Database Theory and Practice for Actuarial Analysis:
Chapter 1: Course and Instructor Introductions

Arlie J. Proctor, FCAS, MAAA
2015
Instructor Background

- 25 years as practicing actuary in Property and Casualty
  - Primary insurance
  - Consulting
  - Reinsurance
  - Long history of database project work
  - Learned the hard way

- Delighted to be here working with The Infinite Actuary!
Chapter 1: Course Introduction

Course Purpose

• Designed for actuarial analysts
• Covers necessary database theory and SQL for actuarial research and data acquisition
• Topic List
  • What is a database
  • Types of databases
  • RDBMS Platforms
  • Data normalization and ERDs
  • Basic-Advanced Structured Query Language (SQL)
  • Special topics for actuarial analysts
  • I’m stuck with Access® -- how do I use it effectively
Chapter 1: Course Introduction

Insurance Perspective

• Course taught using insurance centric examples and exercises
• Brief overview of processes, terminology, and accounting concepts provided
• Microsoft Access® used as platform for course
  • NOT ideal Database Management System
  • NOT best educational platform
  • BUT...in actuarial practice, everybody has it and almost all actuarial analysts use it in practice
• If you do not already have Access®, you can obtain a license through Microsoft Office 365 program for less than $100/year.
Course Materials

- **Course enrollment entitles you to lifetime access to:**
  - Online videos
  - Handouts
  - Sample databases
  - Exercises and solutions
  - Course forum
  - Me, the instructor

- **However, be careful what you post or send by e-mail. Remember that some company data are **highly** confidential.**
Course Requirements

- Microsoft Access® on a PC
- 30-40 hours of effort
  - Exercises are REALLY important – practice and problem solving enhance knowledge
  - Follow along with every example in Access®
- A humble, but hungry attitude
  - Approach every data set with caution and a desire to learn. You can learn the easy way or you can learn the hard way.
Acknowledgements – My Teachers

- Bill Wilson, ACAS, MAAA
- Chris Cornelius, CTO
- James Norris, FCAS, MAAA
- Brad Hoagland (developer)
- Jennifer Chu, CPA and Oracle® developer
- Ernest Crawford (data modeler)
- Jack Pei (database administrator)
- You – I want your suggestions and corrections
A few words about communication!