

Pension Amortization Introduction



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Today's topics

- Why are amortization policies relevant for Minnesota statewide pension systems?
- Do current Required contribution rates/amortization methods follow contemporary best practices and fulfill their intended purpose?
- What are alternative amortization methods to consider?

Background information

Background information

Statutory (fixed rate) contributions

- MN statewide pension systems have “fixed” contribution rates
- These rates do not automatically adjust to changes in systems’ funded status
- Generally influenced by past actuarial analyses; and adjusted by legislative action when necessary

“Required” contribution rates

- Alternative actuarial contribution rates **intended to measure whether current fixed rate contributions are sufficient (or not)**
- Persistent sufficiency/deficiency indicates that fixed contribution rates may need adjustment
- Working group objective: consider whether methods for determining Required contribution rates should be updated

Background information

“Required” contribution rates

- Chapter 356.215 of MN statutes
- Based on actuarial principles
- 3 primary components
 - Normal Cost
 - Administrative expenses
 - **Amortization of unfunded liability**

Definitions

“Required” contribution rates: actuarially-determined contribution rate that is annually compared to the statutory fixed rates to determine whether they are “sufficient” (i.e., guardrails for the fixed rates)

Normal Cost: Amount of active member liability accruing during the current plan year.

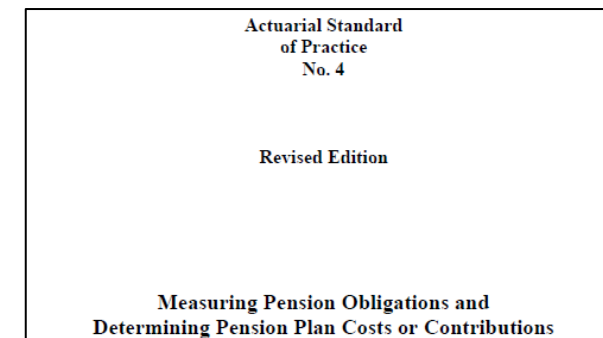
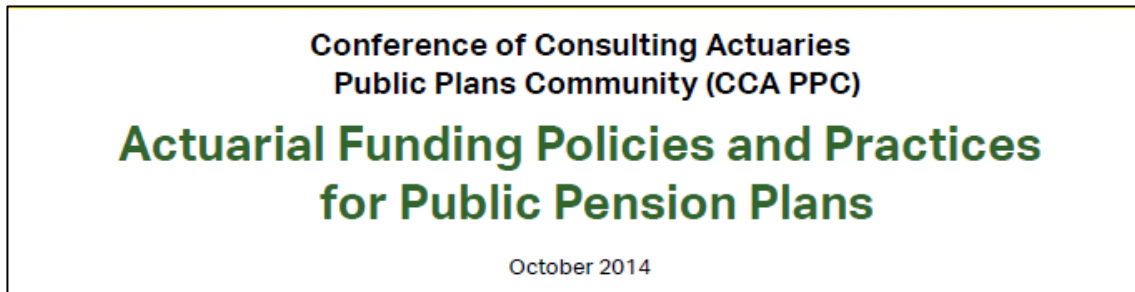
UAAL: Unfunded Actuarial Accrued Liability = Assets – Actuarial Accrued Liability

Amortization: process for methodically paying down a debt or liability. Amortization factor is based on an interest rate, growth rate, and paydown period.

Background information

Best practices for amortizing unfunded liabilities are evolving

- Focus on meaningfully reducing unfunded liabilities over a reasonable time period
- Recent guidance illustrates changing approaches



Background information

Three main factors when choosing an amortization policy

Amortization Inputs	Options
Type	<ul style="list-style-type: none">▪ Open period (reset timeframe at each valuation)▪ Closed period<ul style="list-style-type: none">▪ Single amortization base▪ Layered amortization bases
Length of time	<ul style="list-style-type: none">▪ How long to pay down the unfunded liability?
Growth pattern	<ul style="list-style-type: none">▪ Budget as level percent of payroll or level dollar amount?

Background information

- “Required” rates have typically used a closed 30-year amortization period
 - Example: in 2018 the entire UAAL was re-amortized over a 30-year period ending in 2048.
 - Each subsequent year, the entire unfunded liability (including any new unexpected changes) is re-amortized over the remaining period.
- MN statute 356.215 Subd. 11(c) requires re-calculating the amortization period if there are assumption or plan changes that increase the UAAL
 - New period is based on blend of current remaining period and proportional effect of amortizing new changes over additional 30 years
 - Affected several statewide plans in 2023 because of discount rate change from 7.5% to 7.0%

Potential Amortization Issues

Intergenerational equity: Are unfunded liability costs being paid by parties who receive the benefits/services that are the source of the UAAL?

Negative amortization: When the annual interest accrual on the outstanding debt (unfunded liability) is greater than the annual amortization payment, resulting in growth of the unfunded liability.

Meaningful progress: Recent guidance sources “point to an increased focus on developing amortization policies that are designed to pay down the UAAL in a meaningful way over a reasonable period of time.”

Habitual reset: Closed amortizations are often reset/extended when there are fewer years remaining and there is potential for contribution volatility

Other amortization options

Other amortization options

As we consider alternative amortization methods, let's revisit initial questions

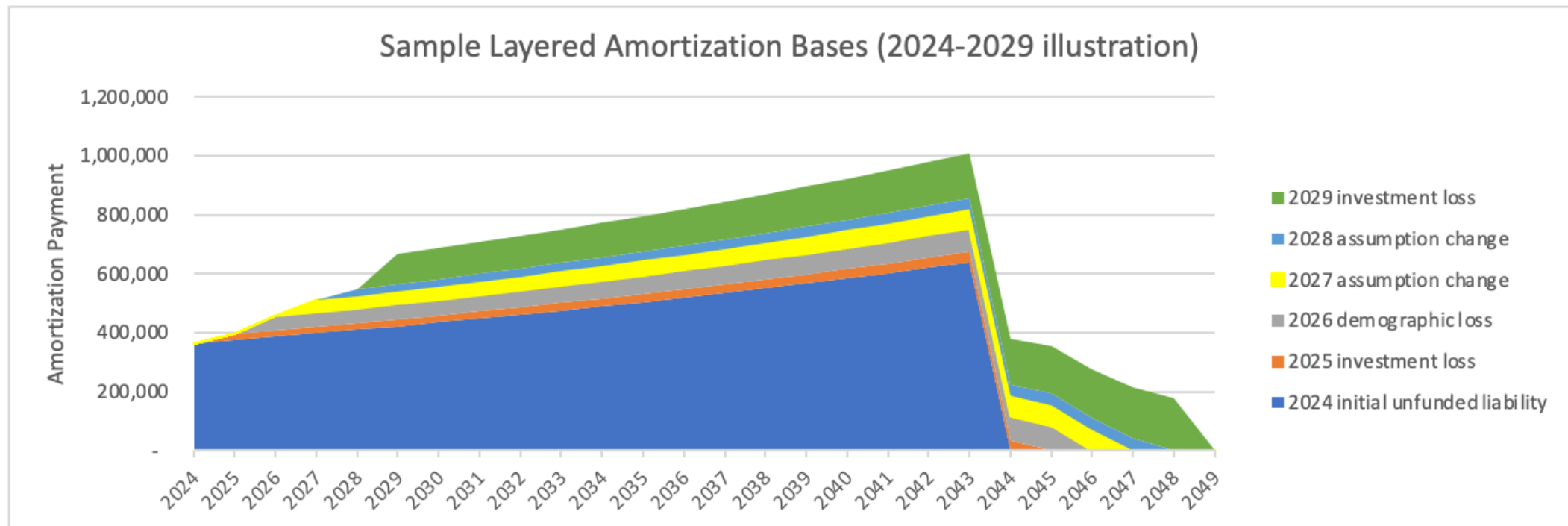
- What is the purpose of the Chapter 356.215 Required contribution rates?
- Are there adjustments to current amortization methods (and codification) that would help the Required contribution rates better achieve their objectives?

Other amortization options

Amortization Type	Considerations
Open period	<ul style="list-style-type: none"> Re-amortize UAAL over new period at each valuation May not meaningfully reduce UAAL over reasonable time period
Closed period(s) <ul style="list-style-type: none"> Single amortization base Layered amortization bases 	<ul style="list-style-type: none"> Provides clear date for fully amortizing UAAL Can produce volatile contribution rates when few years remaining, which often leads to a new extended amortization period Clearly identify sources of UAAL and when they will be fully amortized Aligns with contemporary best practices Confirm that this approach aligns with fixed rate contributions that don't change frequently

Other amortization options

Layered amortization bases are often the most transparent way to track sources of unfunded liability and when those obligations will be satisfied



Other amortization options

Amortization Length (<i>new liabilities</i>)	Considerations
Shorter than 15 years	<ul style="list-style-type: none"> ▪ Quickly amortizes UAAL ▪ May produce volatile results
15 – 20 years	<ul style="list-style-type: none"> ▪ More closely aligns with funding UAAL during working careers of current employees ▪ Aligns with contemporary best practices and “reasonable” ADC requirements
25 – 30 years	<ul style="list-style-type: none"> ▪ Produces more “affordable” results ▪ Risk of negative amortization ▪ May not meaningfully reduce UAAL over a reasonable time period

Amortization Length (<i>old liabilities</i>)	Considerations
20-25 years	<ul style="list-style-type: none"> ▪ Consistent with current amortization schedules ▪ Intergenerational equity may be less relevant for current UAAL attributable to participants who are already retired and no longer working
30+ years	<ul style="list-style-type: none"> ▪ Produces more “affordable” results ▪ May not meaningfully reduce UAAL over a reasonable time period

Other amortization options

Amortization <i>Growth Pattern</i>	Considerations
Level percent of payroll	<ul style="list-style-type: none">▪ Aligns with budgeting of pension contributions▪ Can backload contributions if payroll growth assumption isn't accurate
Level dollar	<ul style="list-style-type: none">▪ Amortizes UAAL more quickly▪ Does not rely on variability of payroll growth▪ Frontloads costs (as a percent of payroll)

Other amortization options

Figure 1. Percentage of plans funded by variable or fixed employer contributions

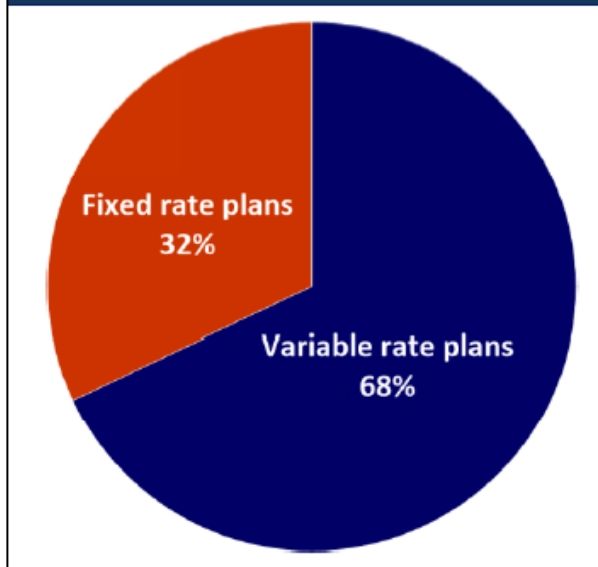


Figure 2. Distribution of policy amortization periods for actuarial gains and losses, layered plans

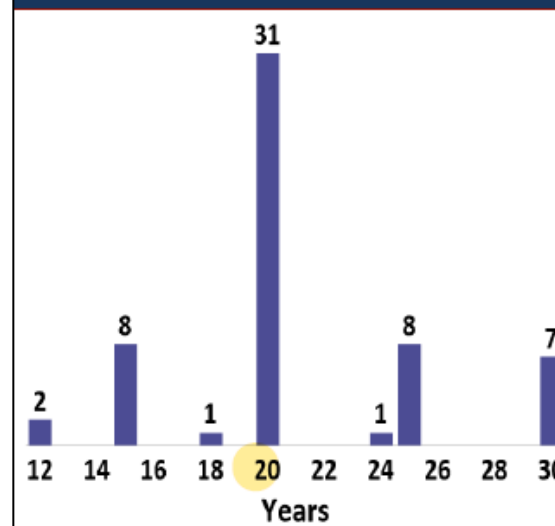
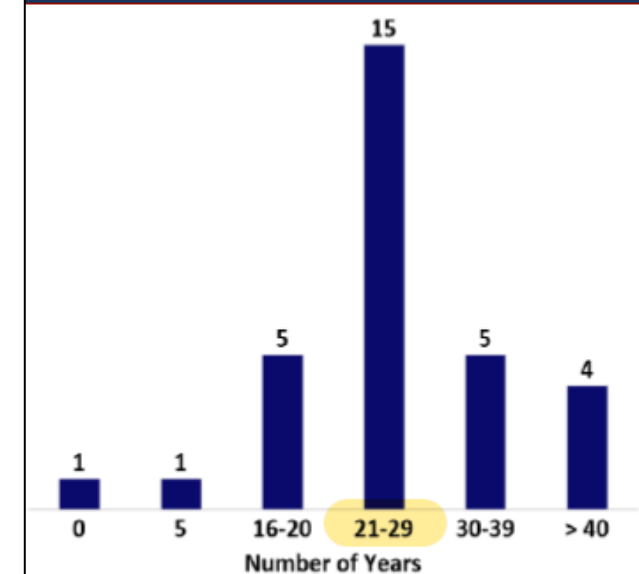


Figure 5. Funding period based on contribution type, fixed rate plans



All exhibits are from NASRA Overview of Public Pension Plan Amortization Policies, April 2022
Survey size = 104 statewide and 20 local systems

Other amortization options

Other considerations:

- Amortization methods should produce results that provide meaningful and consistent information about sustainability of fixed contribution rates
- Extended amortization periods for legacy unfunded liabilities
- Using methods that satisfy ASOP 4 “reasonable ADC” requirements and align with contemporary best practices
- Alternative methods when have a funded status above 100%
- How to balance oversight, individual systems’ needs, and consistency?



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