

# The Actuary

## Basic Education

# What is an Actuary?

A. King of the Nerds?



B. Wizard of Arcane Arts?



C. Fortune Teller?



# What is an Actuary?

A business professional who calculates financial values associated with uncertain events subject to risk, such as insurance premiums or pension contributions. (wiktionary.org)

## **Experts in:**

Evaluating the likelihood of future events—using numbers, not crystal balls.

# “Big Picture” Role

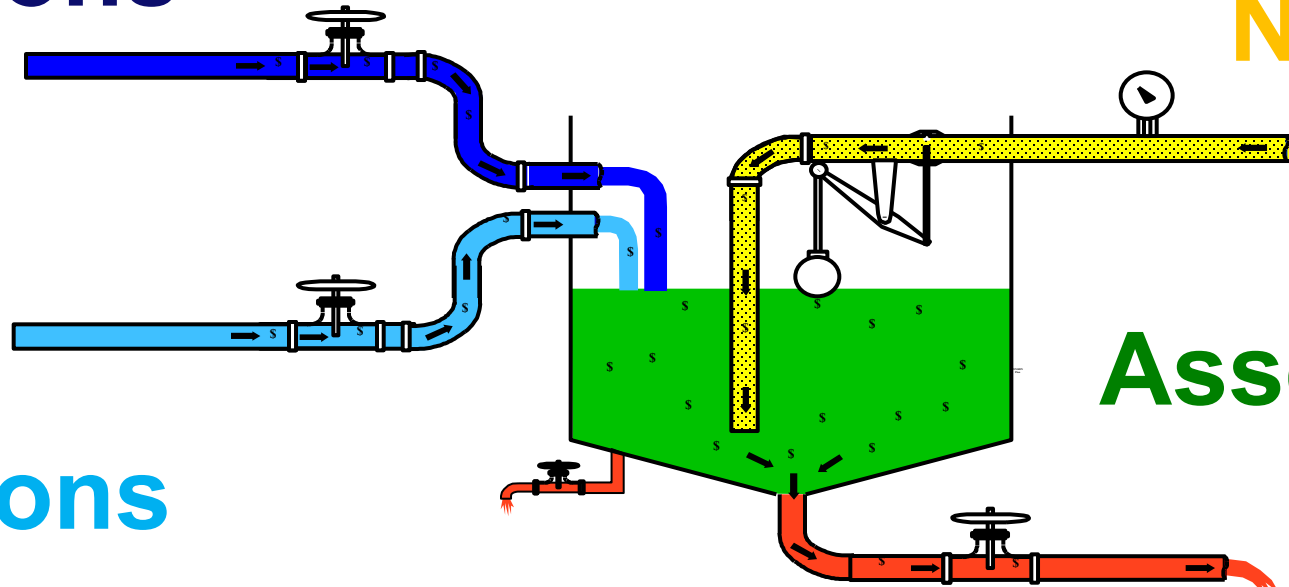


Actuaries **determine the annual amount of money needed to be paid into a Pension Plan** so that the Plan is able to pay the benefits when they become due

# The “Big Picture”

**Employer  
Contributions**

**Employee  
Contributions**



**Net Investment  
Returns**

**Assets**

**Administrative  
Expenses**

**Benefit  
Payments**

# Credentialing

Actuaries must pass a series of exams offered by the **Society of Actuaries** (SOA) specific to their area of expertise in order to be credentialed (ASA, FSA)

- ASA=Associate of the Society of Actuaries
- FSA=Fellow of the Society of Actuaries

Additional exams required to be able to sign certain governmental forms (ERISA related)

- EA=Enrolled Actuary

# Other Designations

## Other Actuarial Designations

- FCA=Fellow of Conference of Consulting Actuaries
- M.A.A.A.=Member of the American Academy of Actuaries



# Actuarial Standards

Actuarial Standards of Practice (**ASOPs**) provide guidance for how an actuary should perform various task, including actuarial valuations



- ASOP No. 4 Measuring Pension Obligations
- ASOP No. 27 Economic Assumptions for Measuring Pensions Obligations
- ASOP No. 35 Demographic Assumptions for Measuring Pensions Obligations



# Routine Services

Determines the value of the liability for the overall pension “promise”

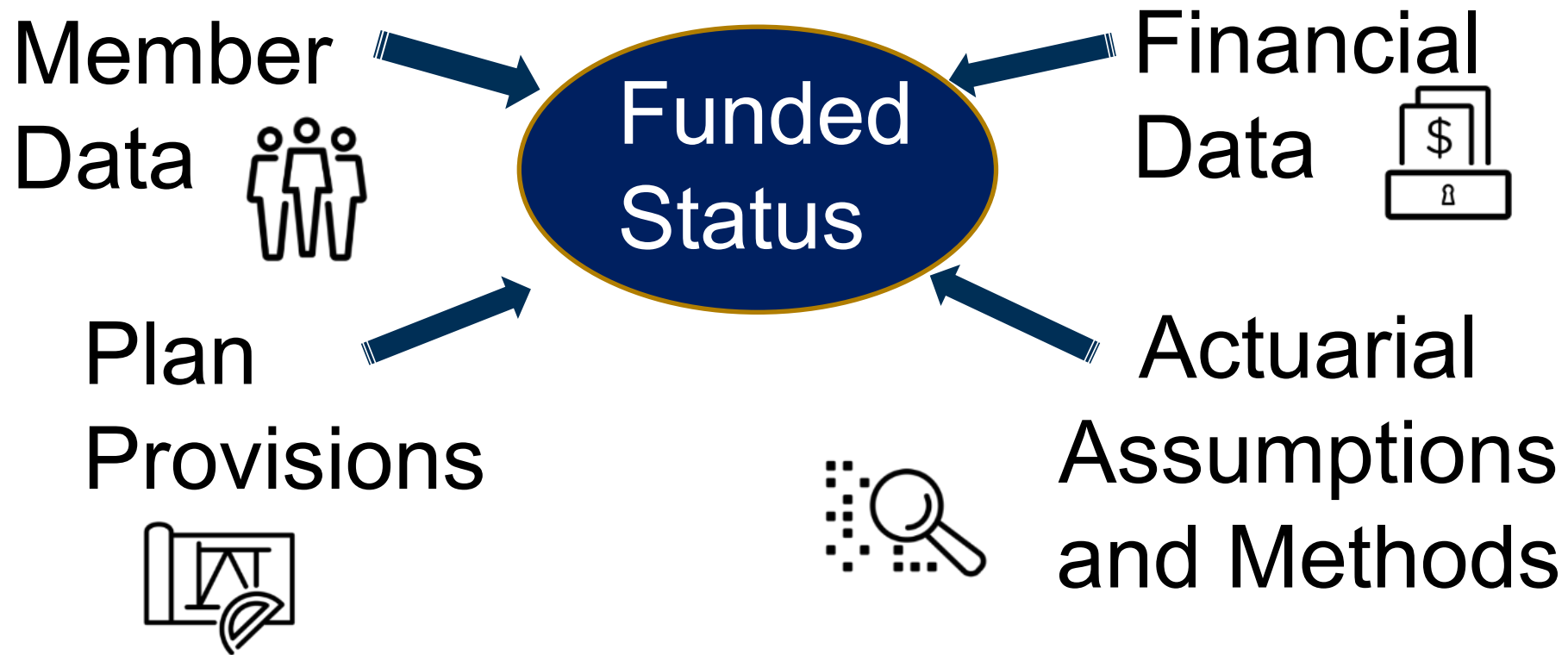
Calculates annual amount of money needed to be contributed into the pension plan (i.e., Actuarial Determined Contribution)

Provides Accounting disclosures

- Governmental Accounting Standards Board (“GASB”) Statements No. 67 and 68

# Actuarial Valuation

**An actuarial valuation is performed to determine the pension liability and funded progress**



# Actuarial report

The actuarial report documents:

- Liability
- Change in Assets
- Funded Status
- Contribution requirements  
(Actuarially Determined Contribution – ADC)
- Plan Provisions
- Actuarial Assumptions & Methods
- Census Data
- Accounting requirements

# Other Services

- Performs review of experience and recommends assumptions (experience studies)
- Assist in developing Funding policy
- Informs the Board of possible future outcomes (projections)
- Perform/Review Benefit Calculations and provide actuarial tables/factors



# Actuary Doesn't!



Investments

Does not make investment decisions

Governance

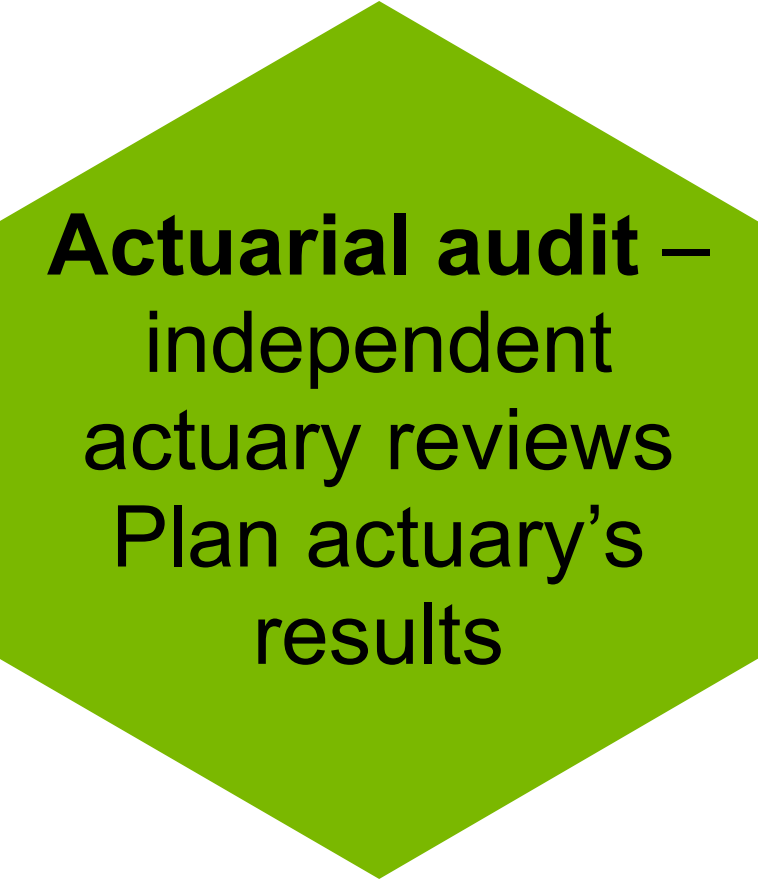
Is not a plan fiduciary

Funding

Does not control actual funding of Plan

# Trustee Best Practices

- Review of actuarial consultants (and all services providers) contracts periodically
- Study experience regularly
- Assumptions consistent with actuarial standards of practice
- Conduct actuarial audit every 4 to 5 years



**Actuarial audit –**  
independent  
actuary reviews  
Plan actuary's  
results

# What to Look for?

- Understandable—communicates in laymen's terms
- “Truth” teller—willing to provide “tough” news/guidance
- Strategic—sees beyond the numbers

