

## Beyond the CAS Exams: Rounding Out the Actuary

2010 CAS Ratemaking and Product Management Seminar

Mary Hosford, FCAS, MAAA, CPCU, AIAF, AIM  
Kelly McKeethan, FCAS, MAAA, CPCU, ARC, AIS, ACP  
Bob Wolf, FCAS, CERA, ASA, MAAA

March 16, 2010

2010 CAS RPM Seminar

1

---

---

---

---

---

---

---

---

## Beyond the CAS Exams: Rounding Out the Actuary

2010 CAS Ratemaking and Product Management Seminar

Kelly McKeethan, FCAS, MAAA, CPCU, ARC, AIS, ACP

March 16, 2010

2010 CAS RPM Seminar

2

---

---

---


---

---

---

---

---



### Antitrust Notice

- The Casualty Actuarial Society is committed to adhering strictly to the letter and spirit of the antitrust laws. Seminars conducted under the auspices of the CAS are designed solely to provide a forum for the expression of various points of view on topics described in the programs or agendas for such meetings.
- Under no circumstances shall CAS seminars be used as a means for competing companies or firms to reach any understanding – expressed or implied – that restricts competition or in any way impairs the ability of members to exercise independent business judgment regarding matters affecting competition.
- It is the responsibility of all seminar participants to be aware of antitrust regulations, to prevent any written or verbal discussions that appear to violate these laws, and to adhere in every respect to the CAS antitrust compliance policy.

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Outline

- Program Content
  - CPCU 5-7
  - IIA 8-18
  - IDMA 19-25
  - AICP 26-27
- Exam Delivery/Timing 28-31
- Study Approach/Considerations 32
- Personal Experiences/Benefits 33

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Program Content

- Administered by the Institutes – www.aicpcu.org
  - \* American Institute for Chartered Property Casualty Underwriters (AICPCU)
  - \* Insurance Institute of America (IIA)
- CPCU
  - \* Three components – Education, Ethics, Experience
- Education
  - \* Five Foundation Courses – Exam Type
    - Foundations of Risk Management, Insurance, and Professionalism – Short Essay
    - Insurance Operations, Regulation, and Statutory Accounting – Multiple Choice
    - The Legal Environment of Insurance – Multiple Choice
    - Finance for Risk Management and Insurance Professionals – Multiple Choice
    - Financial Service Institutions – Short Essay

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Program Content (CPCU continued)

- Concentration Courses – choose Personal Lines or Commercial Lines
  - \* Personal Lines
    - Personal Risk Management and Property-Liability Insurance – Short Essay
    - Personal Financial Planning – Short Essay
    - Survey of Commercial Risk Management and Insurance – Multiple Choice
  - \* Commercial Lines
    - Commercial Property Risk Management and Insurance – Short Essay
    - Commercial Liability Risk Management and Insurance – Short Essay
    - Survey of Personal Risk Management, Insurance, and Financial Planning - Multiple Choice
- \* Cannot mix and match, but there is exposure to the other concentration

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Program Content (CPCU continued)

- Ethics
  - \* AICPCU's Code of Professional Ethics is standard by which ethical behavior is measured.
  - \* Subject to code as candidate and designee
- Experience
  - \* Complete suitable insurance or related activities for any 24 months in five-year period immediately preceding the conferment of the CPCU designation

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Program Content

- IIA – 16 Programs – all multiple choice exams
  - all lead to designation of Associate
- Four Broad Categories (my categories, not those of the AICPCU)
  - \* Related Functional Areas
  - \* Management
  - \* Line of Business
  - \* Specialty

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Program Content (IIA Continued)

Related Functional Areas – we need to be relevant - "Actuaries are pursuing greater precision in areas of decreasing relevance" – CAS Report of the CEO Advisory Task Force – 11/1/1999

- |                                    |        |
|------------------------------------|--------|
| * Adviser in Insurance             | (AAI)  |
| * Claims                           | (AIC)  |
| * Insurance Technology             | (AIT)  |
| * Insurance Accounting and Finance | (AIAF) |
| * Insurance Services               | (AIS)  |
| * Premium Auditing                 | (APA)  |
| * Regulation and Compliance        | (ARC)  |
| * Reinsurance                      | (ARe)  |
| * Risk Management                  | (ARM)  |

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Program Content (IIA cont)

- Related Functional Areas (continued)
  - \* Adviser in Insurance
    - Foundations of Insurance Production
    - Multiple-Lines Insurance Production
    - Agency Operations and Sales Management
  - \* Claims – many of us work in reserving
    - Claim Handling Principles and Practices
    - Workers' Comp and Managing Bodily Injury Claims
    - Property Loss Adjusting
    - Liability Claim Practices

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Program Content (IIA cont)

- Related Functional Areas (continued)
  - \* Insurance Technology
    - Essentials of Information Technology
    - Insurance Uses of Technology
    - The Strategic Management of Information
  - \* Insurance Accounting and Finance – many of us work with Finance
    - Statutory Accounting for Property-Casualty Insurers
    - Insurance Information Systems
    - Insurance Operations, Regulation, and Statutory Accounting - CPCU
    - Finance for Risk Management and Insurance Professionals - CPCU

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Program Content (IIA cont)

- Related Functional Areas (continued)
  - \* Insurance Services
    - Insurance Services exam + completion of one other program
  - \* Premium Auditing
    - Principles of Premium Auditing
    - Premium Auditing Applications
    - Insurance Operations, Regulation, and Statutory Accounting – CPCU
  - + one of the following –
    - Finance for Risk Management and Insurance Professionals – CPCU
    - Commercial Liability Risk Management and Insurance - CPCU

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Program Content (IIA cont)

- Related Functional Areas (continued)
  - \* **Regulation and Compliance** – many of us work on filings to DOIs
    - Insurance Regulation
    - Statutory Accounting for Property-Casualty Insurers – AIAF
    - Insurance Operations, Regulation, and Statutory Accounting - CPCU
  - \* **Reinsurance** – many of us work for reinsurers or with reinsurance
    - Primary Insurance Coverages
    - Reinsurance Principles and Practices
    - Readings in Reinsurance Issues and Developments
    - Insurance Operations, Regulation, and Statutory Accounting – CPCU
  - + **one of the following on the next page** -

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Program Content (IIA cont)

- Related Functional Areas (continued)
  - \* **Reinsurance (continued)**
    - Finance for Risk Management and Insurance Professionals – CPCU
    - Risk Financing – ARM
    - Statutory Accounting for Property-Casualty Insurers - AIAF
  - \* **Risk Management** – the essence of what we do
    - Risk Assessment
    - Risk Control
    - Risk Financing

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Program Content (IIA cont)

- Management – many of us move into management after earning credentials, *with no managerial experience*
  - \* **Program in Supervisory Management (SM)**
    - Essentials of Supervision
    - Supervisory Skills
  - \* **Management (AIM)**
    - Management
    - Human Resource Management
    - Managing Business Resources Today

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Program Content (IIA cont)

- Line of Business
  - \* Associate in Commercial Underwriting (AU)
    - Commercial Underwriting: Principles and Property
    - Commercial Underwriting: Liability and Advanced Techniques
  - + one of the following sequences:
    - 1) INS 23 – Commercial Insurance
    - 2) Commercial Property Risk Management and Insurance (CPCU) + Commercial Liability Risk Management and Insurance (CPCU)
  - \* Associate in Personal Insurance (API)
    - Personal Insurance: Underwriting and Marketing Practices
    - Personal Insurance: Portfolio Management and Issues

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Program Content (IIA cont)

- Specialty
  - \* Associate in Fidelity and Surety Bonding (AFSB)
    - Principles of Suretyship
    - Contract Surety
    - Commercial Surety and Crime Insurance
    - The Legal Environment of Insurance (CPCU)
    - Finance for Risk Management and Insurance Professionals (CPCU)
  - \* Associate in Marine Insurance Management (AMIM)
    - Ocean Marine Insurance
    - Inland Marine Insurance
    - Foundations of Risk Management, Insurance, and Professionalism
    - The Legal Environment of Insurance (CPCU) + 2 electives

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Program Content (IIA cont)

- Specialty
  - \* Associate in Surplus Lines Insurance (ASLI)
    - Surplus Lines Insurance Operations
    - Surplus Lines Insurance Products
  - + 2 electives

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Program Content

- Insurance Data Management Association (IDMA) –
  - \* Data is of the utmost importance to actuaries
  - \* IDMA – Data Management Value Proposition to Actuaries
    - Data Quality
    - Better Decisions
    - Internal Data Coordination
    - Compliance

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Program Content

- Insurance Data Management Association (IDMA continued)
  - \* Data Quality – “Good data management improves data and allows the actuary to have more confidence in, and a better understanding of, the data being used. This assists the actuary in his/her professional responsibilities to certify data quality (e.g., Actuarial Standard 23 on Data Quality).”
    - Validity
    - Accuracy
    - Reasonability
    - Completeness
    - Timeliness

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Program Content

- Insurance Data Management Association (IDMA continued)
  - \* Better Decisions
    - Result from better data
    - Lead to better pricing – increased number of customers, retention, customer satisfaction – impact bottom line
    - *Improve ability to explain and defend decisions (my italics)*
    - Improved data integrity and utility
    - As data availability increases, privacy and confidentiality are critical
    - When data quality is handled by data manager, actuary is free to focus on core responsibilities but actuary still improves process with understanding of data management
    - Improves predictive modeling

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Program Content

- Insurance Data Management Association (IDMA continued)
  - \* Internal Data Coordination
    - Reduced cost and time
    - Better data integration gives actuary options on how to use data
    - Manage data content and coordination across organization
    - Advocate industry and enterprise data standards to ensure consistency
    - Ensure quality of enterprise data and enterprise communication among various data sources

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Program Content

- Insurance Data Management Association (IDMA continued)
  - \* Compliance
    - Protect privacy and confidentiality of enterprise data
    - Ensure compliance with data reporting laws and regulations
    - Assist in identifying solutions to data reporting issues
    - Communicate/interface with regulators
    - Provide non-confrontational mechanism for dialogue
    - Represent company to regulator and bring back information on regulatory perspectives, allowing for better decision-making

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Program Content

- Insurance Data Management Association (IDMA) – all multiple-choice
  - \* Associate Insurance Data Manager – 4 Exams (AIDM)
    - Insurance Data Collection and Reporting
    - Insurance Data Quality
    - System Development and Project Management
    - Data Management, Administration, and Warehousing
  - \* Certified Insurance Data Manager (CIDM)
    - AIDM + courses from one of the following:
      - CAS - CPCU
      - LOMA (Life Office Management Association)
      - SOFE (Society of Financial Examiners)

---

---

---

---

---

---

---

---



Beyond the CAS Exams: Rounding Out the Actuary

Program Content (IDMA cont)

- \* CAS – Exam 2 (Financial Math) or 8 (Investments/Financial Analysis)
  - Exam 3 or 4 (Actuarial Models)
  - Exam 5 (Ratemaking)
  - Exam 6 (Reserving, Accounting, Reinsurance, ERM) or Exam 7
- \* CPCU – Insurance Operations, Regulation, and Statutory Accounting
  - Finance for Risk Management and Insurance Professionals
  - + 2 of the following –
    - Commercial Property Risk Management and Insurance
    - Commercial Liability Risk Management and Insurance
    - Personal Risk Management and Property-Liability Insurance
    - Personal Financial Planning

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Program Content

- Association of Insurance Compliance Professionals (AICP)
  - \* Concentrations
    - Life and Annuity
    - Health
    - Property/Casualty
  - \* Property/Casualty
    - Associate Compliance Professional (ACP)
    - Insurance Regulation – IIA's ARC
    - Foundations of Risk Management, Insurance & Professionalism – CPCU
    - Insurance Operations, Regulation, and Statutory Accounting - CPCU

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Program Content (AICP cont)

- Certified Compliance Professional (CCP)
- ACP + the following three requirements –
  - 1) Statutory Accounting for Property-Casualty Insurers (AIAF) or Finance for Risk Mgmt & Insurance Professionals (CPCU)
  - 2) CAS Exam 5 (Ratemaking) or AICP Exam – Ratemaking – What the State Filer Needs to Know
  - 3) One elective course in a specialized area (personal lines, commercial lines, etc.)

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Exam Delivery and Timing

- Delivery Methods
  - \* CPCU/IIA
    - On-Site Testing Centers
    - Prometric Centers (for example, Sylvan Learning Center)
  - \* IDMA
    - Need to find a proctor to administer on-line exam
- Timing
  - \* CPCU/IIA – 4 windows/yr: Jan 15 - Mar 15, Apr 15 - June 15, July 15 - Sept 15, Oct 15 - Dec 15
  - \* IDMA – 3 two-week windows/yr: Late January, Mid-June, Late September

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Exam Delivery and Timing

- Timing – another aspect – when to take an exam?
    - \* When taking on a new assignment/job –
      - My example – new position w/firm that specialized in WC reserving – took Claims exam on WC
    - \* In anticipation of new assignment –
      - Rotation program – Reinsurance, Personal Lines, Corporate Finance
      - Personnel Departure
      - Enter Management
- Proactive approach – “Luck is what happens when preparation meets opportunity.” – Darrel Royal

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Exam Delivery and Timing

- Timing – another aspect – when to take an exam?

Knowledge is the most important aspect – more important than designation – make ourselves relevant to our employers
- \* One more thought on timing of exams - schedule in conjunction with CAS Exam on common material –
  - Exam 5 has material from CPCU Exams on Commercial, Personal, Insurance Company Operations, and Risk Management
  - Exam 6 has material from CPCU Exam on Insurance Company Operations and IIA Exam on Reinsurance
  - Exam 7 has material from CPCU Exams on Risk Management, Personal Insurance, Legal Environment, and IIA Exam -Regulation

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Exam Delivery and Timing

- Changes to CAS Syllabus in 2011
  - \* Two new modules – Associateship Requirements -
    - CAS and AICPCU have partnered to deliver modules
    - Module 1 Risk Management and Insurance Operations
    - Module 2
    - Each is assessed using a two-hour, 75-question multiple choice computer-based exam
    - Course content delivered by internet or textbook
    - Exam windows will likely coincide with those for CPCU exams

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Study Approach/Considerations

- Approach – from each day's study session, take one thing into the workplace – make ourselves relevant to our employers
- Considerations
  - \* Financial Support – I have worked in all three environments:
    - Employer Pays Up-Front
    - Employer Reimburse
    - No Support
  - \* Study Time
    - Not Likely to receive from Employer
    - My experience – 60-100 hours per course
  - \* Study Aids – AICPCU has available, as do other organizations

---

---

---

---

---

---

---

---

Beyond the CAS Exams: Rounding Out the Actuary

Personal Experiences/Benefits

- Knowledge - Approach – Goal - take one thing into the workplace from each day's study session – make ourselves relevant to our employers
  - \* Examples – Associate in Services (AIS) course – covered topic of team-building as I was starting as team leader of a state expansion project
- Respect from Other Departments – "I love working with someone who can work outside their area."
- Access to CPCU Society Publications and Webinars
- Participation in Local CPCU Chapter – Leadership Skills
- Helps with Job Search

---

---

---

---

---

---

---

---