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Santa Barbara County Employees' Retirement

Actuarial Funding Policies

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Agenda

- Background
  - Funding Principals and Objectives
  - Actuarial Cost Method
  - Asset Smoothing
  - Amortization
- Guidance
- Direct Rate Smoothing
- SBCERS' Policies
- Alternatives

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Background

- Actuarial Funding Policies
  - **Once benefits projected and assets measured, determine how benefits not covered by current assets will be financed**
- Funding policies can be used to meet and balance different objectives
  - Secure the benefit promise
  - Provide predictable and stable contributions
  - Promote intergenerational equity (cost of services paid for by those receiving them)
- Traditional Actuarial Funding Policies have three components
  - Actuarial Cost Method
  - Asset Smoothing Method
  - Amortization Policy

Background

- Benefit Security
  - Generally, the more assets in the trust, the more secure the benefits
  - Constitutional protections provide a significant amount of benefit security, but…
  - The objective of benefit security generally leads to more conservative assumptions, shorter amortization periods, and higher contributions
  - The security of plan is related to the solvency of the sponsors

Background

- Predictable and Stable Contributions
  - Significant and unexpected changes in contribution amounts can cause budgeting problems
  - The objective of predictable and stable contributions generally leads to longer amortization periods, longer asset smoothing periods and slower reactions to changes

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Background

- Generational Equity
  - Each generation of taxpayers should incur the cost of benefits for the employees who provide services to those taxpayers
  - Actuarial cost methods allocate the expected contributions in this manner. Difficult questions arise when:
    - Gains and losses are experienced on actives / inactives
    - Assumption changes are made
    - A prior generation leaves without paying the cost of their benefits
    - Past service benefits are modified

Background

- In balancing these objectives, there are some key principles to maintain
  - Benefits and expenses have to be paid for through contributions and investment earnings
    - B + E = C + I
  - Transparency
    - Communicate how objectives are balanced
    - Accountability
    - Credibility
  - Identify, Understand and Communicate Risks

Background

- Actuarial Cost Method
  - **Defines how to allocate costs between past and future service**
- Most commonly used method in public sector (used by all ‘37 Act systems currently) is **Entry Age Normal**
  - Allocates cost as a level percentage of payroll over each member’s career
  - Required for new GASB 67/68 accounting standards

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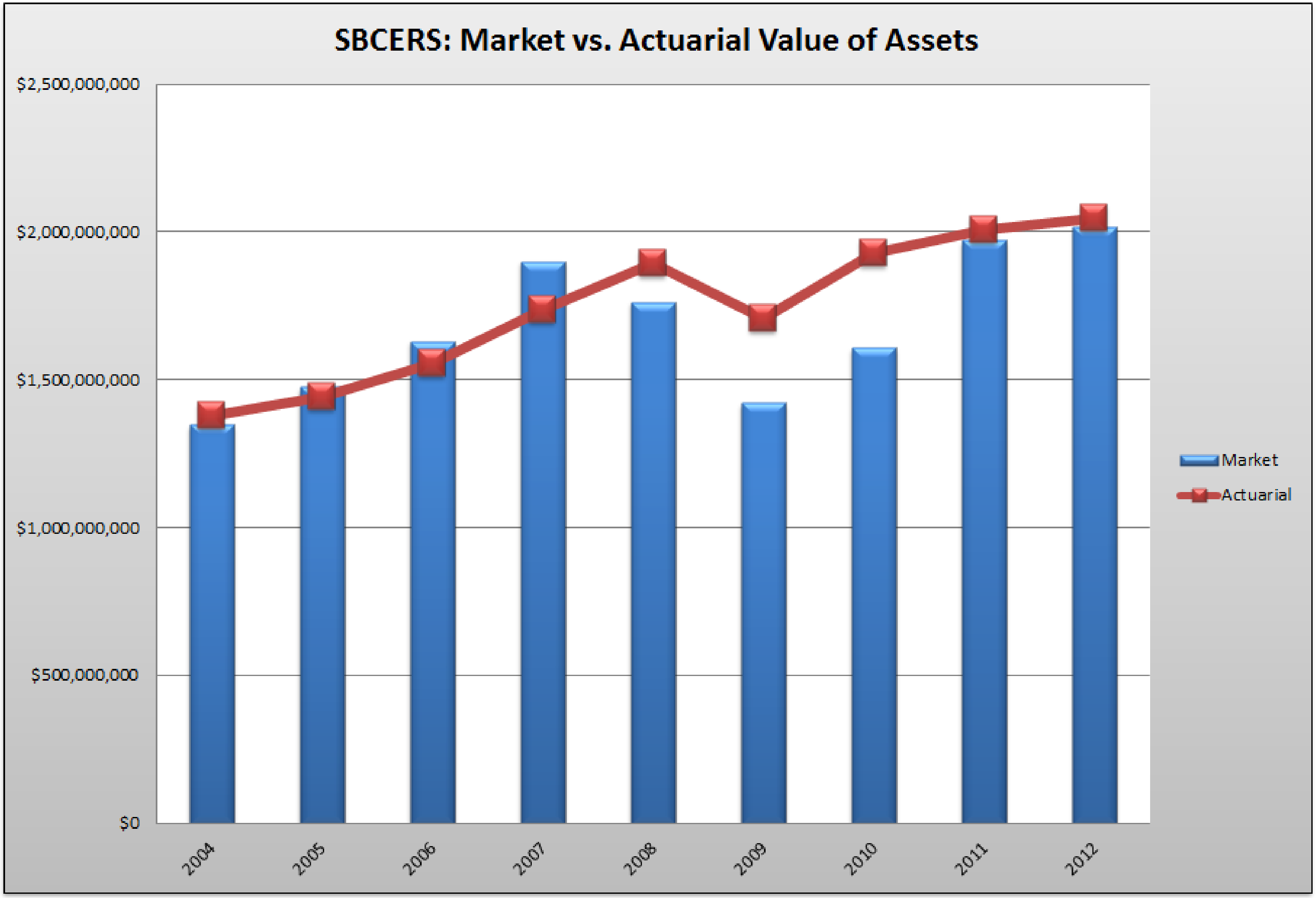
Background

- Asset Smoothing Method
  - Goal is to reduce impact on cost of yearly market fluctuations
  - Use an asset value different from Market Value to determine employer contributions
  - Deferred recognition of asset gains/losses over a number of years provides smoother contribution rate

- Parameters for smoothing method
  - Period: how many years to spread gains/losses over
    - Five years is most common period used
  - Corridor: how far do you allow smoothed value to differ from market?

Background



SBCERS: Market vs. Actuarial Value of Assets
$2,500,000,000
$2,000,000,000
$1,500,000,000
$1,000,000,000
$500,000,000
$0
2004
2005
2006
2007
2008
2009
2010
2011
2012
Market
Actuarial

Amortization Methods

- The amortization of the UAL has become a significant part of the contribution for many plans
- Key parameters
  - Length of period (CERL limits to no longer than 30 years)
  - Level dollar or level percent of pay
  - Rolling/open, closed or layered
- Issues to consider
  - Rolling or open periods are not expected to ever pay off the UAL
    - Closed periods needed to pass new GASB “cross-over” test
  - Level percent of pay amortizations combined with a long amortization period result in an expected increase in the UAL for a period of time
  - Shorter amortization periods result in more contribution volatility
  - Longer amortization periods take longer to return to the funding target

Background

- Example of Layered Amortization

Table IV-2
City of XXX
Schedule of Amortization Bases as of July 1, 2012
Used in Development of the City's Contribution for FY 2014

Type of Base	Date Established	Initial Amount*	Initial Amortization Years	July 1, 2012 Outstanding Balance**	Outstanding Balance for FY 2014 (BOY)***	Remaining Amortization Years	Amortization Payment for FY 2014 (BOY)
1. June 30, 2007 UAL	7/1/2007	$ 1,184,242,049	20	$ 368,436,353	$ 364,190,290	15	$ 30,766,738
2. Assumption Change	7/1/2008	83,787,434	30	29,821,708	30,244,663	26	1,750,406
3. Experience Loss	7/1/2008	13,564,981	15	4,311,281	4,168,625	11	449,746
4. Experience Loss	7/1/2009	810,661,179	15	264,015,308	257,037,693	12	25,844,620
5. Experience Loss	7/1/2010	25,942,732	15	8,607,470	8,428,990	13	795,295
6. Experience Gain****	7/1/2010	(50,000,000)	14	(15,157,254)	(14,756,666)	12	(1,483,753)
7. Experience Gain	7/1/2011	(141,139,563)	15	(47,468,129)	(46,717,381)	14	(4,160,479)
8. Assumption Change	7/1/2011	188,313,322	30	63,333,632	64,459,571	29	3,497,661
9. Experience Loss	7/1/2012	36,799,824	15	36,799,824	39,559,811	15	3,342,007
10. Method Change	7/1/2012	2,465,954	30	2,465,954	2,650,900	30	141,107
11. Non-Police UAL	7/1/2012	1,564,122,860	15	1,564,122,860	1,550,667,393	15	163,414,719
TOTAL				**$ 2,279,289,006**	**$2,259,933,888**		**$ 224,358,069**

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Funding Policy Guidance

- GASB ARC, requiring max 30 year amortization, is going away
- Guidance from other organizations:
  - Government Finance Officers Association (GFOA) and "Big Six"
    - Issued "Pension Funding: A Guide for Elected Officials"
  - National actuarial organizations (AAA, CCA, ASB)
  - California Actuarial Advisory Panel (CAAP)
    - Issued "Actuarial Funding Policies for Public Pension and OPEB Plans and the Level Cost Allocation Model"
  - Society of Actuaries "Blue Ribbon Panel"
  - All recommend amortization periods of 15-20 years, shorter for plan amendments

Funding Policy Guidance

- All documents identify three primary policy objectives
  1. Fully fund benefits
  2. Maintain generational equity
  3. Manage contribution volatility
- Other objectives identified in one or more documents
  1. Support accountability and transparency
  2. Include mechanisms to measure, disclose and address risk
  3. Address principal/agent issues

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CAAP Model Funding

- California Actuarial Advisory Panel (CAAP) issued guidance on March 1, 2013 on actuarial funding policies and practices
- “Model” practice does not mean best practice, but means practice that fits the “Level Cost Allocation Model”
- “Model” practice includes:
  - Entry Age actuarial cost method with level percentage of pay normal cost
  - Layered, fixed amortization periods by source
    - Gain or loss: 15 to 20 years
    - Assumption/method change: 15 to 25 years
    - Plan amendments: up to 15 years
    - Early retirement incentives: 5 or less years
    - Surplus: 30 years
  - Fixed asset smoothing periods with corridors
    - 5 years, 50%/150% corridor
    - 7 years, 60%/140% corridor
    - 10 years, 70%/130% corridor

SBCERS Policies

- Current SBCERS Policies
  - Cost method: Entry Age Normal (GASB-compliant version)
  - Asset smoothing method: 5-year smoothing using fixed periods, 80%/120% corridor
  - Amortization method as of 6/30/2013: 17 year single period, closed, level percentage of payroll
    - 15 year closed period for Safety Plan 6 liability
    - 7/1/2013 Actuarial Valuation: "Prior to the next actuarial valuation, the Board will be determining a policy for amortizing new unfunded liabilities that arise due to experience on or after July 1, 2013"
    - Closed period satisfies GASB cross-over test
    - 16 year period (for 2014) avoids negative amortization for current UAAL

Direct Rate Smoothing

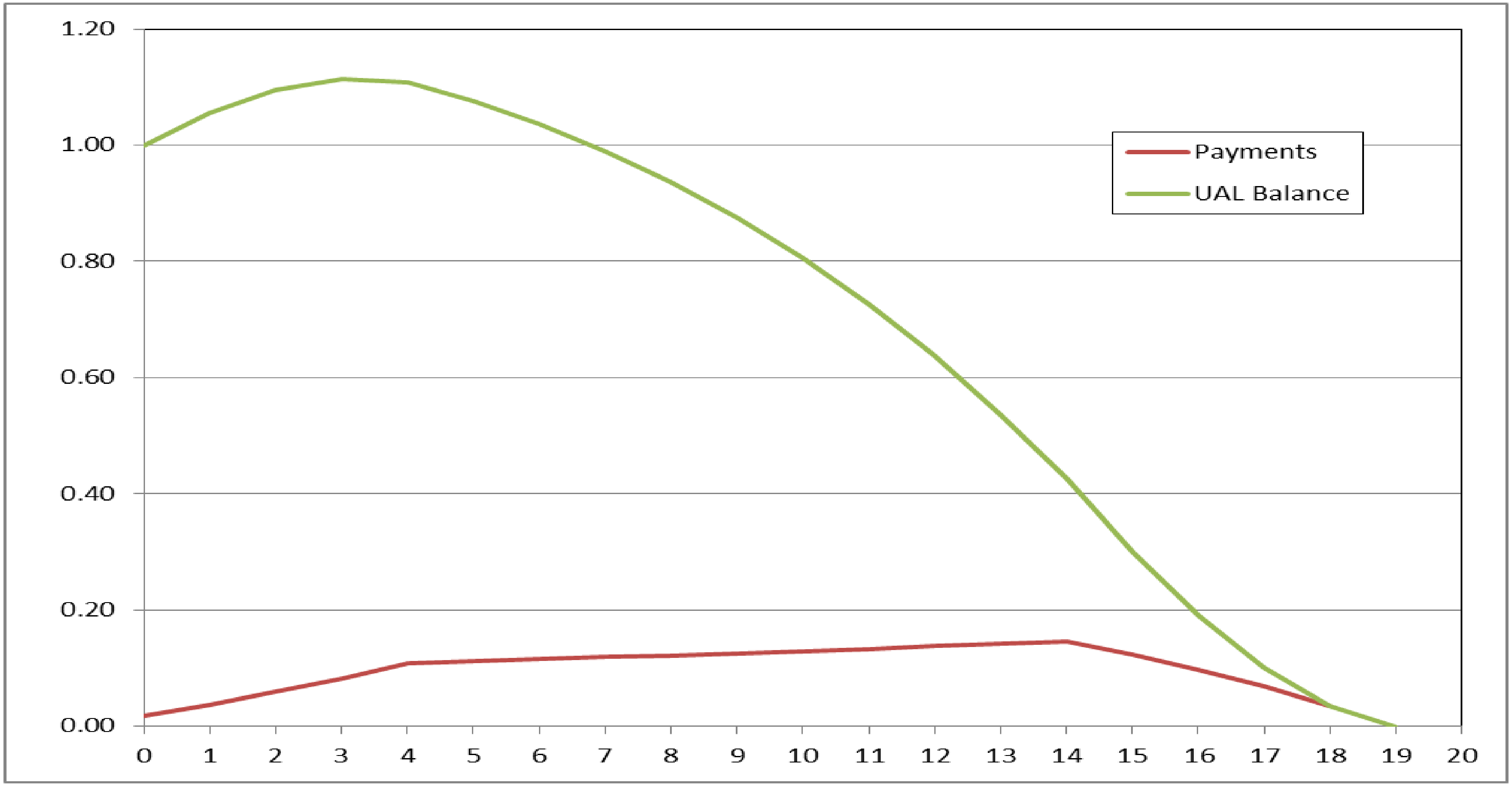
- Adjust outputs (contribution rates, unfunded liability amortization schedule), rather than inputs (Actuarial Value of Assets) to control contribution volatility
  - Asset smoothing replaced with other techniques, such as contribution collars, corridors, or modified amortization schedules
  - Direct rate smoothing will usually smooth more than just volatility from assets
  - Discussed as possibility under several guidance documents (CAAP, CCA, Blue Ribbon Panel)
  - Currently used by some state systems (Oregon PERS, Maryland)
  - Recently adopted by CalPERS, being considered by several ’37 Act systems

New CalPERS Methods

- Form of direct rate smoothing adopted in 2013
- Move away from Actuarial Asset Smoothing (no more AVA calculation)
- Old CalPERS policy used 30 year rolling amortization of gains/losses, 15 year asset smoothing
- New policy uses 30 year amortization periods, but payment schedules “ramp-up” and “ramp-down” over five year periods
  – Equivalent to 25 year regular amortization with 5 year asset smoothing

Traditional Amortization / Smoothing

- Five year smoothing of asset gains/losses
- 15-year level % pay amortization
- Separate layer for each year gains/losses recognized



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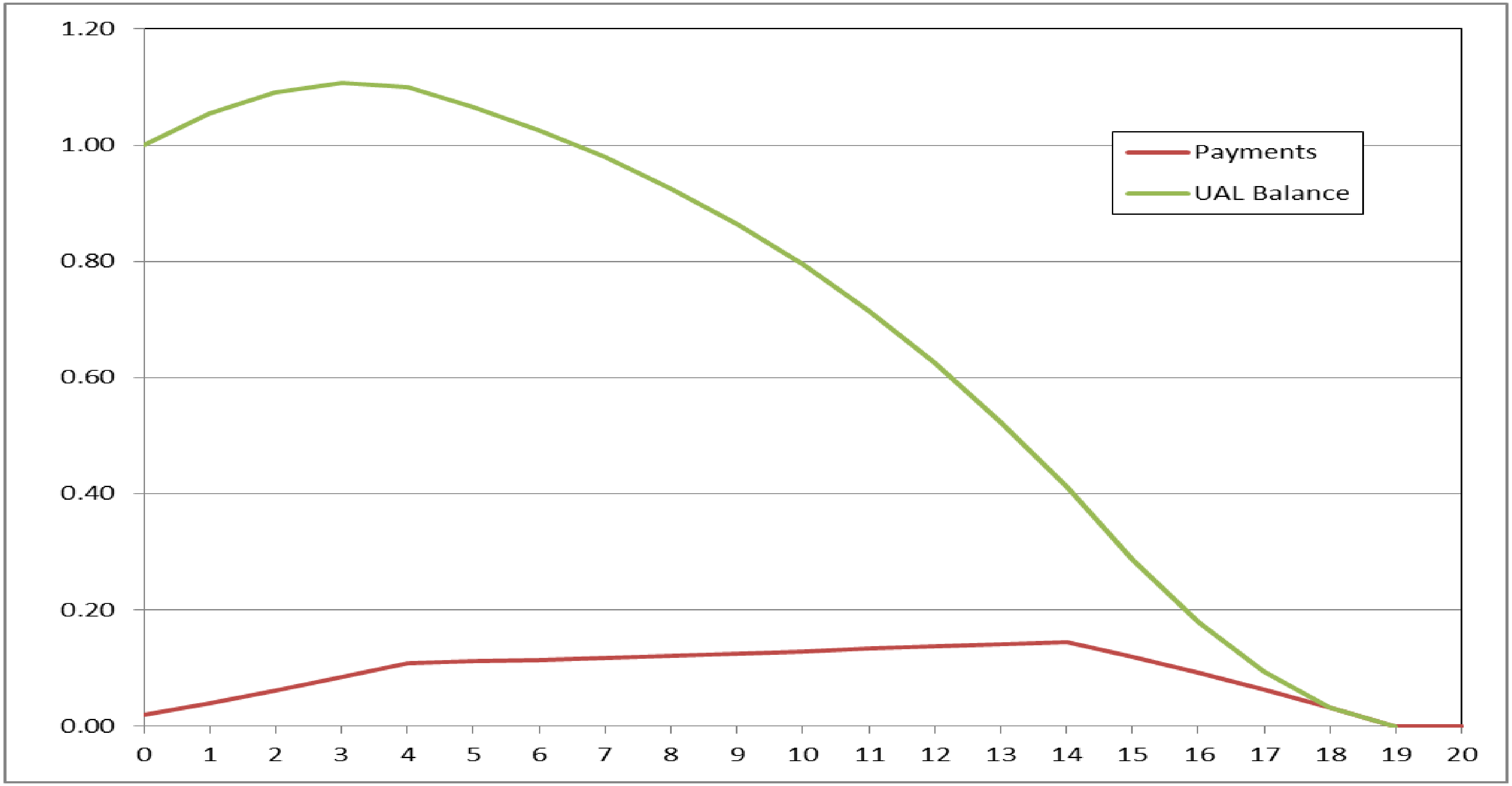
Direct Rate Smoothing Method

- No smoothing of asset gains/losses; assets only at market value
- Five years grade up and grade down
- Ten years of payments at a level % of pay



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New CalPERS Methods

- CalPERS method closely mimics the current combination of smoothed actuarial value of assets combined with layered amortization
- CalPERS method dispenses with actuarial value of assets, simplifying presentation of costs and funding status
- In effect, applies five-year smoothing to all pieces of the UAL calculation (liability gains/losses, assumption changes), not just asset smoothing
- Because of the ramping up to full payments, some negative amortization (growth in UAL) is inevitable
- Direct rate smoothing suggested by SOA Blue Ribbon Panel, addressed in CAAP and CCA Funding Policy documents

Direct Rate Smoothing

- Does this interest the Board? If so, need to establish parameters:
  - Method (CalPERS, Oregon, other?)
  - Length of ramp-up/down period
    - Currently using five-year asset smoothing
    - CAAP recommends smoothing over periods between experience studies for assumption changes
  - Length of amortization period
    - CalPERS: 30 years with 5-year ramp up/down; equivalent to 25 years
      - Still significant negative amortization, longer than current SBCERS amortization periods
    - Could consider shorter periods, such as 20 years, with 5-year ramp up/down (equivalent to 15 years)
      - Still some negative amortization on UAAL in first few years because of ramp up, but may not result in *overall* negative amortization

Looking Ahead

- Discuss on amortization approach
- Formulate funding policy document

Required Disclosures

- The purpose of this presentation is to discuss funding policies with the Santa Barbara County Employees' Retirement System (SBCERS). This presentation is for the use of the Board.
- In preparing this presentation, we relied without audit, on information (some oral and some written) supplied by Staff at SBCERS. This information includes, but is not limited to, the plan provisions, employee data, and financial information.
- To the best of our knowledge, this presentation and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this presentation. This presentation does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.
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