



# **The CAS: The Gold Standard for Property/Casualty Actuaries**

Student Program  
Buckeye Actuarial Continuing Education  
April 16, 2014



# Congratulations! Already, You're Making Wise Choices



# Soon, You'll Face More Choices





# This Morning's Agenda

- What is the Casualty Actuarial Society (CAS)?
- What do Casualty Actuaries do?
- How do I become a CAS member?
- Where do I go for more information about the CAS?





# **What is the Casualty Actuarial Society (CAS)?**





# 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.





**100 Years of Expertise,  
Insight & Solutions**





# CAS Centennial Goal

*The CAS will be recognized globally as a leading resource in educating casualty actuaries and conducting research in casualty actuarial science. CAS members will advance their expertise in pricing, reserving, and capital modeling, and leverage their skills in risk analysis to become recognized as experts in the evaluation of enterprise risks, particularly for the property and casualty insurance industry.*





# 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





# CAS Demographics



# A Growing Society

	Nov 2003	Nov 2013
Fellows	2,503	4,230
Associates	1,318	1,812
Affiliates	26	20
Total	3,847	6,062



# A Global Society

## 2013 Geographic Distribution

United States	5,152	Hong Kong	32
Canada	521	Switzerland	32
Bermuda	110	Singapore	20
United Kingdom	53	Germany	13
China	51	Other	78





# CAS Members by Employment Type

Employment Type	Total
Property/Casualty Insurance	43%
Consultants	16%
Other	13%
Reinsurance	10%
Retired	6%
Organizations Serving the Insurance Industry	6%
Brokers & Agents	2%
Government	2%
Life & Accident, Health	2%
Academic	<1%

Source: Casualty Actuarial Society, December 2012



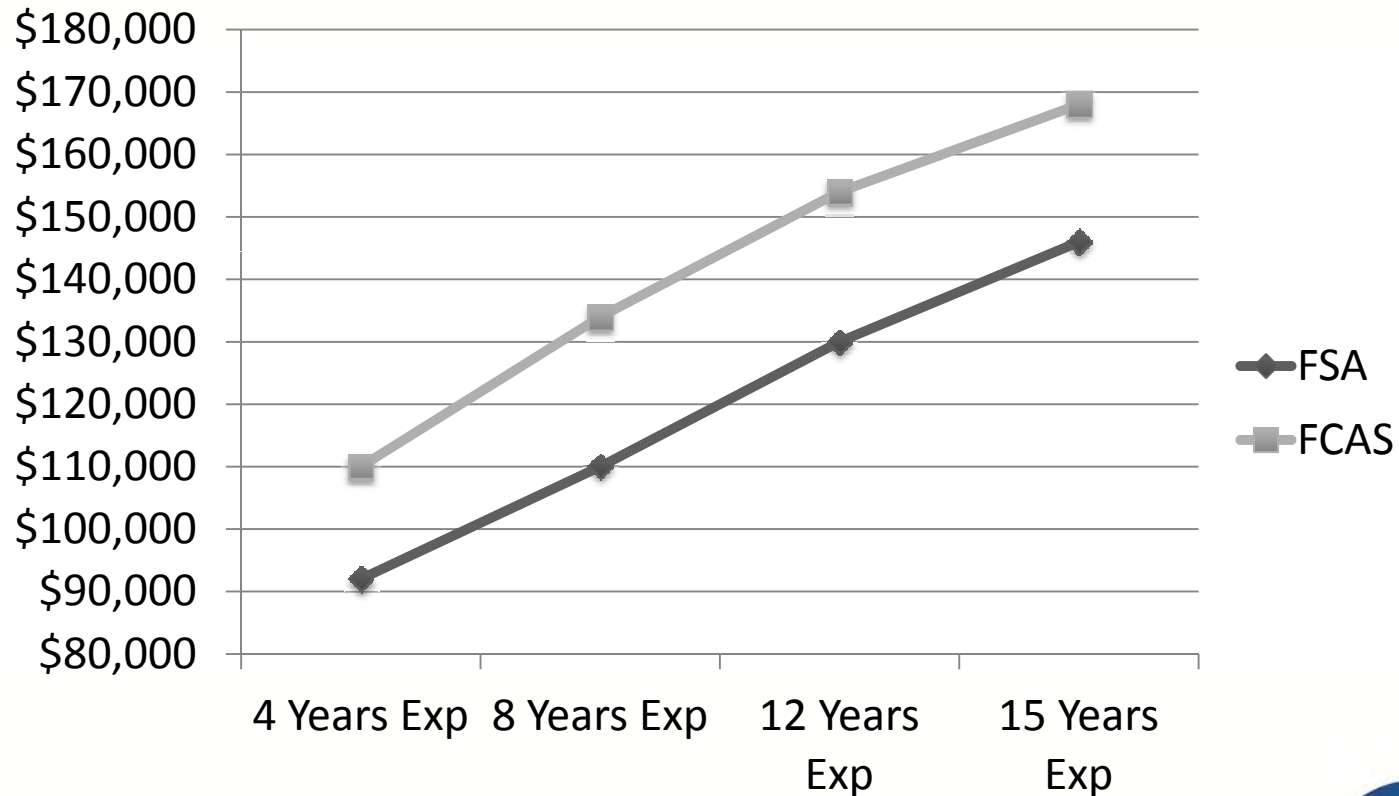
# Employers of CAS Members

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).

# Average Salary for CAS Member Higher than for SOA Member



Used with permission from Ezra Penland Actuarial Recruitment  
(<http://www.ezrapenland.com/salary/>)







# What do Casualty Actuaries do?





# The 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



# What Do Casualty Actuaries Do?

- Ratemaking/Pricing
- Loss Reserving
- Capital Adequacy
- Reinsurance Evaluation
- Enterprise Risk Management
- C-Level Officer (CFO, CEO, CRO)
- 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 12/31/2013? (Best estimate; Central estimate)
- What is the probability distribution of unpaid claims as of 12/31/2013?





# 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 ...







# How do I become a CAS member?





# CAS Membership Credentials

- Associate (ACAS)





# CAS Membership Credentials

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





# CAS Membership Credentials

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





# Current Path to ACAS

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





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  - VEE-Corporate Finance
  - 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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  - VEE-Applied Statistical Methods
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- Two CAS Online Courses:
  - Online Course 1—Risk Management and Insurance Operations
  - Online Course 2—Insurance Accounting, Coverage Analysis, Insurance Law, and Insurance Regulation
- **Course on Professionalism**
- **Exams 1 - 6**





# Current Path to ACAS

- Exams
  - Exam 1/P—Probability







# Current Path to ACAS

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





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





# Current Path to ACAS

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  - Exam 1/P—Probability
  - Exam 2/FM—Financial Mathematics
  - Exam 3F/MFE—Models for Financial Economics
  - **Exam 3L—Models for Life Contingencies and Statistics**





# Current Path to ACAS

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





# Current Path to ACAS

- Exams

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





# Current Path to ACAS

- 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**



# Changes to CAS Syllabus for Path to ACAS

- Exams 1/P, 2/FM, 3F/MFE, and 4/C are currently jointly sponsored by CAS and Society of Actuaries (SOA).
- SOA announced that it will discontinue the agreement to jointly sponsor the exams as of December 31, 2013.
- Details can be found at:

<http://www.casact.org/press/index.cfm?fa=viewArticle&articleID=2104>





# Current Path to FCAS

ACAS plus:

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







# Current Path to FCAS

ACAS plus:

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





# Current Path to 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 Path to CERA

- **Meet all requirements for CAS Associateship**





# Current Path to CERA

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





# Current Path to 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 Path to 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**





# Professionalism and Career Development

- Code of Professional Conduct
- Actuarial Standards of Practice
- At least 30 hours per year of continuing education
- Other professional designations (CPCU, CFA, The Institutes' Associate programs)
- MBA or other academic credentials





**Where do I go to for more  
information about the CAS?**







# Introducing...

**STUDENT  CENTRAL**

**FOCUSED ON YOUR FUTURE**

join online today at  
**[www.CASstudentcentral.org](http://www.CASstudentcentral.org)**





# CAS Student Central

- No membership fee
- Automatic annual membership renewal
- Access to resources
- Free webinars
- Invitations to networking events





# Student Central Online Community

Stay connected!

- 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



# STUDENT CAS CENTRAL

FOCUSED ON YOUR FUTURE

About the CAS

About Our Profession

Classroom to Credentials

News & Updates

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▶ About CAS Student Central

▶ Study Tools

▶ Career Resources

▶ Online Community

*Jumpstart your success.  
Be part of CAS Student Central.*



CAS Student Program | This is a test announcement.

### Join Us

Employers value CAS credentials – Associate of CAS (ACAS) and Fellow of CAS (FCAS) – as the gold standard. With this in mind, we invite university students to become members of CAS Student Central. We care about your developing career and take it as seriously as you do.

### Future Focus

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.



**You are invited...**

**STUDENT  CENTRAL**

**FOCUSED ON YOUR FUTURE**

Join online today at  
**[www.CASstudentcentral.org](http://www.CASstudentcentral.org)**





# Additional Resources

- CAS - [www.casact.org](http://www.casact.org)
- CAS Student Central  
[www.CASstudentcentral.org](http://www.CASstudentcentral.org)
- Be An Actuary -  
[www.BeAnActuary.org](http://www.BeAnActuary.org)
- American Academy of Actuaries -  
[www.actuary.org](http://www.actuary.org)
- Salary Surveys
  - [www.ezrapenland.com](http://www.ezrapenland.com)
  - [www.dwsimpson.com](http://www.dwsimpson.com)





**Questions?**



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