and various future-based model scenarios. Additionally, actuaries help to design investment products that incorporate insurance elements, applying skills in analysis of contingent risk and financial analysis.

## Actuaries and Public Policy

Actuaries take seriously their responsibility to the public and recognize that their unique blend of skills can be enormously beneficial when applied to the general public good. Through their national associations, actuaries provide voluntary assistance to national and regional governments, analyzing legislative and regulatory proposals, advising on social trends and suggesting solutions to a wide range of social problems. Through the International Actuarial Association (IAA), actuaries are offering support to international regulatory, financial, accounting and public assistance organizations.

## The Importance of Professionalism

The actuarial profession recognizes and appreciates the exceptional degree of public trust that is bestowed upon it and, accordingly, acknowledges its corresponding responsibility to fulfill its duty to the public by maintaining a high level of professionalism among its members. Candidates must successfully complete rigorous educational programs and achieve significant levels of appropriate experience before being admitted to membership in the actuarial profession. They are required by their membership organizations to meet high standards of professional

integrity and competence. They must also comply with exacting standards of practice developed by experienced practitioners to guide actuaries in conducting their complex analyses. Actuaries who do not fully comply with the standards of their profession are subject to discipline by their membership organization. The establishment and maintenance of uncompromising professional standards helps actuaries maintain their reputation for being responsible, competent, objective and ethical.

## The Role of the IAA

Created to serve as a bond between the actuaries and the associations of actuaries throughout the world, the IAA is the international professional, educational and research organisation of actuarial associations and of actuaries. In accordance with Article 3 of the Statutes, the aims of the IAA are:

1. Develop the role and enhance the reputation and recognition of the actuarial profession and individual actuaries throughout the world.
2. Promote high standards of professionalism among actuarial associations and among actuaries throughout the world to ensure that the public interest is served.
3. Advance the body of knowledge of actuarial science and its applications.
4. Further the personal professional development of actuaries throughout the world.
5. Promote mutual esteem and respect amongst actuaries.
6. Provide a forum for discussion among actuaries and actuarial associations throughout the world.
7. Represent Member Associations in discussions with international bodies.

The IAA fosters professionalism among actuaries worldwide by requiring its member associations to establish and maintain standards of conduct and practice and an appropriate disciplinary process.

The IAA offers the expertise of the global actuarial community to provide voluntary assistance to international public policy makers and service organizations.

The IAA has been constituted and incorporated as an Association in accordance with Swiss law. It is the continuation of the "Comité Permanent des Congrès d'Actuaires" established in 1895 which was renamed the "International Actuarial Association" in 1968.

Secretariat: 360 Albert Street, Suite 820, Ottawa, Ontario CANADA K1R 7X7, ☎ 1-613-236-0886 📠 1-613-236-1386,  
✉ [secretary.general@actuaries.org](mailto:secretary.general@actuaries.org), ✉ [executive.director@actuaries.org](mailto:executive.director@actuaries.org), ✉ [administrative.assistant@actuaries.org](mailto:administrative.assistant@actuaries.org), Web Site [www.actuaries.org](http://www.actuaries.org)