

# ***SDP 2009 TRAINING***

## ***LIFE ANALYSIS FOR VALUATIONS***

This course begins with a discussion of *Depreciation Tables and Economic Lives* used in valuations. The course then provides an introduction to the following life analysis models that may be used to provide the survivor curves and average service lives used in valuations: *Actuarial Analysis, Simulation Analysis, Life Cycle Analysis, and Technology Forecasting*. We also include a class on *Current Regulatory Issues in Valuation*, which discusses the effect on value of net salvage and external obsolescence (e.g., Contributions in Aid of Construction). Ample opportunity is provided during class and at informal receptions to ask questions of the expert instructors and network with fellow attendees from utilities, State and Federal commissions, and consulting firms. You will receive up to **22 CPE credits** for this course.

### ***LIFE ANALYSIS FOR VALUATIONS***

#### ***Depreciation Tables and Economic Lives***

The Age-Life Concept  
Depreciation Tables & Factors  
Life Concepts  
Consideration of Factors That Influence Property Lives

#### ***Actuarial Life Analysis***

Retirement and Survivor Curves  
Average Service Life, Average Remaining Life, Probable Life  
Original Group Method v. Multiple Original Group Method  
Understanding the Data Matrix  
Retirement Rate Method  
Selection of Experience and Placement Bands  
Curve Fitting  
Forecasting Service Life

#### ***Simulation Life Analysis (SPR, STAGE, Computed Mortality)***

Turnover Models  
Data Required and Adjustments  
SPR Model

- Balances and Retirements Methods
- Data Simulation
- Conformance Index, Retirement Experience Index
- Application, Interpreting Results, Pitfalls

Statistical Aging (STAGE) Model  
Computed Mortality Model

## ***LIFE ANALYSIS FOR VALUATIONS - cont'd***

### ***Technology Forecasting***

Forecasting Technology Advancement

- Learning Curves
- Technology Performance
- Manufacturing and Cost Curves
- Cost-Of-Capacity Modeling

Forecasting Technology Substitutions

- Basic Technology Substitution Modeling
- Multiple Technology Substitution Modeling

Modeling the Life Cycle of Technologies

### ***Life Cycle Analysis***

Understanding the Forces of Depreciation

- Physical Depreciation
- Functional & Technological Obsolescence
- External or Economic Obsolescence
- Ordinary vs. Abnormal Obsolescence
- Depreciation's Impact on Value: Service Lives, Utilization, Profitability

Modeling Forces of Depreciation Using Life Cycle Models

- Life Cycle Concepts
- Modeling Physical Depreciation & Ordinary Obsolescence
- Modeling Abnormal Obsolescence: Technological Substitution Analysis

### ***Current Regulatory Issues in Valuation***

Net Salvage Value/Terminal Value

Methods of Calculating the Effect of Net Salvage on Value

External Obsolescence due to Rate Regulation