What is an Actuary

Mathematician who:

- Use analytical and financial skills to help solve problems
- Perform calculations and projections which are the backbone of the Pension and Insurance Industries
- Assigns a price to future risk
The Perks of an Actuary

- High salary
- Professional prestige
- Quality work environment
- Challenging projects
- Low stress (Sometimes)
Persona of an Actuary

- Characteristics
  - Passion of problem solving
  - Enjoy being intellectually challenged
  - Good communicator

- Necessary Skills
  - Reasoning ability
  - Analytical skills
  - Verbal and written communication
  - Time management
Employers of Actuaries

- Insurance Companies
  - Medical
  - Life
  - Property and Casualty
- Benefit Consulting Companies
- Public Accounting Firms
- Government Agencies
  - Internal Revenue Service
  - Pension Benefit Guarantee Corporation (PBGC)
Gabriel, Roeder, Smith & Company
GRS and Public Retirement Systems

- National firm whose primary focus is the public sector
  - Started in 1938 – and still work with our first client
  - Serve 600+ public employee systems (Pension and OPEB)
  - Over 120 associates
  - Frequent speakers and active participants in public sector meetings and task forces

- Five offices located in:
  - Chicago, Dallas, Denver, Detroit, and Fort Lauderdale

GRS is the Premier Firm in the Public Sector Consulting Business
A National Perspective

States where GRS currently provides retained consulting services to statewide systems

States where GRS has provided consulting services to, including cities and other local entities
Recent Headlines

Ohio Public employees, not taxpayers, will pay for changes to the state's five pension systems under House bill.

Changes to rules affecting public worker unions are under consideration in several states.

Wisconsin Assembly OKs hiking state employee contributions.

Washington legislature to consider constitutional amendment requiring full funding of pensions.

Study says public pension funds are “implementing aggressive allocation strategies”

U.S. House committees holding hearings on state bankruptcy and pension plans.

Miss. Retirement Board agrees to put off proposed increase in contribution to pension system.

Arizona Needs Bold Pension Reform Plan.
Pension Plan Valuation Process

- Membership Data
- Financial Information
- Benefit Provisions

Financial Condition
Annual Cost
Risk Exposure
Various Projection Techniques

Example use of Stochastic Projections

Assumptions
- Projected liabilities based on a plan with similar characteristics as Client XYZ
- Assumes employer contributions equal to 16.50% of covered payroll in all years
- Investment returns based 2010 capital market assumptions and Client XYZ 2009 target asset allocation
Closing Thoughts

- Your mathematics background will provide you an edge in the workforce
- Choose a career that involves something you are passionate about
- Continue learning and developing your skills