Legislative Commission on Pensions and Retirement
Actuarial Basics

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Funding Objectives

- Intergenerational equity with respect to plan costs.
- Stable pattern of contribution rates.
- Ratio of Assets to Liabilities targeted at 100%.

What Is Needed To Meet Objectives?

- Reasonable forecasts of resources and obligations (i.e., good assumptions).
- Smoothing devices.
  - Level % of payroll funding method
  - Market-related asset valuation method
- A sound funding program.
- A sound investment program.

Basic Retirement Funding Equation

C + I = B + E

- Where:
  - C is Contribution Income
  - I is Investment Return
  - B is Benefits Paid
  - E is Expenses

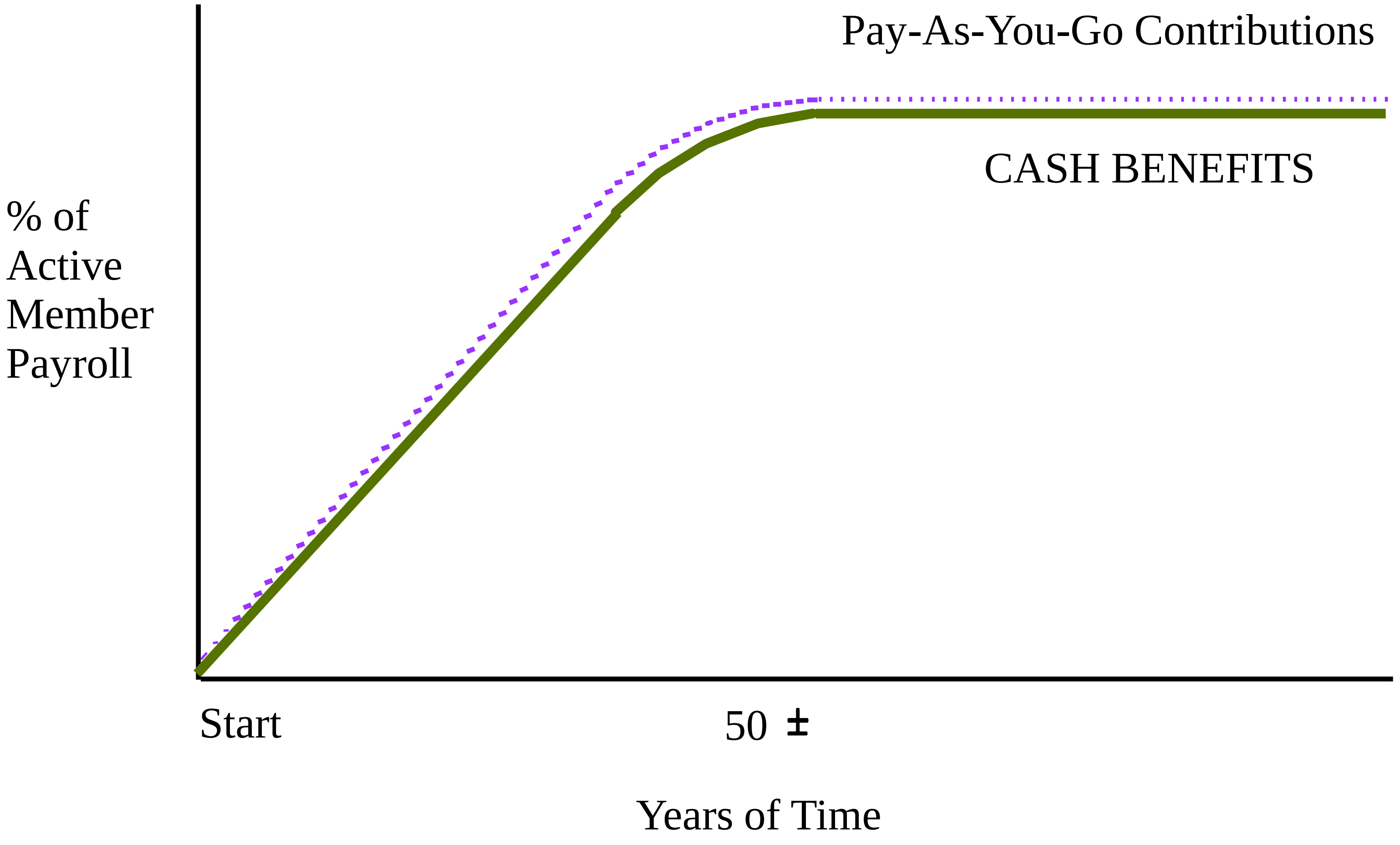
"Money In = Money Out"

Basic Retirement Funding Equation

$$C + I = B + E$$

- B depends on
  - Plan Provisions
  - Experience
- C depends on
  - Short Term: Actuarial Assumptions
    Actuarial Cost Method
  - Long Term: I, B, E

The Long Term Solution to the Equation



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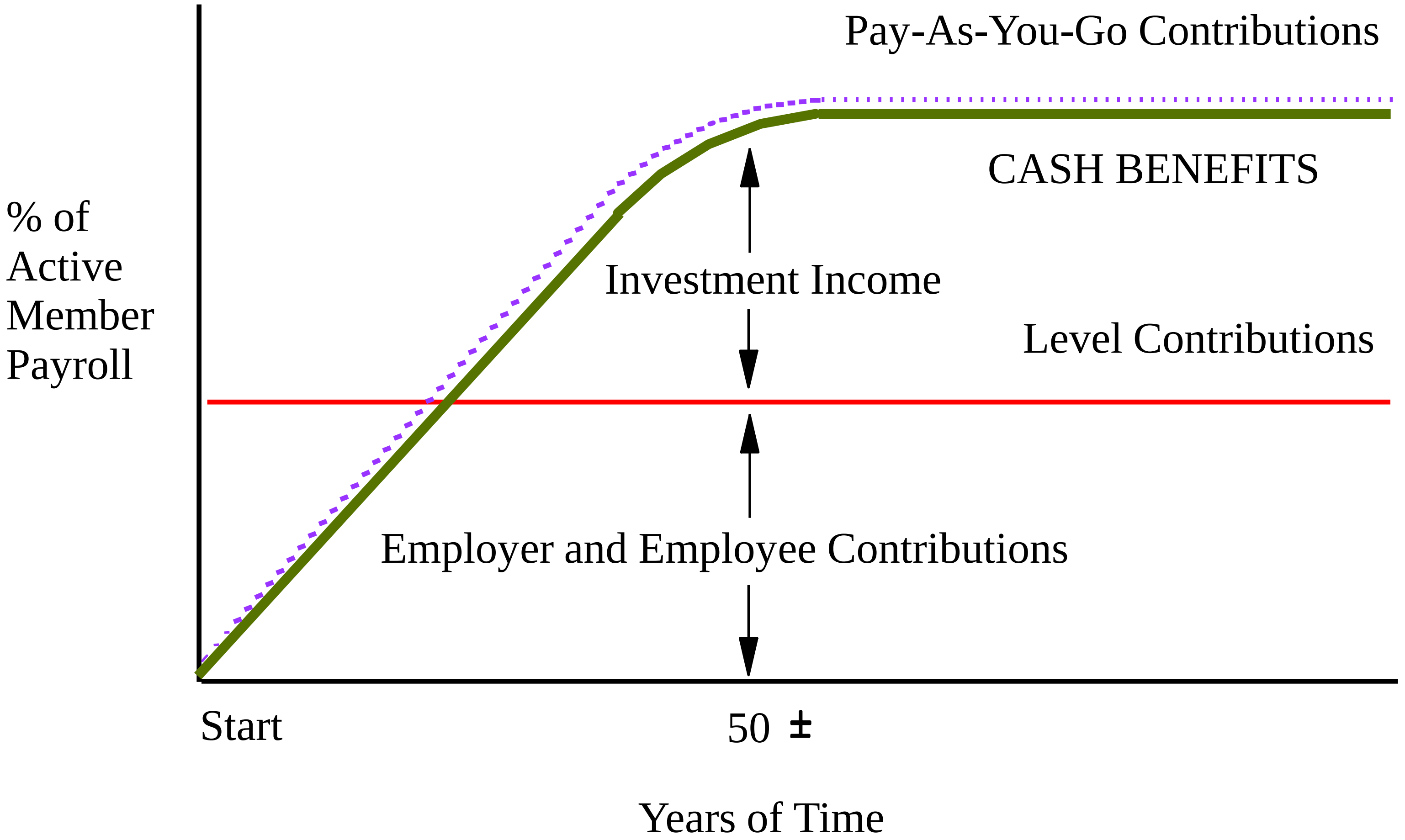

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Which Plan Would You Want To Retire From?

Funding Ratio

	Plan 1	Plan 2
2003	30%	90%
2004	33%	87%
2005	36%	84%
2006	39%	81%
2007	42%	78%
2008	45%	75%
2009	48%	72%
2010	51%	69%
2011	54%	66%
2012	57%	63%
2013	60%	60%

Which Plan Would You Want To Retire From?

	Plan 1	Plan 2
Funding Ratio	90%	60%
Required Contribution Rate	10% of pay	10% of pay
Statutory Contribution Rate	8% of pay	11% of pay
Contribution Sufficiency/(Deficiency)	(2%) of pay	1% of pay

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