

CAS: The Gold Standard for Property/Casualty Actuaries

March 25, 2014

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CAS Past President



The Casualty Actuarial Society

- The only actuarial organization in the world exclusively focused on property/casualty risks.
- Trusted resource for professional development and career advancement
- Unmatched credentials for Property/Casualty Actuaries.



Centennial Goal

The CAS will be recognized globally as the premier organization in advancing the practice and application of casualty actuarial science and educating professionals in general insurance, including property & casualty and similar risk exposures.



Why CAS?

What makes us different?

- **Tangibles**
 - Depth of training
 - Salaries
 - Employment opportunities
- **Intangibles**
 - A Leader
 - Culture and Community
 - Spirit of volunteerism
 - Core Values



Core Values of the CAS

- Collaboration
- Collegiality
- Community
- Creativity/Intellectual Curiosity
- Excellence
- Integrity
- Professionalism
- Practical Applications



Actuarial Skill Set: A Question of Balance

- Technical Competence
 - Ability to apply casualty actuarial techniques
 - Synthesis skills
 - Critical thinking/informed judgment
- Ability to communicate effectively
 - Relevance: A business perspective
 - Articulate judgments, assumptions, limitations
 - Audience may vary – Sr. Management vs. Peers
- Business sense





CAS Demographics



A Growing Society

	Nov 2003	Jan 2014
Fellows	2,503	4,358
Associates	1,318	1,884
Affiliates	26	21
Total	3,847	6,263



A Global Society

2014 Geographic Distribution

United States	5,314	Switzerland	36
Canada	546	Hong Kong	32
Bermuda	113	Singapore	22
United Kingdom	56	Germany	13
China	56	Other	75



CAS Members by Employment Type

Employment Type	Total
Property/Casualty Insurance	44%
Consultants	14%
Other	13%
Reinsurance	9%
Retired	7%
Organizations Serving the Insurance Industry	6%
Brokers & Agents	2%
Government	2%
Life & Accident, Health	2%
Academic	1%

Source: Casualty Actuarial Society, January 2014



Employers of CAS Members

Company or organization	No. employed	% of CAS membership*
Liberty Mutual Group	209	4.0%
The Travelers Companies	193	3.7%
Towers Watson	130	2.5%
Milliman, Inc.	110	2.1 %
AIG	99	1.9%
CNA Insurance Companies	98	1.9%
The Hartford	95	1.8%
Zurich North America	92	1.8%
Allstate Insurance Company	69	1.3%
ISO	67	1.3%
Nationwide Insurance Company	59	1.1%



* Represents the percentage of members who are currently employed (i.e., not retired).

What Do Casualty Actuaries Do?

- Ratemaking/Pricing
- Loss Reserving
- Capital Adequacy
- Reinsurance Evaluation
- Enterprise Risk Management
- And more...



Ratemaking/Pricing

- Are current rates meeting our objectives?
- Are some classes performing better/worse than others?
- (Auto) How do driving patterns influence risk of loss?
- How does an insured's loss experience influence its premium?



Loss Reserving

- What is Company's unpaid claim liability as of 12/31/12? (Best estimate; Central estimate)
- What is the probability distribution of unpaid claims as of 12/31/12?



Capital Adequacy

- How adequate is Company Surplus to respond to adverse results (e.g., loss reserves higher than estimate)?
- How much capital is required to support different types of business?



Reinsurance

- (Insurer) What are risk/reward trade offs related to different reinsurance structures?
- (Reinsurer) Pricing and reserving issues, but with much less data.



Line of Business Considerations

- Private Passenger Auto
- Commercial General Liability
- Medical Malpractice
- Crop Insurance
- Others ...



CAS Credentials



CAS Credentials

- **Associate (ACAS)**



CAS Credentials

- Associate (ACAS)
- **Fellow (FCAS)**



CAS Credentials

- Associate (ACAS)
- Fellow (FCAS)
- **Chartered Enterprise Risk Analyst (CERA)**



Current CAS Syllabus to Reach ACAS

- **Validation by Educational Experience (VEE):**
 - **VEE-Applied Statistical Methods**
 - **VEE-Corporate Finance**
 - **VEE-Economics**



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- Validation by Educational Experience (VEE):
 - VEE-Applied Statistical Methods
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 - VEE-Economics
- **Two CAS Online Courses:**
 - **Online Course 1—Risk Management and Insurance Operations**
 - **Online Course 2—Insurance Accounting, Coverage Analysis, Insurance Law, and Insurance Regulation**



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- Two CAS Online Courses:
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- **Course on Professionalism**
- **Exams 1 - 6**



Current CAS Syllabus to Reach ACAS (con't)

- Exams
 - **Exam 1/P—Probability**



Current CAS Syllabus to Reach ACAS (con't)

- Exams
 - Exam 1/P—Probability
 - **Exam 2/FM—Financial Mathematics**



Current CAS Syllabus to Reach ACAS (con't)

- Exams
 - Exam 1/P—Probability
 - Exam 2/FM—Financial Mathematics
 - **Exam 3F/MFE—Models for Financial Economics**



Current CAS Syllabus to Reach ACAS (con't)

- Exams
 - Exam 1/P—Probability
 - Exam 2/FM—Financial Mathematics
 - Exam 3F/MFE—Models for Financial Economics
 - **Exam LC – Models for Life Contingencies**



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- Exams
 - Exam 1/P—Probability
 - Exam 2/FM—Financial Mathematics
 - Exam 3F/MFE—Models for Financial Economics
 - Exam LC—Models for Life Contingencies
 - **Exam ST – Models for Statistics and Stochastic Processes**



Current CAS Syllabus to Reach ACAS (con't)

- Exams
 - Exam 1/P—Probability
 - Exam 2/FM—Financial Mathematics
 - Exam 3F/MFE—Models for Financial Economics
 - Exam LC—Models for Life Contingencies
 - Exam ST – Models for Statistics and Stochastic Processes
 - **Exam 4/C—Construction and Evaluation of Actuarial Models**



Current CAS Syllabus to Reach ACAS (con't)

- Exams

- **Exam 5—Basic Techniques for Ratemaking and Estimating Claim Liabilities**



Current CAS Syllabus to Reach ACAS (con't)

- Exams
 - Exam 5—Basic Techniques for Ratemaking and Estimating Claim Liabilities
 - **Exam 6—Regulation and Financial Reporting (Nation Specific)**
 - **Actuarial Institute of Chinese Taipei**
 - **Canada**
 - **United States**



Current CAS Syllabus to Reach FCAS

ACAS plus:

- **Exam 7—Estimation of Policy Liabilities, Insurance Company Valuation, and Enterprise Risk Management**



Current CAS Syllabus to Reach FCAS

ACAS plus:

- Exam 7—Estimation of Policy Liabilities, Insurance Company Valuation, and Enterprise Risk Management
- **Exam 8—Advanced Ratemaking**



Current CAS Syllabus to Reach FCAS

ACAS plus:

- Exam 7—Estimation of Policy Liabilities, Insurance Company Valuation, and Enterprise Risk Management
- Exam 8—Advanced Ratemaking
- **Exam 9—Financial Risk and Rate of Return**



Current CAS Syllabus to Reach CERA

- **Meet all requirements for CAS Associateship**



Current CAS Syllabus to Reach CERA

- Meet all requirements for CAS Associateship
- **Have credit for CAS Exam 7 and Exam 9**



Current CAS Syllabus to Reach CERA

- Meet all requirements for CAS Associateship
- Have credit for CAS Exam 7 and Exam 9
- **Successfully complete Exam ST9, Enterprise Risk Management Specialist Technical, of the Institute and Faculty of Actuaries (U.K.)**



Current CAS Syllabus to Reach CERA

- Meet all requirements for CAS Associateship
- Have credit for CAS Exam 7 and Exam 9
- Successfully complete Exam ST9, Enterprise Risk Management Specialist Technical, of the Institute and Faculty of Actuaries (U.K.)
- **Successfully complete the three-day Enterprise Risk Management and Modeling Seminar for CERA Qualification**



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Read from our guest bloggers – from seasoned casualty actuaries and recruiters to professors, recent graduates and students – who share their personal experiences and practical insights on landing that internship, how to navigate exams and study demands, what catches the attention of employers, and much more.

Puzzler

Find a new brain twister here every month. We'll post a variety of puzzles that challenge your mind, stretch your thinking and hone your problem-solving skills.

Student Central Online Community

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- Future Focus blog shares insights, tips and perspectives from practicing casualty actuaries, university professors, students and others.
- CAS member directory will give you a sense of how far and wide, broad and deep our network is.
- View and connect with other student members
- Receive updates from the CAS



You are invited...

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