

Actuaries: Risk Is Opportunity

PRESENTED TO

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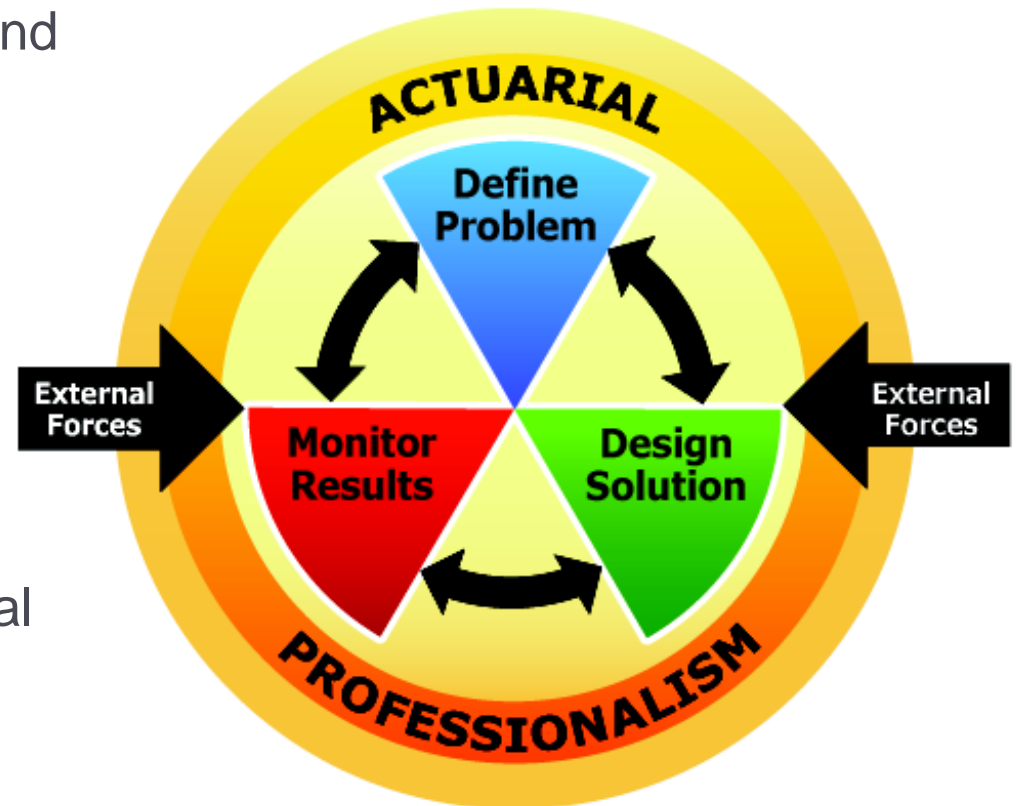
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What is an Actuary?



Actually, Actuaries...

- Analyze, measure, convert and manage risk into opportunity
- Use mathematical and statistical analytical skills, financial theory, business knowledge and an understanding of human behavior
- Develop and validate financial models to guide decision making
- Are creative problem solvers who see the “whole picture”



What is Risk?

- *Old-School Webster Definition:*
 - Possibility of Loss
- *New-School Actuarial Definition:*
 - Opportunity



The Actuarial Point of View

- Actuaries don't merely speak to what we can lose; they focus on what we can gain
- Actuaries decide whether to avoid, reduce, transfer or manage (exploit) an enterprise's risk



Evolving Nature of Risk

BusinessWeek

Can you Afford to Retire?

CANADA'S NATIONAL NEWSPAPER
THE GLOBE AND MAIL

**Risk Management Expert
Added To BMO Board**

South China Morning Post

**Silent Virus likely
to spark next pandemic**

**HOUSTON
CHRONICLE**

**Credit Crisis, Auto
Failures Just Side Shows**

U.S. News & WORLD REPORT
usnews.com

The Best Life By Philip Moeller 

**Is Longevity Insurance
Right for You?**

Opportunities For Actuaries

Traditional Opportunities

- Health Insurance
- Life Insurance
- Property/Casualty Insurance
- Pension/Retirement



Emerging Trends

- Changes in accounting rules (e.g., principles-based)
 - Increase in demand for financial reporting actuaries
- Enterprise risk management (ERM)
 - Expanding traditional and non-insurance opportunities
 - CERA credential; SOA funding
- Globalization
 - Opportunities for those understanding cultures, language, etc.
 - Unifying approaches, actuarial organizations, credentialing, etc.
- Health care?
 - Changes in regulation may drive new opportunities for actuaries

Enterprise Risk Management (ERM)

- There is a growing need for organizations to link their risks across their business units and adopt a more comprehensive framework
- ERM is the process of risk analysis and management across an entire organization



ERM Professional Credential: Chartered Enterprise Risk Analyst (CERA)

- Developed in response to non-traditional business needs
- CERAs model future events by converting data that drives strategic decisions with a 360-degree view of an organization's risk profile
- To learn more about the CERA credential, visit www.CERAnalyst.org/Campus



Benefits of a CERA Designation

- The most comprehensive and rigorous ERM training available
- Enhance exposure to the C-suite
- Differentiates them from other risk professionals
- Advances the field of ERM
- Expands professional network by being a member of the SOA

ERM: Case Study

- Company: Major U.S. telecomm
- Business issue: Decision on data privacy breach liability
- Traditional approach: no framework for evaluating risk-reward trade-offs
- Actuarial approach: provided unique risk-reward insights that informed the decision

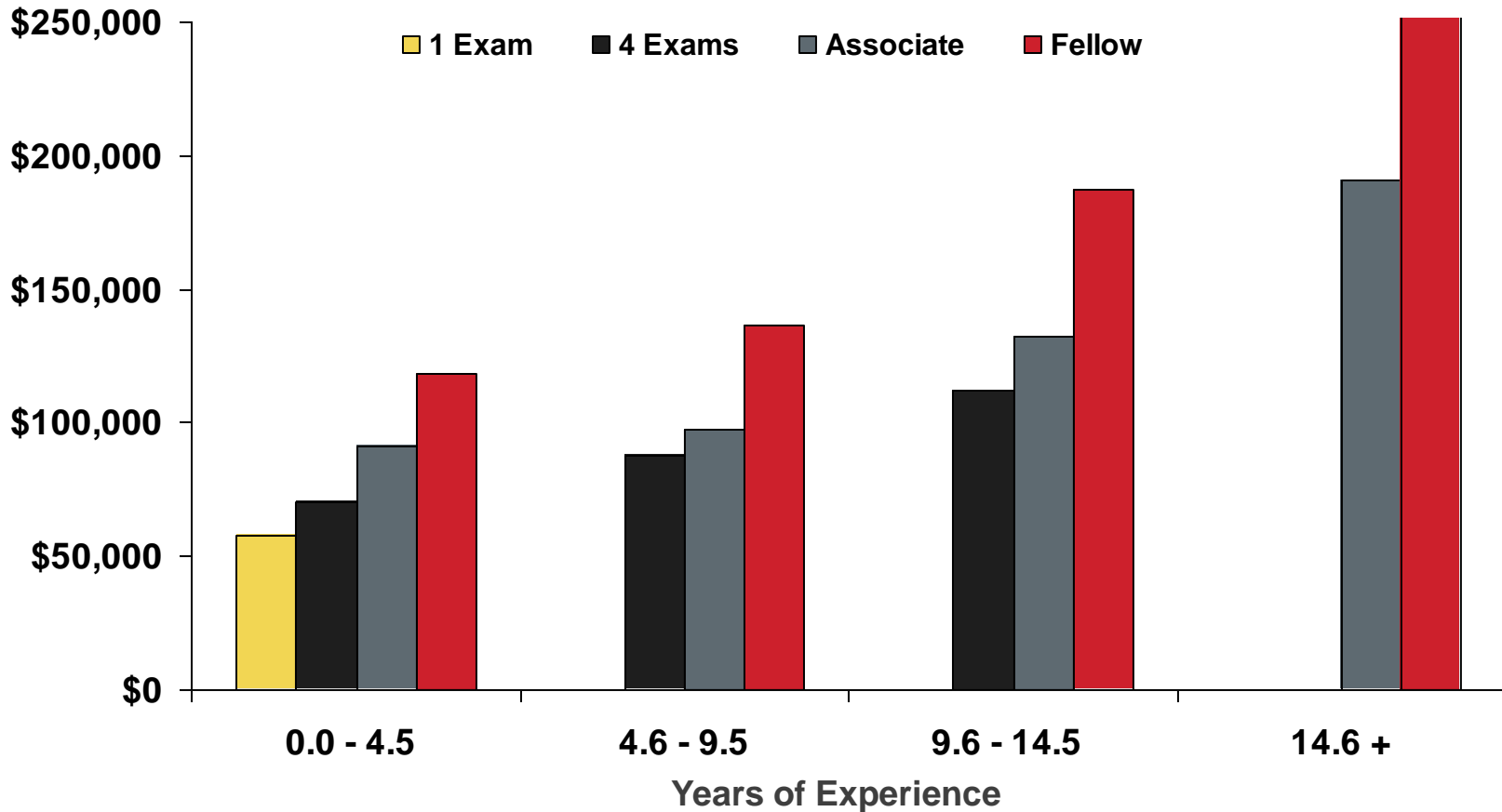


Why Become an Actuary?

- Combines passion for math with business
 - Wide variety of opportunities, career experiences and growth available
- U.S. Department of Labor
 - Employment of actuaries expected to increase by 24 percent through 2016
 - Less sensitive to economic cycles
- Financial Rewards
 - \$46,000-63,000 – Entry-level actuaries
 - \$74,000-117,000 – New ASAs
- Education Benefits
 - Learn while you earn – Most employers provide full educational financial support while you pursue your credentials



Earning Potential: Average Salaries



Note: Compensation may vary significantly according to specialty, years of experience, geographic region and responsibilities.
Source: D.W. Simpson & Company, Inc., September 2008 Salary Survey. Visit: www.DWSimpson.com/Salary for more information.

A Strong Career Outlook

A 2007 employer research study by the Society of Actuaries found:

- The profession is becoming more relevant to the needs of larger companies
- Actuarial jobs remain steady
- High value of enterprise risk management (ERM)
- Role of Chief Risk Officer (CRO) opening up to actuaries



Day in the Life of Our Featured Actuaries



What Employers Value

ACTUARIAL
CREDENTIALS



CRITICAL
BUSINESS
SKILLS

Advice for Students

- Make learning a lifelong habit
- Develop disciplined study habits
- Acquire a well-rounded curriculum, including classes approved for VEE credit
- Sharpen your communication and general business skills
- Take SOA/CAS actuarial exams while in school - the sooner you start, the sooner you will finish
- Obtain an actuarial internship
- Find mentors

Making Risk Your Opportunity

Ken Guthrie
Managing Director—Education
Society of Actuaries

The Society of Actuaries (SOA)

- Is the largest professional, actuarial organization in the world
 - 5 organizations in the U.S. and Canada working together
- Serves over 21,000 members, 30,000 candidates and the public
- Works for actuaries to be the leading professionals in the measurement and management of risk
- Committed to:
 - Education
 - Research
 - The Profession

The screenshot shows the Society of Actuaries website homepage. At the top right, it says "SOCIETY OF ACTUARIES". Below that is a navigation bar with links: "PROFESSIONAL INTERESTS", "NEWS & PUBLICATIONS", "MEETINGS & EVENTS", "CAREERS", "EDUCATION", "RESEARCH", "ABOUT THE SOA", and "LEADERSHIP". On the left side, there is a sidebar with several sections: "Quick Search" with a search box and "Advanced Search" link; "Actuarial Directory" with a search box and "Search by: Last Name" dropdown; "My Account" with a "View my account" link; "Exam Registration" with a "Register for exams and requirements" link; "Event Calendar" with a "View upcoming actuarial events" link; and "Find a Section" with a dropdown menu set to "Actuary of the Future". The main content area features a large banner image of a person in a suit looking out over a city skyline. The banner text reads "Actuaries: Enabling smart, more confident decisions." Below the banner, there are three columns of content: "Breaking News" with a link to "SOA Announces Fall 2009 Advanced Finance/ERM Exam"; "Upcoming Events" with a link to "Life Spring Meeting"; and "Related Sites" with links to "Chartered Enterprise Risk Analyst (CERA) Credential", "Image of the Actuary", and "Be An Actuary". At the bottom, there is an "Important SOA Information" section with links to "New Publication: Risk Management Essays", "Continuing Professional Development", "Pay Membership Dues or Print Invoice", "2009 Board of Directors and Section Council Elections", and "Contact Us".

Academic Studies

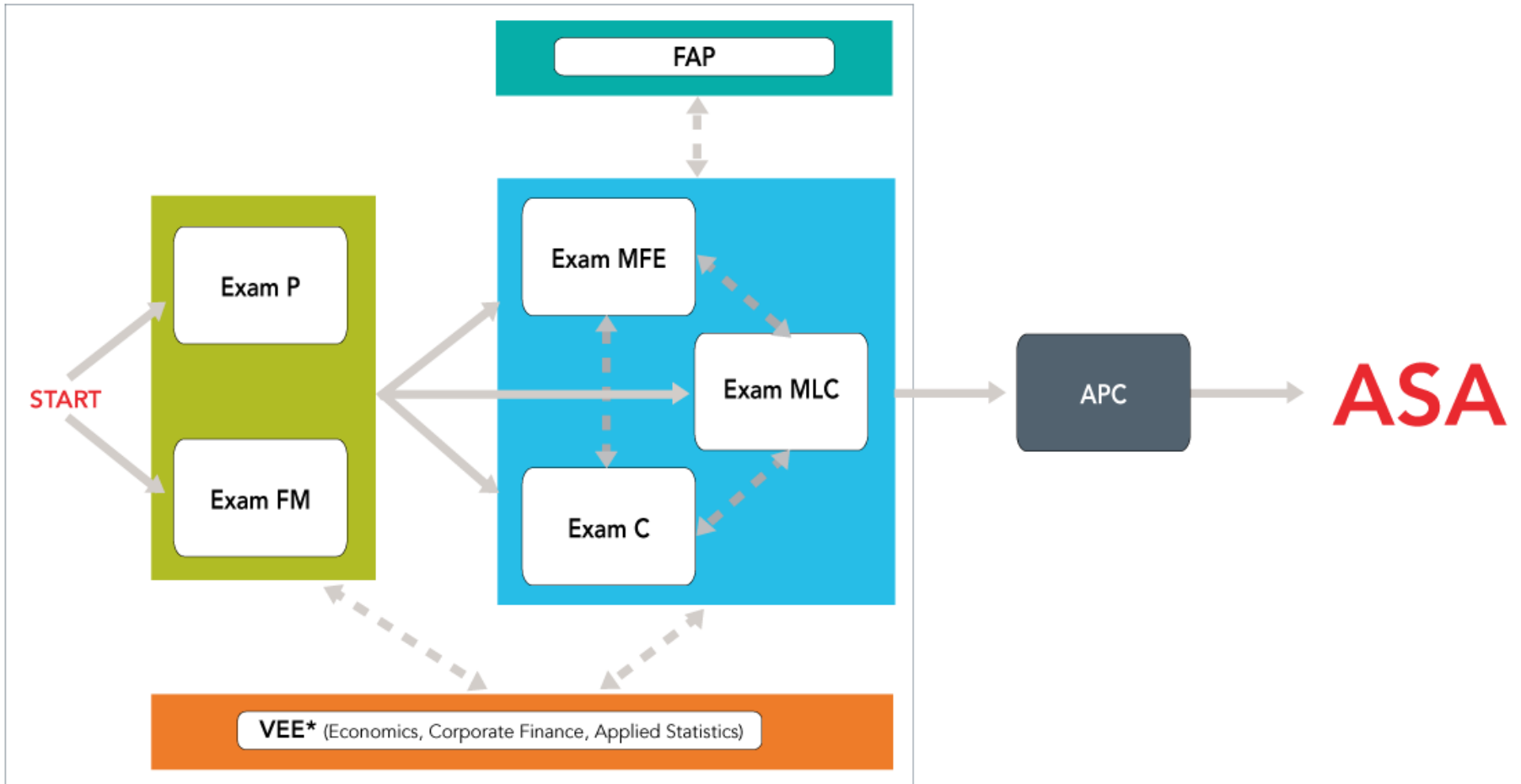
- Actuaries come from a range of disciplines including actuarial science, math, finance, statistics and engineering
- Students should complete approved courses in economics, applied statistics and corporate finance to meet VEE requirements
- Other foundational coursework includes probability, calculus and business communications



Three SOA Designations

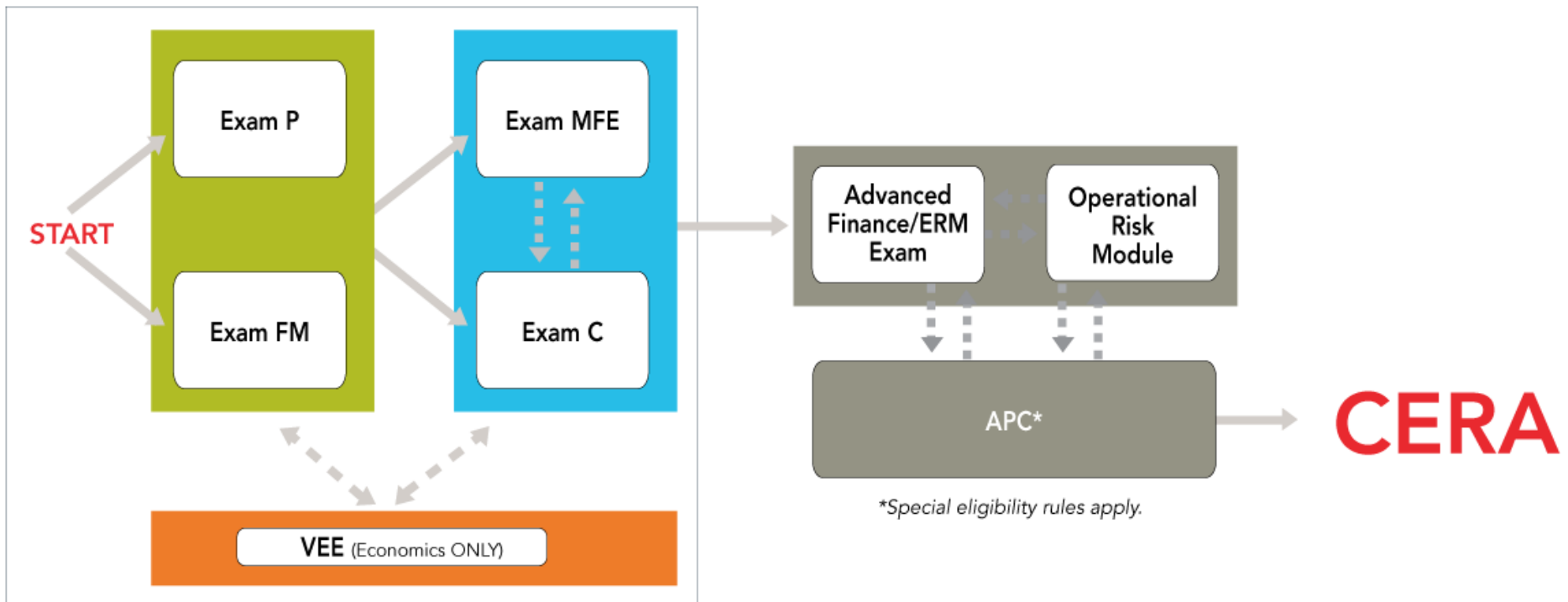
- Associate of the Society of Actuaries (ASA)
- Chartered Enterprise Risk Analyst (CERA)
- Fellow of the Society of Actuaries (FSA)

ASA Designation



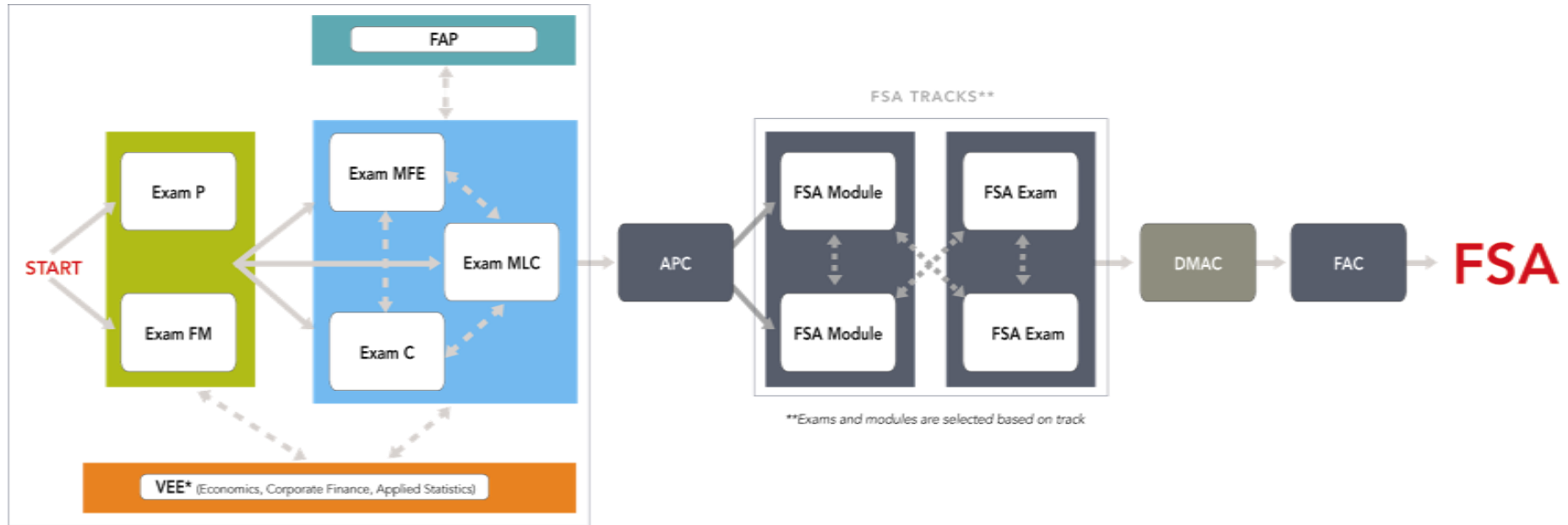
*Must complete any two exams before applying.

CERA Designation



*Must complete any two exams before applying.

FSA Designation



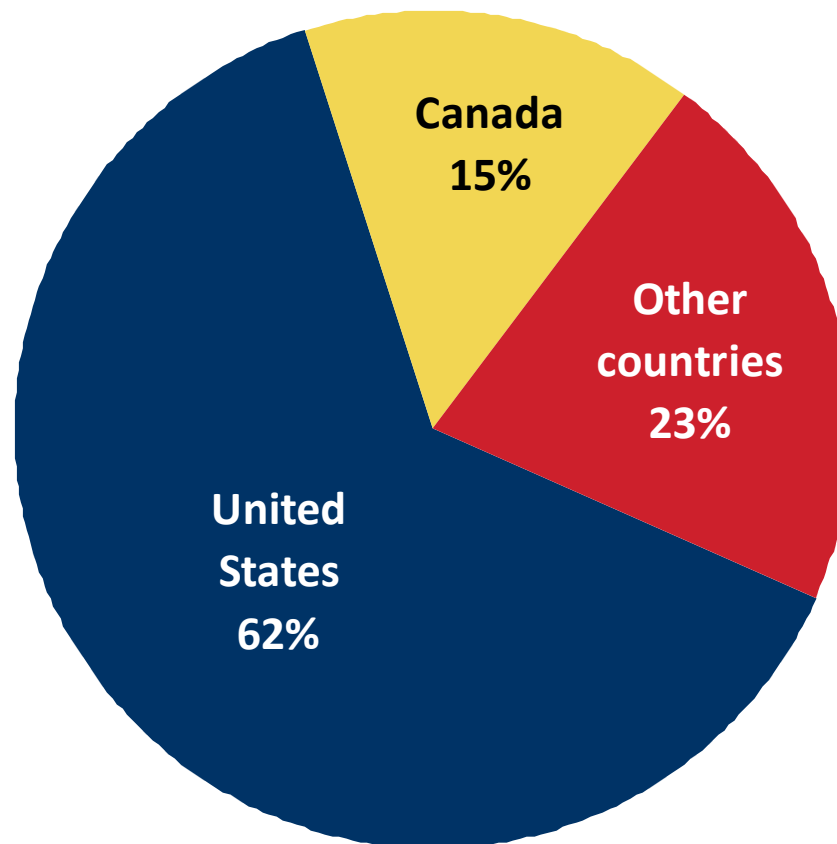
*Must complete any two exams before applying.

The Education Structure

- More than 600 volunteers, who are the backbone of complex system, contribute & partner with staff
- 350 exams centers located worldwide
- 45,000 exams by year end
- In 2008, there were 30,000 candidates;
- of which more than 9,000 were brand new



Global Exam Administration

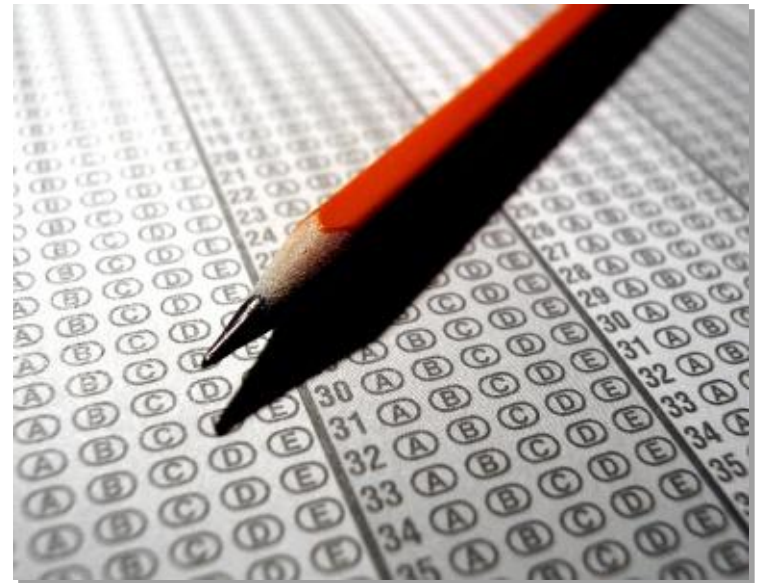


Recent Developments

- Computer-Based Testing (CBT)
 - Exams P and FM now CBT
 - Exam C (deploys in November of '09)
 - Exams MFE & MLC to follow, no timetable set

Grading – Multiple Choice

- ACT and SOA volunteers/staff
- Several checks & balances
- All potential question flaws reviewed by subject experts
- Pass mark reflects expected knowledge level, set in advance for CBT
- Pass rate is not pass mark



The Truth

- We do not grade on a curve
- We do not attempt to restrict membership
- We **DO** take our role of determining who has met the membership standards very seriously
 - Protection of the credential
 - Insurance for your future

Education – The Rules

- Rules/regulations for exams
- Terms/conditions for e-Learning
- Penalties imposed for violations
 - Writing after time
 - Plagiarism on e-learning components
 - Copying from neighbor

Education – The Rules

Candidate Code of Conduct

- Implementation of the SOA Candidate Code of Conduct – Dec 2008
- Emphasizes importance of ethical behavior on the part of all those writing exams – whether or not credentialed

SOA in 2009 and Beyond



- Academic Exam Fee Reimbursement
 - Full-time faculty and PhD students
- Doctoral Stipend Program
 - PhD students
- Centers of Actuarial Excellence (CAE)

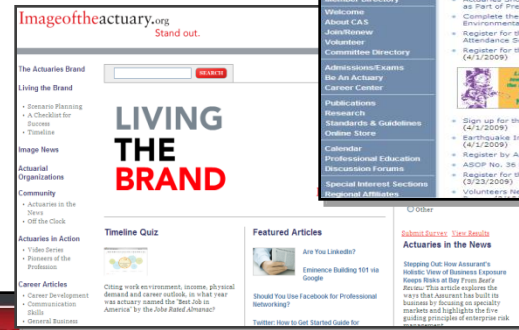
Professional Development

Once you become an actuary you can:

- Continue your professional development
- Network with other actuaries
- Experience career growth
- Take advantage of volunteer opportunities

Resources for Students

- BeAnActuary.org
- CASACT.org
- ImageoftheActuary.org
- RiskisOpportunity.net
- SOA.org



Questions?

Thank You!

www.SOA.org

www.RisksOpportunity.net