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Transparency Initiatives and Key System Cost Drivers

Oregon Public Employees Retirement System

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Overview

- Today's presentation gives a summary of:
  - Efforts made in our actuarial work to enhance system transparency to members, PERS employers, and other interested parties
  - Key system cost drivers and a review of how those drivers have contributed to the contribution rate increases effective July 2011
  - Why rate increases are likely to occur in subsequent rate-setting periods

Transparency Initiatives
How Calculations Are Done

- To make the PERS actuarial calculations more understandable, we use measures that attempt to enhance system transparency
- For annual actuarial valuation calculations we have introduced:
  - Use of fair market asset values
    - Most other states use "smoothed" multi-year asset averages
    - We feel that fair value leads to more transparent and understandable funded status and shortfall reporting
  - An explicit percentage of pay "rate collar" formula to limit rate movements in the event of large changes in funded status
    - Analysis prior to implementation indicated the fair value/rate collar approach provided rates as stable as those from an asset smoothing approach
  - Cost allocations using the "projected unit credit" (PUC) allocation method
    - The value of projected retirement benefits are allocated to a Member's working years via a cost allocation method
    - PUC allocates all benefits from the Money Match formula to pre-2004 service, and recognizes that Money Match is not generating new liabilities

Transparency Initiatives
How Calculations Are Done

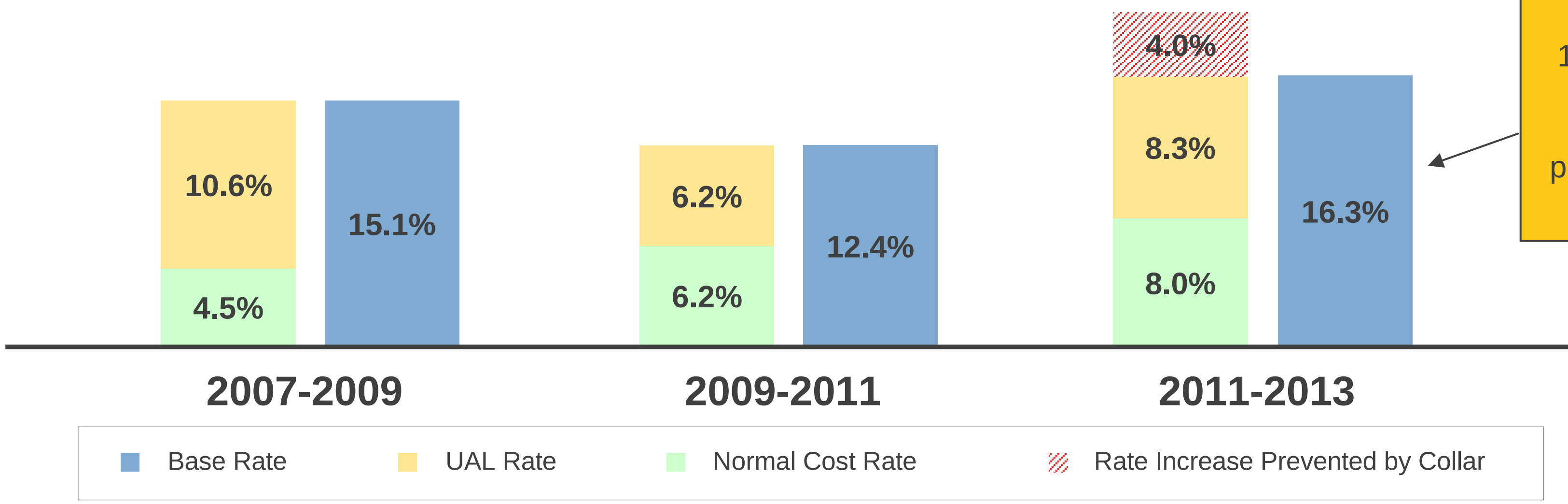
- To assist interested parties, we also conduct forward-looking financial modeling
  - Regular stochastic modeling shows a wide range of possible investment return scenarios with probability estimates attached to each scenario
    - This helps members, employers and policy makers understand the potential volatility of system costs if low likelihood "tail events" occur
  - More simplified employer contribution rate and system funded status modeling is also conducted regularly
    - This provides timely, understandable updates to the rate forecast under both the actuarial investment return assumption and under two or three alternative investment return scenarios

Transparency Initiatives
How Calculations Are Communicated

- At a system-wide level, results are communicated:
  - Via public presentations to the PERS Board
  - All Mercer presentations are gathered and available in one location on the PERS website
- The system is not a monolith, and both current contribution rate levels and biennium to biennium rate changes vary by employer
- As such, at an employer-specific level results are communicated via:
  - Detailed (15+ pages) annual employer-specific informational reports summarizing employer rate calculations
  - Extensive backup material provided to PERS employer relations staff

Key System Cost Drivers
“Base” Employer Contribution Rates

Rate-setting valuations are conducted biennially, with advisory valuations in off years

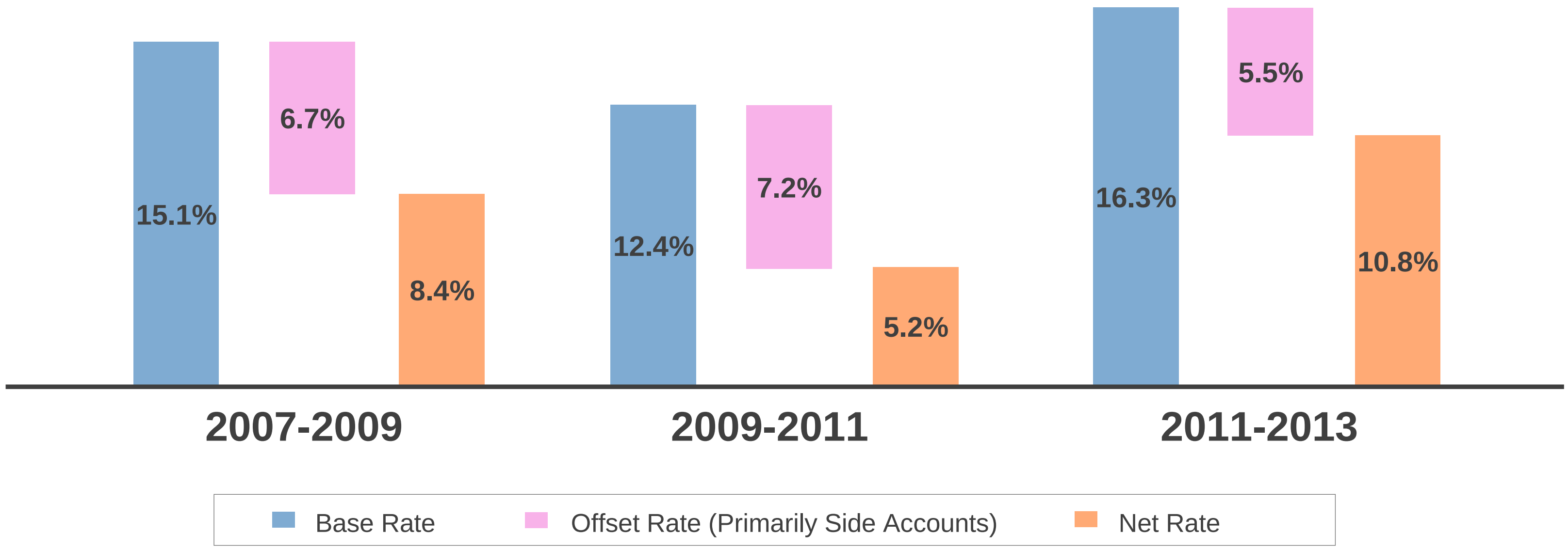


Based on 12/31/2009 valuation results, presented in July 2010

- The “base rate” has two parts:
  - Normal cost (the allocated economic value of benefits earned during the year)
  - UAL rate (shortfall amortization)
- Base rates are paid from employer contributions and side account transfers
- Normal cost is increasing as fewer and fewer active members remain that will retire under the frozen Money Match formula, which has zero normal cost
- Tier 1/Tier 2 shortfalls are amortized over 20 years as a percent of payroll
  - UAL rate varies with asset returns
- The rate collar limited the UAL rate change for the upcoming biennium

Key System Cost Drivers

"Net" Employer Contribution Rates



- The "net rate" is the base rate after reflecting rate offsets
- Net rates increased more than base rates due to the combined effect of:
  - The base rate increase discussed on the previous slide
  - A decrease in side account balances due to 2008 investment losses
- Side accounts leverage rate changes, with either good or bad leverage possible depending on asset returns

Key System Cost Drivers

Why Are Base Rate Increases Likely to Occur for 2013-2015 and Later?

- Rates are increasing in 2011, but the rate collar prevented an even greater increase
  - Under most investment return scenarios, the 4.0% of payroll base rate increase prevented by the collar will be reflected in 2013 and later years
- Why are subsequent base rate increases likely?
  - The rate structure <u>is</u> designed with a long-term view
    - Successive incremental rate adjustments are made with a goal of eliminating system shortfalls over twenty years if the investment return assumption (and other assumptions) are met
  - The structure <u>is not</u> designed to keep short-term funded status stable
    - At current contribution levels, if actual 2010 investment return is 8% then funded status excluding side accounts is forecast to decrease by 0.6% during 2010
      - We estimate an 8.8% return is needed to avoid a funded status decrease
  - In the rate structure, the initial rate increase is needed to get rates to a level where funded status is forecast to be level if the assumed investment return occurs
  - Subsequent rate increases are needed in a “meet the investment return assumption scenario” to allow for projected funded status improvement over twenty years

Closing Comments

- Rates shown in this presentation are system-wide rates, based on Mercer's three rate-setting actuarial valuations (as of December 31 of 2005, 2007, and 2009)
  - Those valuation reports should be referenced for a full explanation of the methods, data, assumptions and benefit provisions used in the rate calculations
    - Limitations on the use the system-wide rates are detailed in those reports, and those limitations are incorporated herein by reference
- Rates vary from employer to employer, and a given employer's rate can vary significantly from the system-wide rate
  - This is particularly true for employers with side accounts
- Rates shown here are payroll weighted, system-wide average Tier 1/Tier 2/OPSRP contribution rates
  - Rates include the retiree healthcare rate for the RHIA and RHIPA programs
  - Rates do not include contributions to the Individual Account Program (IAP) or debt service payments on pension obligation bonds associated with side accounts

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