Emerging Issues 2025 FORUM

01. Funding Issues as Full Funding (or 2040!) Approaches

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Emerging Issues 2025 FORUM

01. FUNDING ISSUES AS FULL FUNDING (or 2040!) APPROACHES

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Agenda

- What Does it Mean to be Fully Funded and Why are We Talking About this Now?
- Funding Schedules and Unfunded Actuarial Accrued Liability
- Approaches to Funding Schedule Design
- Strategies to Consider When Approaching Full Funding
- Developing a Funding Policy
- Questions

What Does it Mean to be Fully Funded and Why are We Talking About this Now?

NOTES:

What Does it Mean to be Fully Funded?

- Appropriations don't end
  - members still earn benefits
  - administrative expenses continue
- There will be gains and losses
- There may be assumption changes
- There may be a plan change

Impact on Cost When Approaching Full Funding

- Small experience fluctuations can result in significant changes in the employer cost
  - fluctuations may be large relative to the remaining unfunded liability
  - the number of years remaining on the funding schedule may be small

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Why Are We Talking About This Now?

- Many systems are at full funding or close to full funding
  - 4 systems are over 100% funded
  - 19 systems are 90% funded or better
- All systems have to be fully funded by 2040
  - 27 systems are projected to be fully funded by 2030
    - 15 are 90% funded or better; 12 are under 90% funded
- Will need legislation to address volatility by 2040, if not earlier

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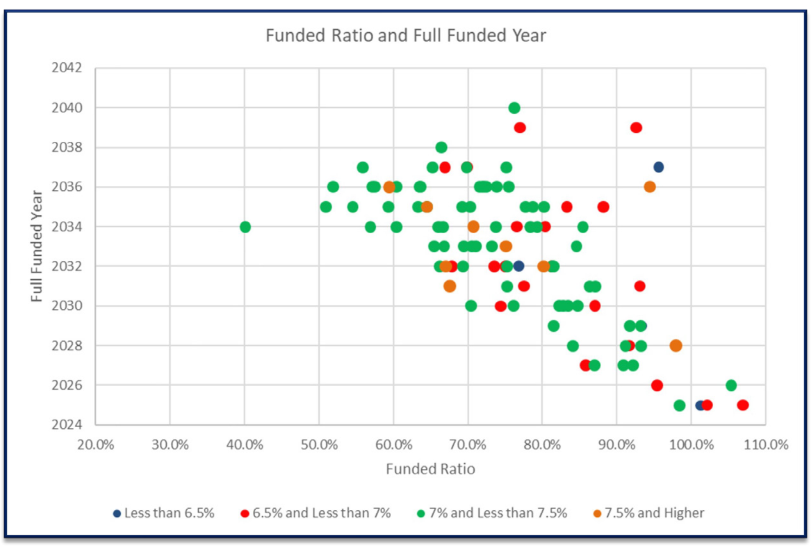
Summary of Full Funding Progress



- Based on most recent actuarial valuation reports submitted to PERAC
- **Source:** PERAC August 2025

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NOTES:

Chapter 32 Funding Requirements

- Section 22D – full funding by 2030
  - Amortization payments increase by no more than 4.5% per year
  - Appropriation cannot be less than 95% of the prior year's appropriation
- Section 22F – full funding by 2040
  - Amortization payments increase by no more than 4.0% per year
  - Increase in appropriation can be limited to 8% per year and appropriation cannot be less than the prior year's appropriation

Funding Schedules and Unfunded Actuarial Accrued Liability

NOTES:

What is a Funding Schedule?

- Budget or roadmap to fund benefits
  - Benefits earned in the past that have not been funded (Unfunded Actuarial Accrued Liability or UAAL)
  - Benefits and expenses earned in the current year (Normal Cost)
- The rest of this presentation will focus on paying down the UAAL

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Why Does UAAL Exist?

- UAAL is created when experience is different than expected
  - Investment experience
  - Demographic experience
- UAAL is created when assumptions are revised
- UAAL is created when the plan of benefits is improved
- UAAL can be positive or negative

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NOTES:

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The Mortgage Analogy

- UAAL is like a mortgage and the payments on the UAAL (amortization payments) are similar to mortgage payments
  - Each payment includes principal and interest
- Over what period of time will payments be made - the amortization period
- What will those payments look like - the amortization method
  - Level dollar payments or payments that are a level percent of pay

How to Pay Off a Million Dollars

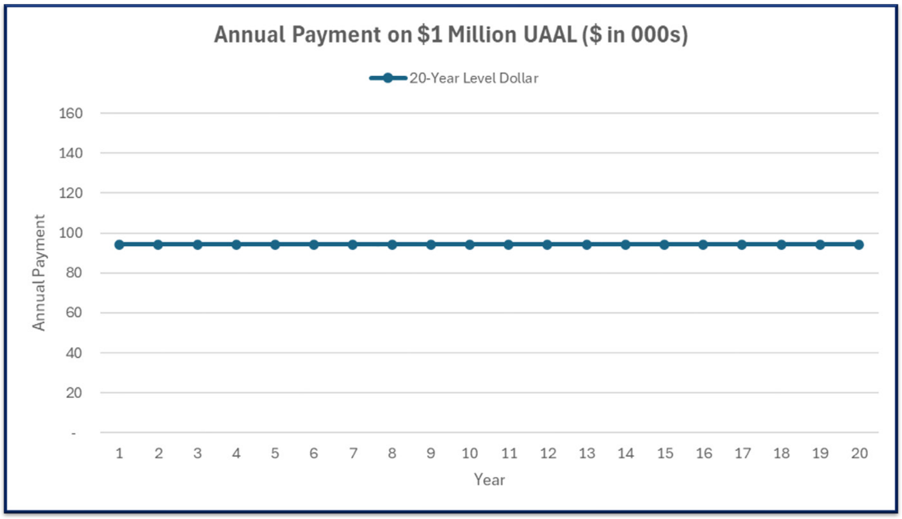
	Period / Method	20 years / Level Dollar	20 years / Level Percent of Pay	15 years / Level Dollar	15 years / Level Percent of Pay
Increase in UAAL		1,000,000	1,000,000	1,000,000	1,000,000
Amortization Amount					
Year 1		94,393	72,046	109,795	89,109
Year 5		94,393	82,674	109,795	102,255
Year 10		94,393	98,191	109,795	121,447
Year 15		94,393	116,620	109,795	144,241
Year 20		94,393	138,509	-	-
Total amount paid					
Principal		1,000,000	1,000,000	1,000,000	1,000,000
Interest		887,859	1,037,438	646,919	719,423
Total		1,887,859	2,037,438	1,646,919	1,719,423

Assumes:

- 7% interest
- 3.5% Pay Growth

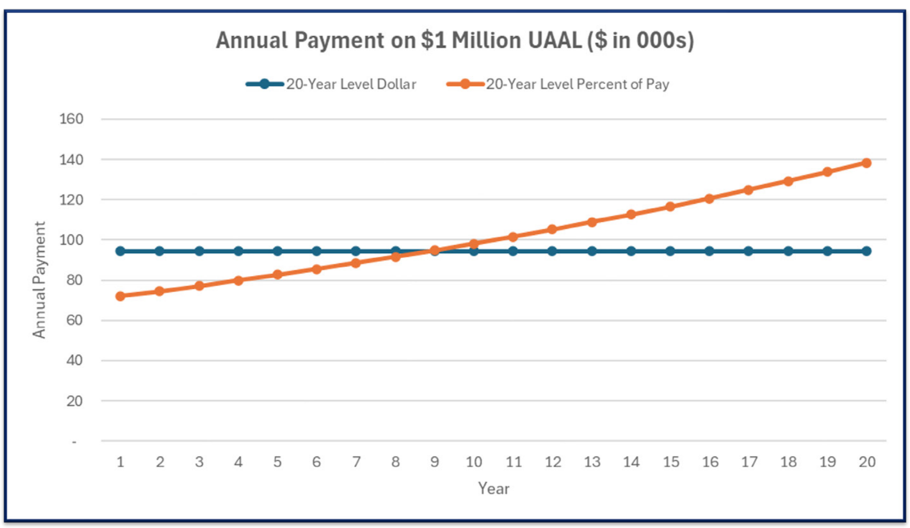
NOTES:

Amortization Methods (1)



- Level dollar
- Payments are equal through end of 20-year period
- Total payments = $1.9m

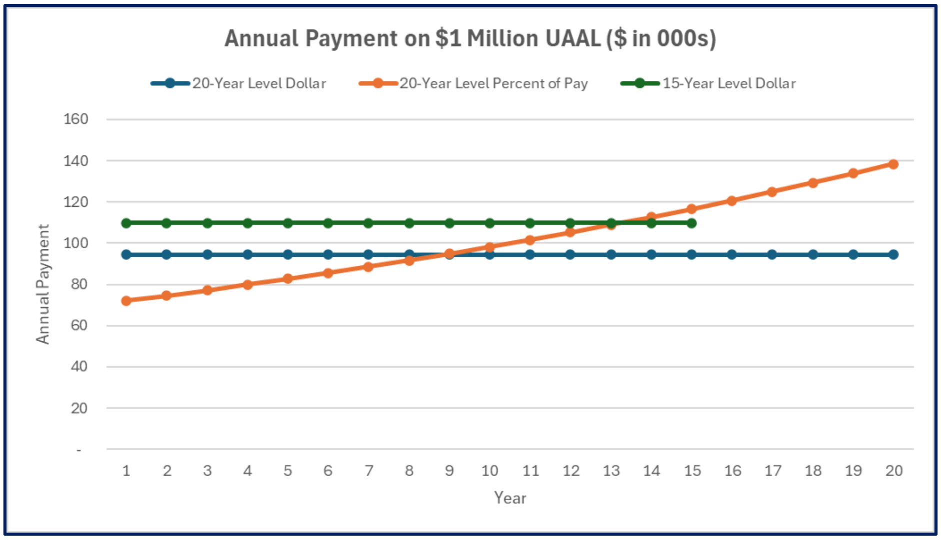
Amortization Methods (2)



- Level percent of pay
- Payments increase annually by 3.5% through end of 20-year period
- Final payment is 92% higher than first payment
- Total payments = $2.0m

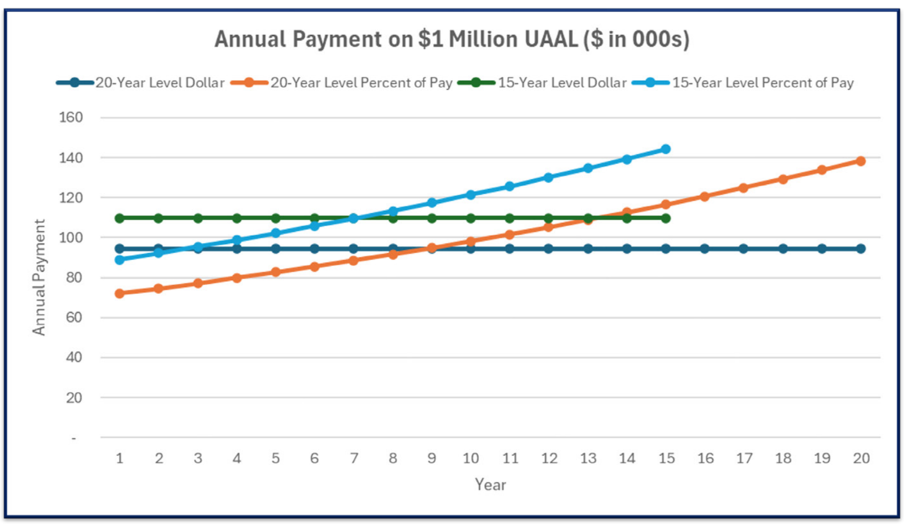
NOTES:

Amortization Methods (3)



- Shorten amortization period
- Annual payments greater when period is shorter
- Total payments = $1.6m

Amortization Methods (4)



- Level percent of pay
- Payments increase annually by 3.5% through end of 15-year period
- Final payment is 62% higher than first payment
- Total payments = $1.7m

NOTES:

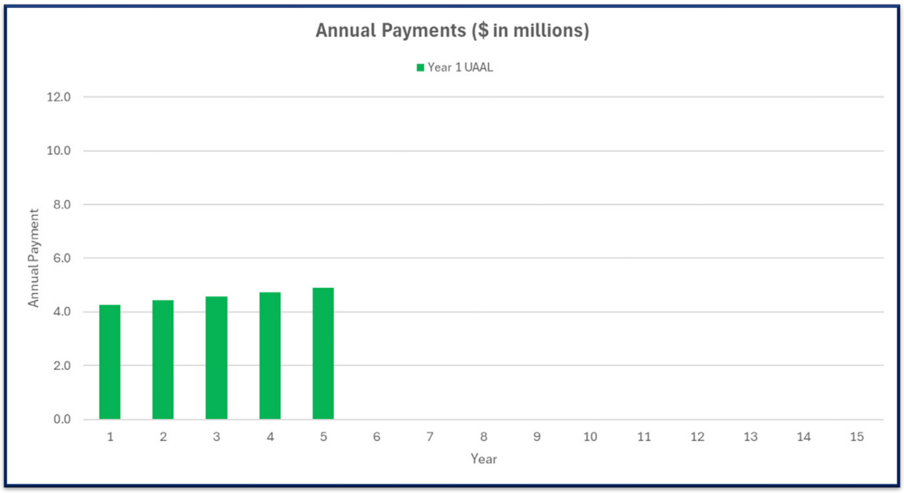
Approaches to Funding Schedule Design

The “Current” Approach to Funding Schedule Design (1)

- Fixed or closed amortization period
- In general, all sources of UAAL are funded in the same manner
- Unless the funding schedule is revised, the amortization period decreases every year
- New UAAL (e.g. gains or losses, assumption changes, plan changes) is rolled into existing UAL and amortized over remaining period

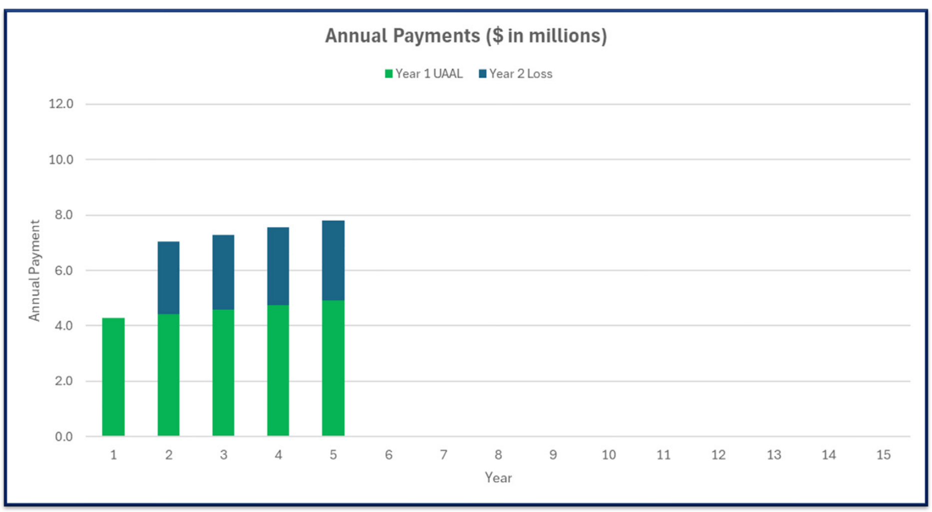
NOTES:

The “Current” Approach to Funding Schedule Design (2)



- Initial UAAL amortized over 5 years
- Payments increase annually by 3.5% through end of 5-year period
- Payments increase from $4.5m to $4.9m over 5-year period

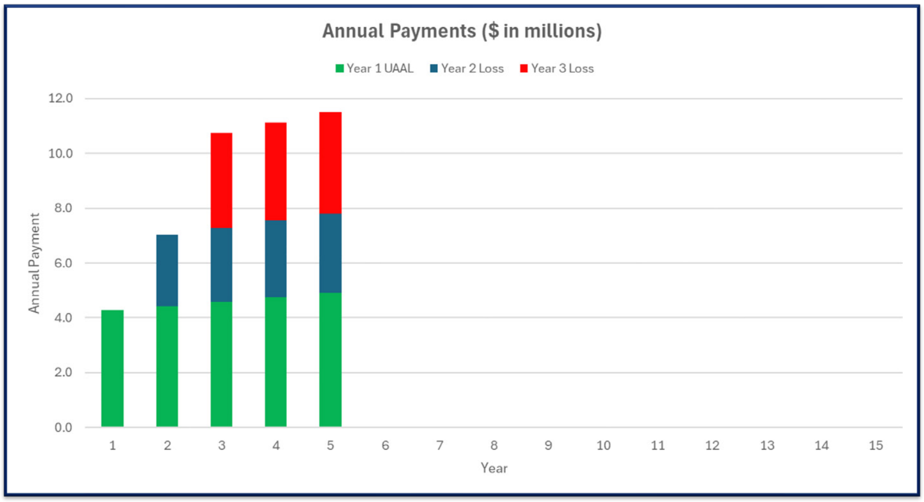
The “Current” Approach to Funding Schedule Design (3)



- Year 2 Loss combined with UAAL as of year 2
- Total UAAL as of year 2 amortized over 4 years
- Payments increase annually by 3.5% through end of 4-year period
- Payments increase from $4.5m to $7.8m over 5-year period

NOTES:

The "Current" Approach to Funding Schedule Design (4)



- Year 3 Loss combined with UAAL as of year 3
- Total UAAL as of year 3 amortized over 3 years
- Payments increase annually by 3.5% through end of 3-year period
- Payments increase from $4.5m to $11.5m over 5-year period

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A New Approach to Funding Schedule Design

- "Layered Fixed Amortization Periods" for each new source of UAAL
- Different full funding dates for each new source
- Select an amortization period for each source
- Select an amortization method
  - Level dollar payments
  - Level percent of pay payments

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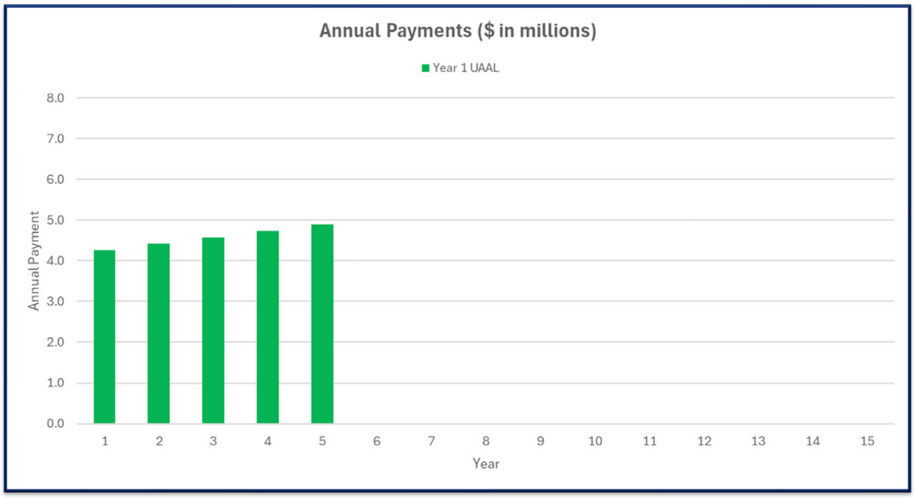
The “Layered” Approach to Funding Schedule Design (1)



- Initial UAAL amortized over 5 years
- Payments increase annually by 3.5% through end of 5-year period
- Payments increase from $4.3m to $4.9m over 5-year period
- Same payment pattern as “Current” Approach in initial year

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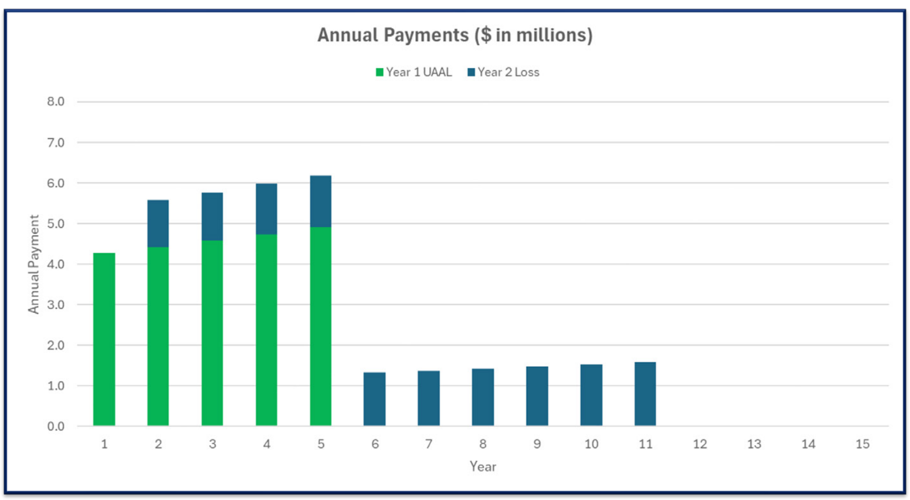
The “Layered” Approach to Funding Schedule Design (2)



- Year 2 loss amortized over 10 years starting in year 2
- Payments increase from $4.3m to $6.2m in years 1 – 5, and $1.3m to 1.6m in years 6-11

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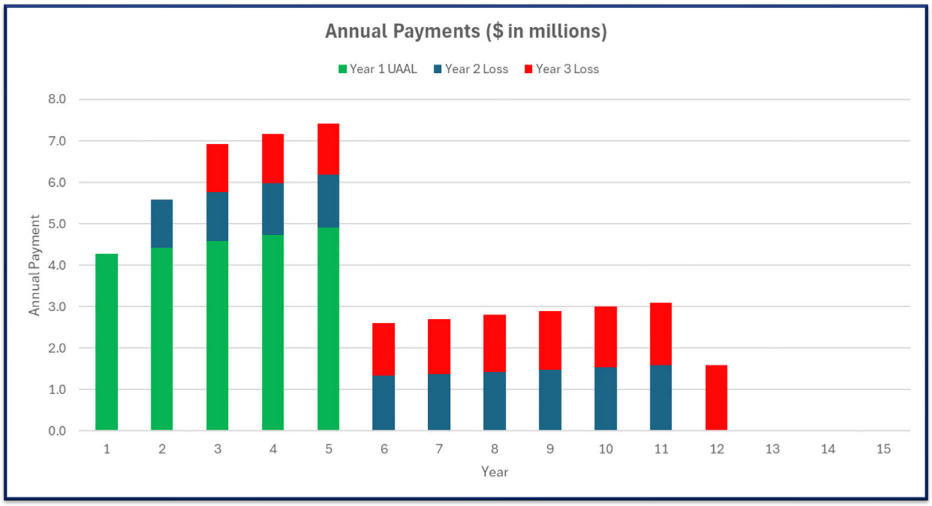
NOTES:

The “Layered” Approach to Funding Schedule Design (3)



- Year 3 loss amortized over 10 years starting in year 3
- Payments increase from $4.3m to $7.4m in years 1-5, and $2.6m to 3.1m in years 6-11 and drops to $1.6m in year 12

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The Devil is in the Details

- Experience gains and losses - 10 or 15 years
- Changes in assumptions and methods - 10 or 15 years
- Plan changes – vary based on type
  - 1 year for additional 2% COLA
  - 5-10 years for COLA base increases
- If the period is too short, costs may be too volatile
- If the period is too long, funding is delayed too long

NOTES:

Does Chapter 32 Allow Layered Amortization?

- Yes, if all layers are fully amortized by June 30, 2040.
- Chapter 32 would need to be amended if layers extend beyond 2040.
- When should Chapter 32 be amended?
- How should existing UAAL be handled?

Strategies to Consider When Approaching Full Funding

NOTES:

Strategies to Consider When Approaching Full Funding (1)

- Perform annual valuations
- Perform an interim valuation to reflect prior year's investment performance or deferred investment losses in the funding schedule
  - Identify when contributions may need to be increased in the future

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Strategies to Consider When Approaching Full Funding (2)

- Review actuarial assumptions
  - Demographic – mortality, turnover, disability and retirement
  - Economic – investment return and salary increase

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NOTES:

Should the Investment Return Assumption Be Lowered?

- Lowering the investment return assumption increases the likelihood of meeting the assumption, assuming no change in the System's asset allocation

Asset Class	Target
Equities	40%
Fixed income	25%
Real estate	10%
Hedge funds	10%
Private equity	15%

Investment Return	Likelihood of Achieving
6.00%	64%
6.25%	60%
6.50%	56%
6.75%	52%
7.00%	47%

Should the Asset Allocation Be Revised?

- Reducing risk lowers the expected return of the portfolio and volatility
- May require a reduction in the investment return assumption

Sample Portfolio	Targets (Eq / FI / RE / HF / PE)	Likelihood of Achieving 6.50% Assumption
1	40/25/10/10/15	56%
2	30/35/10/10/15	51%
3	30/40/10/10/10	45%

NOTES:

Consider Benefit Driven Investing (BDI) (1)

- Negative cash flow – benefit payments are partially funded by investment income – will occur when employer contributions are reduced after full funding is reached
- Poor returns are difficult to recover from for a plan with large cash flow needs
- If there is a market downturn, a System that is in negative cash flow will “lock-in” investment losses

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Consider Benefit Driven Investing (BDI) (2)

- Invest a portion of the assets in a portfolio of long duration bonds (the BDI portfolio) – the bond cashflows match the projected benefits for a number of years
- Minimize the likelihood and magnitude of drawdowns
- Revised asset allocation may require a lower investment return assumption
- Analysis is required to determine the trade-offs

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NOTES:

When Should Appropriations Be Reduced? (1)

- After the UAAL is fully funded, ongoing benefit accruals (normal cost) and administrative expenses need to be funded.
- Should contributions continue at a level to overfund the System?
- What is the correct level of overfunding – 5%, 10% or more?

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When Should Appropriations Be Reduced? (2)

- Consider reducing contributions gradually – minimize the “cliff”
- Balance achieving full funding or building a reserve with budget constraints
- Should the minimum contribution always be normal cost?

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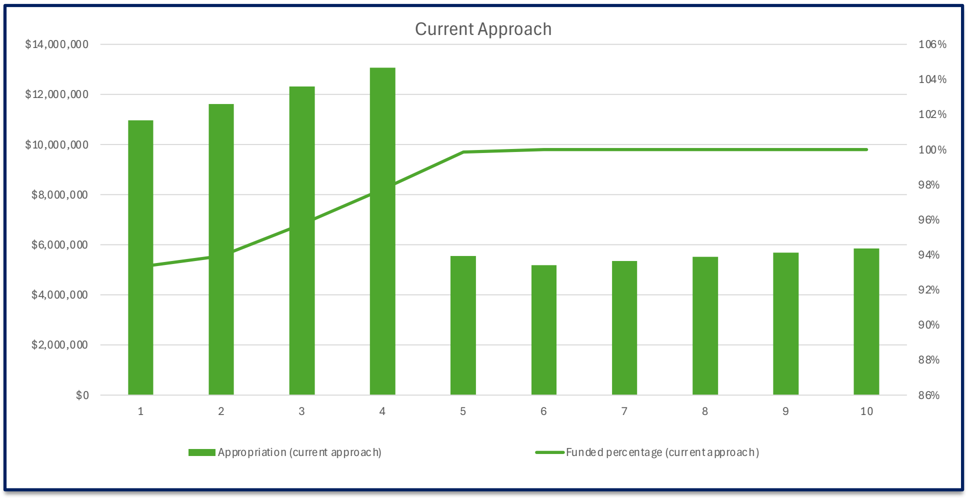
NOTES:

Current Approach to Funding Schedule Design



- Appropriation, including normal cost, increases 6% per year until fully funded
- When fully funded, appropriation drops to normal cost

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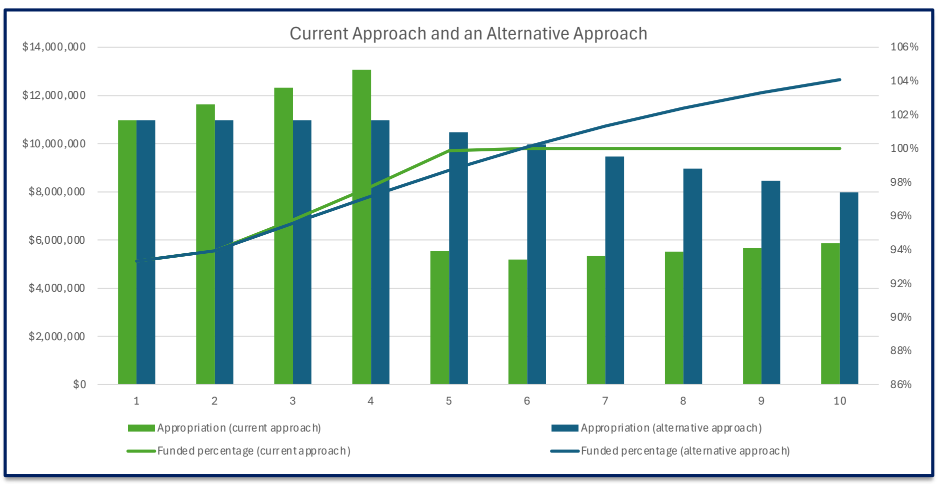
Alternative Approach to Funding Schedule Design



- Appropriation, including normal cost, remains level for four years, then decreases by $500,000 per year
- Target is 105% funded

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NOTES:

Strategies to Consider When Approaching Full Funding

- Consider Retirement and OPEB budgets together
  - Redirect a portion of retirement funding to OPEB
  - Change allocation between retirement and OPEB funding as needed

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Developing a Funding Policy

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Developing a Funding Policy

- Establish clear objectives to ensure the System remains well funded
  - When should the COLA base be increased
- Determine contribution strategy
  - Including when there is a surplus
- Incorporate risk management principles

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QUESTIONS??

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