



**RETIREMENT BOARD CALENDAR SHEET  
Retirement Board Meeting of August 10, 2016**

**To:** Retirement Board

**Through:** Jay Huish *JH*  
Executive Director

**From:** Janet Brazelton *JEB*  
Actuarial Services Coordinator

**Date:** August 10, 2016

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**Agenda Item:**

Amortization period for July 1, 2016 Unfunded Actuarial Accrued Liability arising from the 2013 and 2014 Supplemental COLAs for Post-1996 Retirees

**Background**

After the passage of Proposition C in November 2011, the Plan has been administered with a "fully funded" precondition to the granting of supplemental cost-of-living adjustments (Supplemental COLAs). Although there were "excess" investment returns both at June 30, 2013 and June 30, 2014, no Supplemental COLAs were approved by the Board for July 1, 2013 and July 1, 2014 as the Plan did not meet the fully funded precondition for either of those two potential Supplemental COLA dates.

This fully funded precondition was the subject of litigation and a decision of the California Court of Appeals which held that this precondition could not be applied to retirees (and their beneficiaries) who retired on or after November 6, 1996. The California Supreme Court denied review of the Court of Appeals decision. On October 25, 2015, the San Francisco Superior Court entered an amended judgment consistent with the Court of Appeals.

To fulfill the terms of the judgment, in January 2016 SFERS commenced paying 2013 and 2014 Supplemental COLAs and recalculated Basic COLAs as appropriate to the affected post-1996 retirees. In addition, SFERS paid retroactive benefit payments for the missed months and also paid interest on the missed payments as directed by the judgment. The impacts of the judgment will be recognized in the July 1, 2016 actuarial valuation.

On July 13, 2016, the Board determined, in light of the Court of Appeals conclusions, Proposition C should be interpreted to also pay the 2013 and 2014 Supplemental COLAs to eligible pre-November

6, 1996 retirees. The impacts of this determination will be recognized in the July 1, 2017 actuarial valuation.

### **Amortization of UAAL at July 1, 2016 for Post-1996 Retirees**

The combined cash outflow in fiscal year 2015-16 and actuarial accrued liability (AAL) for future expected benefit payments due to the 2013 and 2014 Supplemental COLAs for post-1996 retirees will increase the July 1, 2016 unfunded actuarial accrued liability (UAAL) by an estimated \$429M. This increase in the UAAL needs to be amortized beginning with the July 1, 2016 actuarial valuation and included in the employer's contribution rate calculated at the July 1, 2016 actuarial valuation.

The Retirement Board's Actuarial Funding Methods Policy (attached) specifies the following amortization periods for UAAL:

- Supplemental COLAs – 5 years
- Charter amendments – 5 years for changes due to non-active members
- Actuarial gains or losses – 20 years
- Remaining balance of non-proposition UAAL existing at July 1 2013 – 19 years at July 1, 2014

Ordinarily, Supplemental COLAs are granted at the same valuation date that an actuarial gain occurs due to positive returns on assets above the long-term expected rate of return. In this case, SFERS will be increasing AAL two and three years after the grant dates of the Supplemental COLAs and after experiencing two years in a row of asset returns below the long-term expected rate of return. For these reasons, I recommend that the Board review the impact of the amortization period on both employers and employees under cost-sharing provisions while keeping in mind three guiding principles for funding:

- 1) Achieve full funding of all promised benefits;
- 2) Limit volatility in the employer contribution rate by avoiding large fluctuations from year-to-year;
- 3) Benefit costs are paid over an employee's working career to avoid inter-generational inequities.

To help the Board make an informed review, Cheiron has estimated future employer costs under three scenarios:

- 1) 5-year amortization of the increased UAAL,
- 2) 17-year amortization of the July 1, 2013 Supplemental COLA and 5-year amortization of the July 1, 2014 Supplemental COLA
- 3) 20-year amortization of the increased UAAL

The table below highlights some pros and cons of the above three scenarios.

| Amortization Option        | Pros  | Cons  |
|----------------------------|---|---|
| 5-years                    | <ul style="list-style-type: none"> <li>• Faster funding for benefit security</li> <li>• Tier III New Plan retirees more likely to receive Supplemental COLA</li> </ul>  | <ul style="list-style-type: none"> <li>• Higher up-front funding could cause employer budgeting issues</li> <li>• Greater chance of triggering higher employee contributions in FYE 2018-2022 (projected employer contributions closer to cost-sharing thresholds)</li> </ul>   |
| 17-year/5-year combination | <ul style="list-style-type: none"> <li>• Moderate impact on employer budgets</li> <li>• Lowest impact on employee contributions</li> <li>• Split funding provides faster funding in near term when revenues are more certain</li> <li>• Payment schedule for 2013 Supplemental COLA matches "what would have been"</li> </ul> | <ul style="list-style-type: none"> <li>• Lengthens time to full funding</li> <li>• Probability of Supplemental COLA to Tier III New Plan retirees is lower</li> </ul>   |
| 20-years                   | <ul style="list-style-type: none"> <li>• Easier transition for employer budgets</li> </ul>  | <ul style="list-style-type: none"> <li>• Lengthens time to full funding</li> <li>• Probability of Supplemental COLA to Tier III New Plan retirees is lower</li> <li>• Requires modification of Actuarial Funding Methods Policy</li> <li>• Employer contributions remain above cost-sharing thresholds longer due to lower funding</li> </ul> |

### **Action Requested**

- 1) Approve an amortization of the UAAL due to 2013 and 2014 Supplemental COLAs payable to the post-1996 retirees for the July 1, 2016 actuarial valuation as follows:
  - 17 years for UAAL due to the 2013 Supplemental COLA and 5 years for UAAL due to the 2014 Supplemental COLA; or
  - Other period(s) as specified by the Board.
- 2) Direct staff to make changes if needed to the Actuarial Funding Methods Policy and bring changes back to the Retirement Board for approval

### **Attachments**

Actuarial Funding Methods Policy  
Cheiron Presentation

# **San Francisco City and County Employees' Retirement System Actuarial Funding Methods Policy**

## **Introduction**

City and County of San Francisco Charter sections 12.100 and A8.510 authorize the Retirement Board to determine required City and County contributions to the Retirement System. These Charter sections restrict the selection of actuarial cost methods and amortization periods used in the determination of the required contributions but do not explicitly state the actuarial cost methods and amortization periods to be used. The Board established this policy to provide a clear statement of actuarial cost method, amortization periods, asset valuation method including smoothing methodologies, and transition methods to the extent that these items are not specified in the provisions of the Charter.

## **Objectives**

The objectives of the Actuarial Funding Methods Policy are to:

- a. Ensure that actuarial valuations, analysis and other reports are prepared in a systematic and consistent manner
- b. Document actuarial cost method, amortization periods, asset valuation methods including smoothing methodologies as well as the effective dates
- c. Document transition methods when required
- d. Ensure compliance with Actuarial Standards of Practice (ASOPs)
- e. Balance the competing goals of benefit security to members, stability of cost to the City and County, and intergenerational equity (i.e. fully funding benefits over the average future service of members in active service).

## **Methods**

### **Actuarial cost method**

The Charter specifies that the normal contribution rate “be computed as a level percentage of compensation which, when applied to the future compensation of the average new member entering the System, together with the required member contribution, will be sufficient to provide for the payment of all prospective benefits of such member.” The actuarial cost method historically used in the valuation of the System’s actuarial liabilities has been the Entry Age Normal cost method applied on an individual basis.

On August 13, 2014, the Retirement Board affirmed the continued use of the Individual Entry Age Normal cost method for funding valuations.

### **Amortization of unfunded actuarial accrued liabilities**

The Charter specifies that the portion of the liability not provided by the normal cost contributions be amortized over a period not to exceed twenty years.

On August 13, 2014, the Retirement Board revised the amortization method as follows:

The amortization method shall be level percent of pay. Sources of UAAL or surplus will be separated into layers and will be amortized separately over the fixed periods shown below.

UAAL due to actuarial gains or losses: Fixed 20 year periods

UAAL due to changes in actuarial assumptions or methods: Fixed 20 year periods

UAAL due to charter amendments: 1) Fixed 15 year periods for changes in UAAL due to active members except that retirement incentive programs will be amortized over fixed 5 year periods; 2) Fixed five year periods for changes in UAAL due to non-active members

UAAL due to Supplemental COLAs: Future grants of Supplemental COLAs are not included in the Actuarial Accrued Liability (AAL) for purposes of determining required City and County contributions. If a Supplemental COLA is granted, then the change in UAAL due to the granted Supplemental COLA will be amortized over a fixed five year period. If future grants are ever included in the AAL, then this amortization should be revisited.

The equivalent single amortization period calculated at any valuation date shall not be greater than 20 years. In the case of changes in actuarial assumptions or methods, amortization schedules that are substantially a consistent level percent of pay except for an appropriately determined phase-in period of five years or less shall meet the requirements of this Policy.

The revised amortization method will first be effective for the July 1, 2014 actuarial valuation. To transition to the revised method, the remaining balance of non-Proposition UAAL existing at the July 1, 2013 actuarial valuation will be reamortized at July 1, 2014 over a fixed 19 year period, while the remaining balances of proposition UAAL layers existing at the July 1, 2013 actuarial valuation will continue to be amortized over their individual remaining periods.

#### **Asset valuation method (smoothing methodology)**

At its December 2005 meeting, the Retirement Board adopted a revised actuarial value of assets based upon the recommendation from the actuarial audit of 2005 and elected to transition to the revised method at July 1, 2004 utilizing the market value of assets:

The actuarial value of assets is calculated by recognizing 20% of each of the past five years of actual investment experience relative to the expected return on the actuarial value of assets.

On August 13, 2014, the Retirement Board affirmed the above asset valuation method.

## **Roles and Responsibilities**

The Retirement Board is responsible for determining actuarial methods, amortization periods, smoothing methodology and transitions methods to the extent that these items are not specified in the provisions of the San Francisco Charter.

The Consulting Actuary is responsible for presenting potential changes to the actuarial funding methods policy when actuarial practice changes, when aspects of the policy are no longer practical, or when unintended consequences result from the policy.

The Actuarial Services Coordinator is responsible for supporting the Retirement Board and Consulting Actuary in reviewing the appropriateness of the actuarial funding methods and for recommending a review of the Policy to the Board when the Policy is no longer appropriate.

## **Policy Review**

The Retirement Board will review this policy within seven months after the completion of an actuarial audit or upon recommendation of the Actuarial Services Coordinator to ensure that it remains consistent with actuarial best practices, relevant and appropriate.

## **Policy History**

The Retirement Board adopted this policy on January 10, 2006

The Retirement Board revised this policy on August 13, 2014.

# Supplemental COLA Changes Post '96 Retirees Pre '97 Retirees

August 10, 2016

Bill Hallmark, ASA, EA, FCA, MAAA

Anne Harper, FSA, EA, MAAA

# Agenda



- Overview
- Protect Our Benefits Impact on 2016 Valuation – Post '96 Retirees
- Projections – Post '96 Retirees
- Protect Our Benefits Impact on 2017 Valuation – including Pre '97 Retirees
- Projections – including Pre '97 Retirees
- Board Decisions



# Overview



- Based on Proposition C, since July 1, 2012, SFERS has operated as if the Supplemental COLA was only payable if SFERS was also fully funded
- State Appeals Court determined the full funding requirement is unconstitutional as applied to members who worked after November 6, 1996 and before Proposition C passed (Post '96 Retirees)
- At its July 2016 Board meeting, the SFERS Board determined, in light of the Court of Appeals conclusions, Proposition C should not be interpreted to apply the 2012 full funding requirement to members who retired before November 6, 1996 (Pre '97 Retirees)

# Overview



- These determinations necessitate restoring Supplemental COLAs from 2013 and 2014, that were not paid solely because of the full funding requirement
- Because of the timing of the decisions, we plan to recognize the impact at different times
  - Post '96 Retirees
    - 2016 valuation, FYE 2018 contribution rates
  - Pre '97 Retirees
    - 2017 valuation, FYE 2019 contribution rates
- A Board decision is needed on how to amortize the impact
  - Decision for 2016 valuation now
  - Decision for 2017 valuation later

# Impact on 2016 Valuation



- Suggest recognition of Post '96 Retirees Only
  - Reflects plan in effect on 7/1/2016
    - Post '96 Retirees have 2013 and 2014 Supplemental COLAs restored
    - Pre '97 Retirees do not
  - Required for GASB valuation
- AL increase = present value of 2013 and 2014 Supplemental COLA payments on and after 7/1/2016
- AVA decrease = 2013 and 2014 Supplemental COLA payments (including back payments with interest) through 6/30/2016

## Impact of 2013 and 2014 Supplemental COLAs Post '96 Retirees July 1, 2016 (\$ in millions)

|   | 2013       | 2014       | Total      |
|---|------------|------------|------------|
| Actuarial Liability (AL)                  | 158        | 193        | 351        |
| Actuarial Value of Assets (AVA)           | (45)       | (33)       | (78)       |
| <b>Unfunded Actuarial Liability (UAL)</b> | <b>203</b> | <b>226</b> | <b>429</b> |

# Impact on 2016 Valuation



- Key decision is how to amortize the impact
- Under current amortization policy, Supplemental COLAs would be amortized over 5 years
  - Benefit change for retirees, so amortization period is short
  - 5 years matches the recognition period for the investment gains that triggered the Supplemental COLA in the asset smoothing method
- If Supplemental COLAs had been provided in 2013 and 2014
  - 2013 Supplemental COLA would have 17 years remaining on its amortization
  - 2014 Supplemental COLA would have 3 years remaining on its amortization
  - In general, we do not recommend an amortization period less than 5 years

# Impact on 2016 Valuation



- The amortization period for the Supplemental COLA should not exceed the average expected future lifetime of those receiving the Supplemental COLA
  - Post '96 retirees average expected future lifetime is 20 years
  - 20 years is also the maximum amortization period under the Charter
  - Selecting 20 years would be a special exception to the funding policy currently adopted by the Board

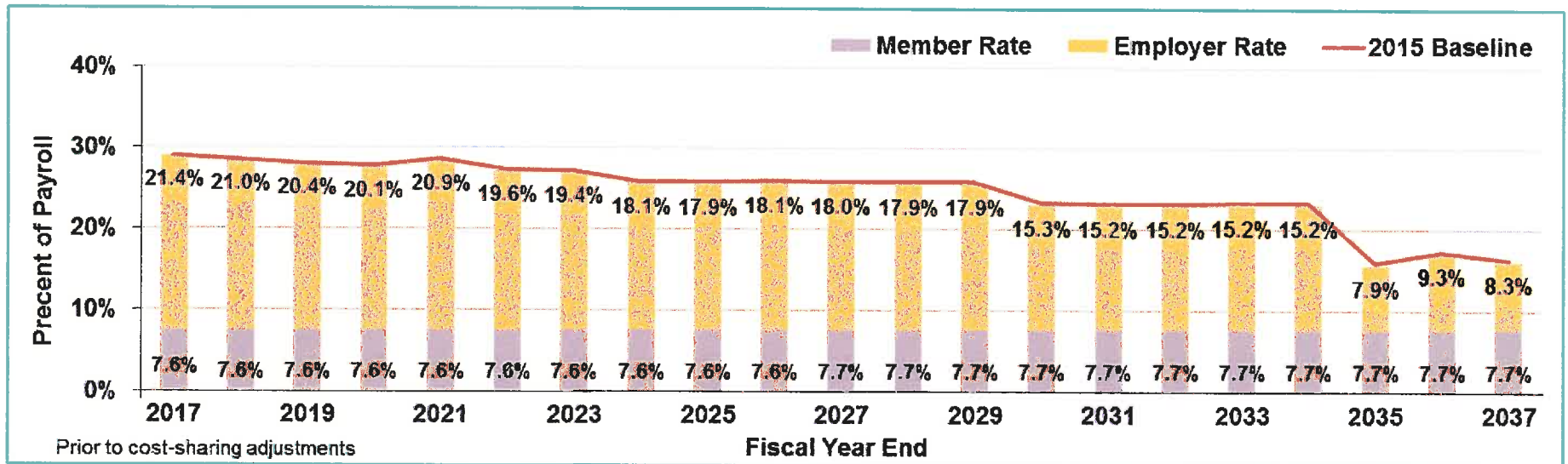
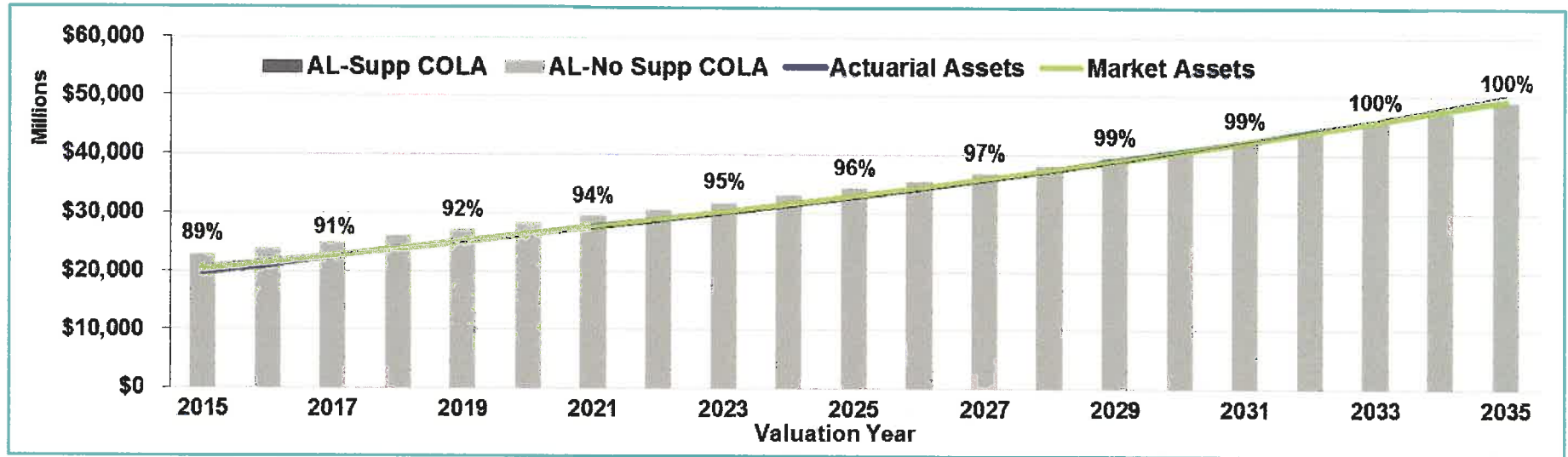
# Projections – Post '96 Retirees



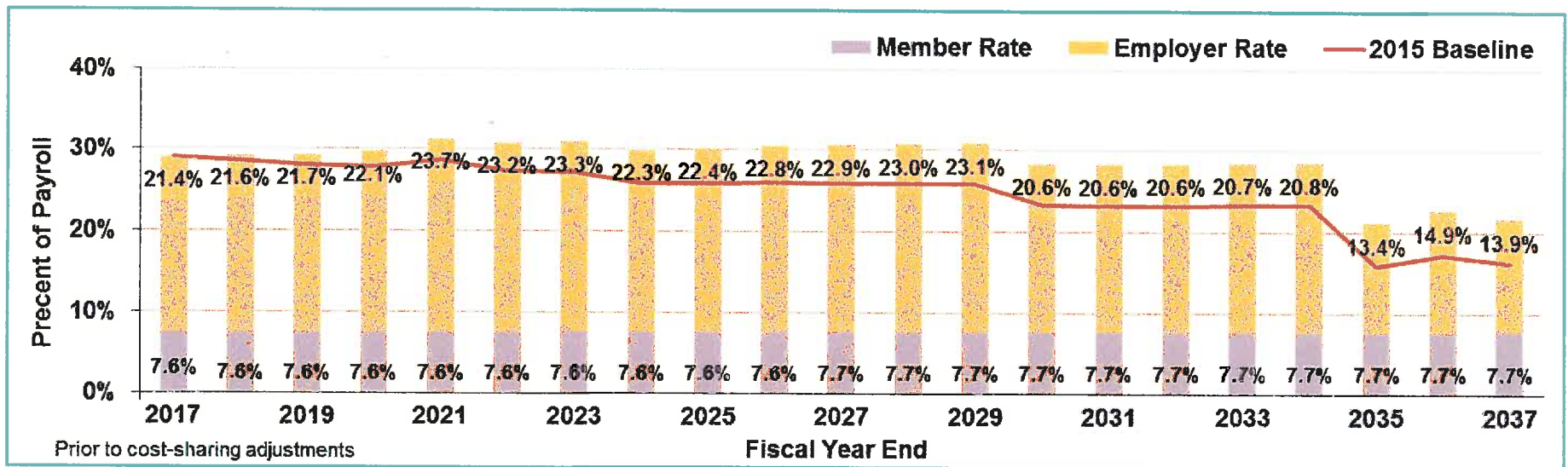
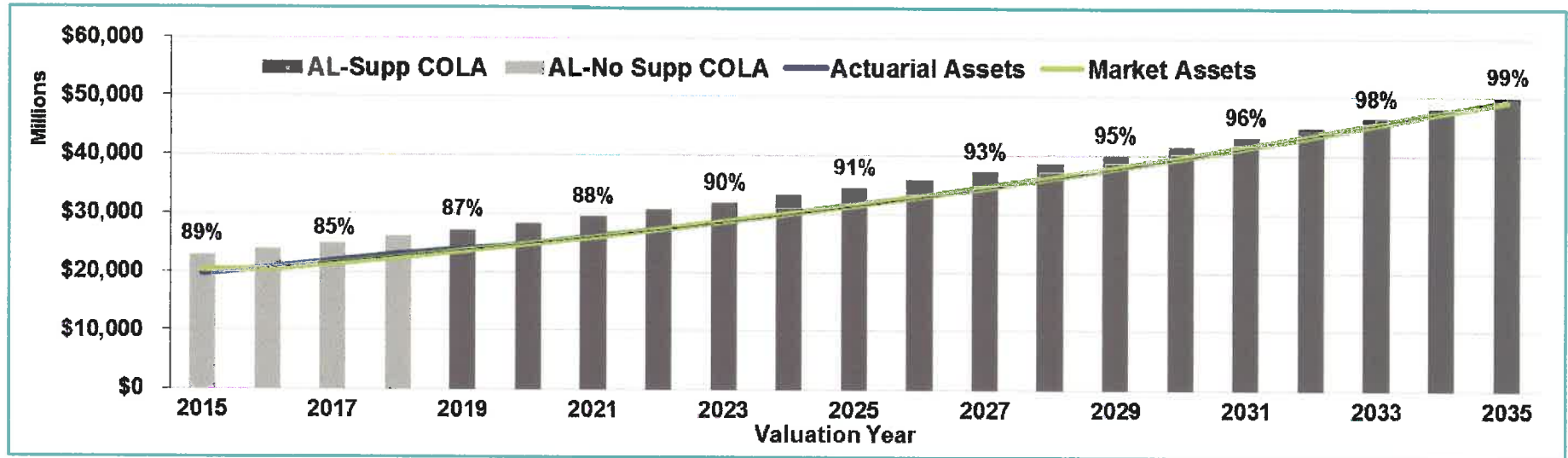
- The following projections are shown
  - 2015 Valuation
  - 2015 Valuation with approximate FYE 2016 investment return
  - 2013 and 2014 Supplemental COLA for Post '96 Retirees Only
    - 5 year amortization
    - 17 year amortization of 2013 Supplemental COLA and 5 year amortization of 2014 Supplemental COLA
    - 20 year amortization
- Impact on projections includes the change in expected frequency of future Supplemental COLAs
  - Post '96 Retirees – Supplemental COLA of 0.75% (50% x 1.5%) each year
  - All others – Supplemental COLA assumed to be 0% increasing gradually up to 0.375% (25% x 1.5%) as probability of being 100% funded increases
  - Future Supplemental COLAs are amortized over 5 years from the date they are expected to be granted



# Projections from 2015 Valuation



# Reflecting 1.3% Return for FYE 2016

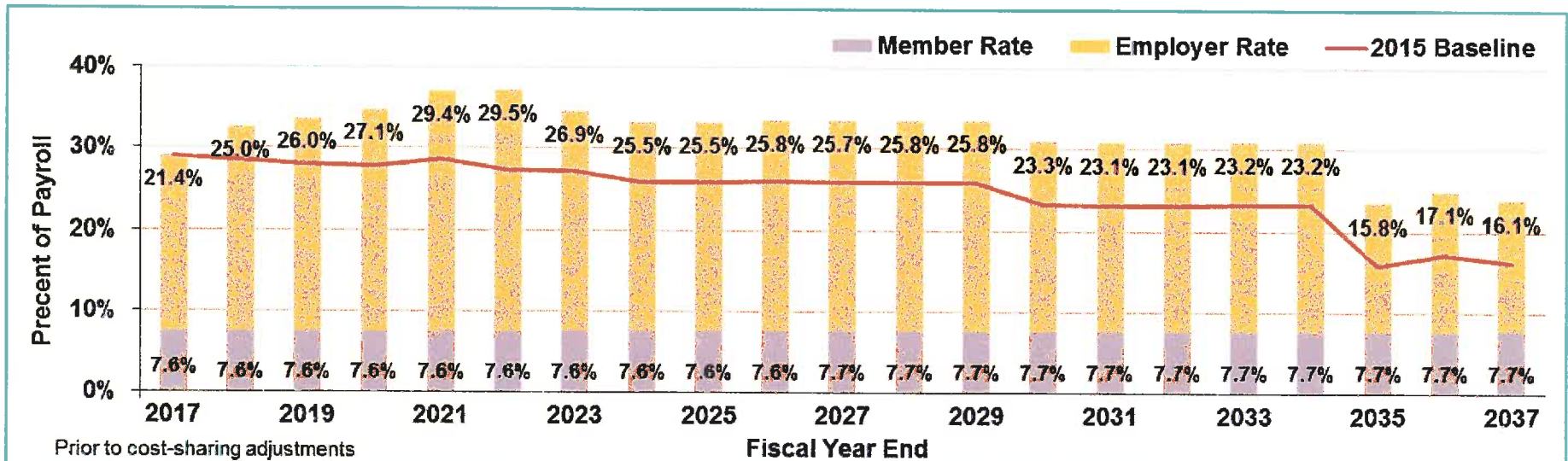
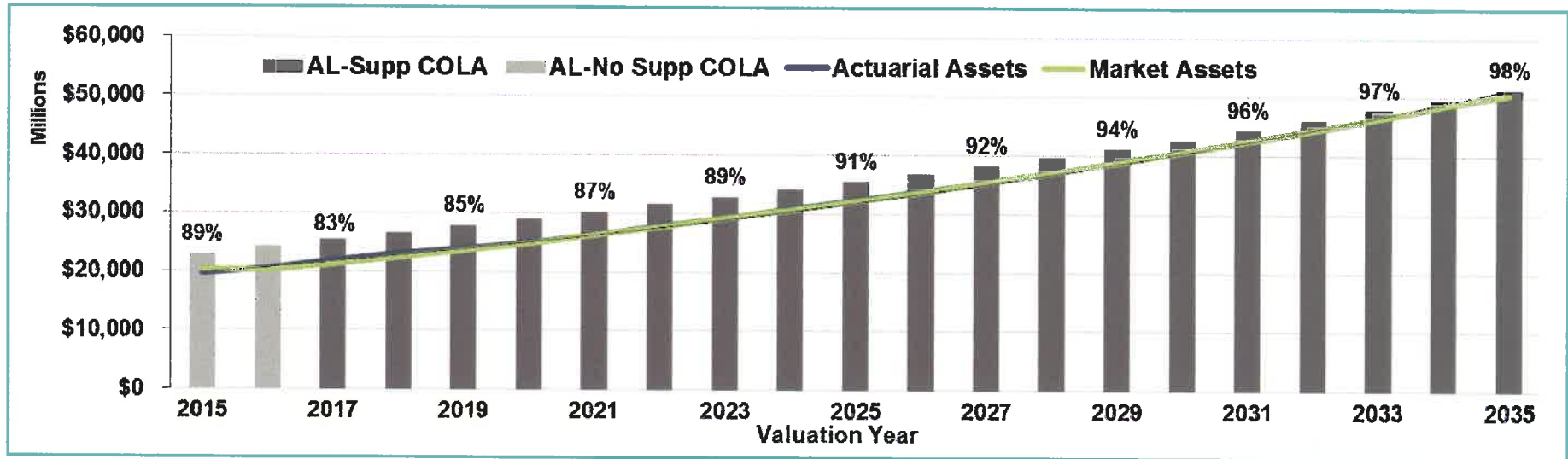




# Post '96 Supplemental COLA Only



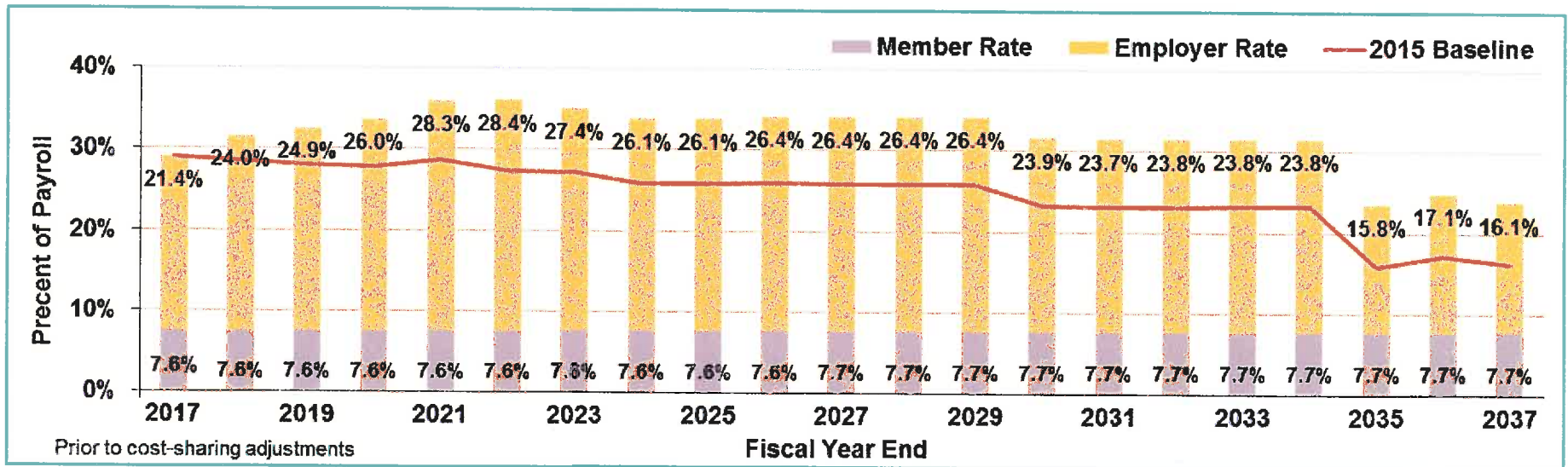
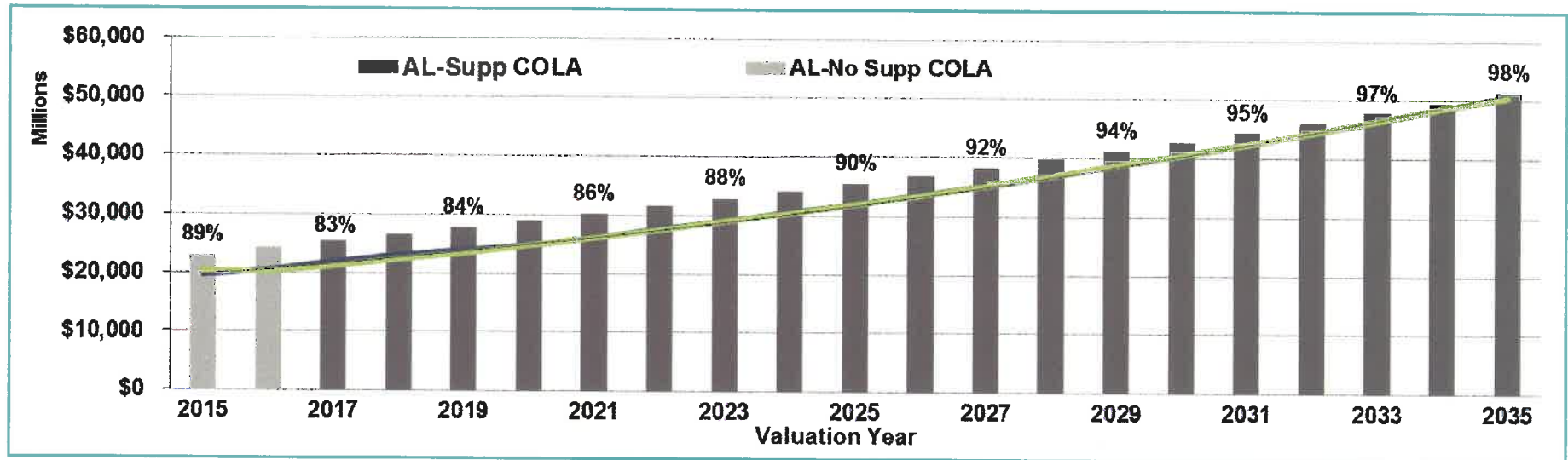
Amortization Period: 2013 Supp COLA – 5 Years, 2014 Supp COLA – 5 Years



# Post '96 Supplemental COLA Only



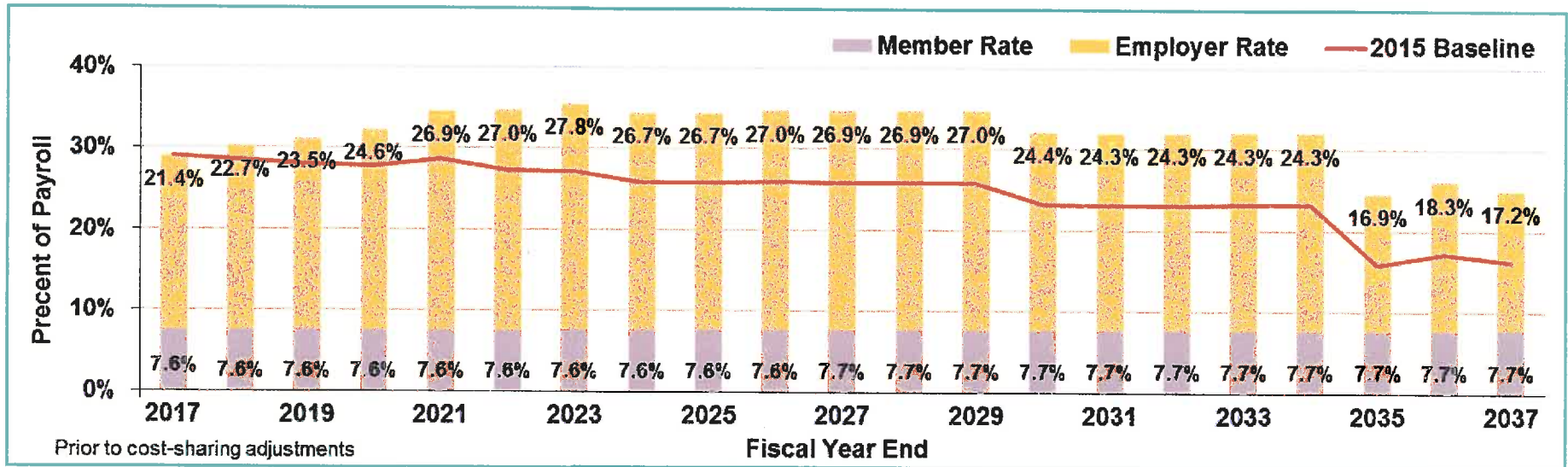
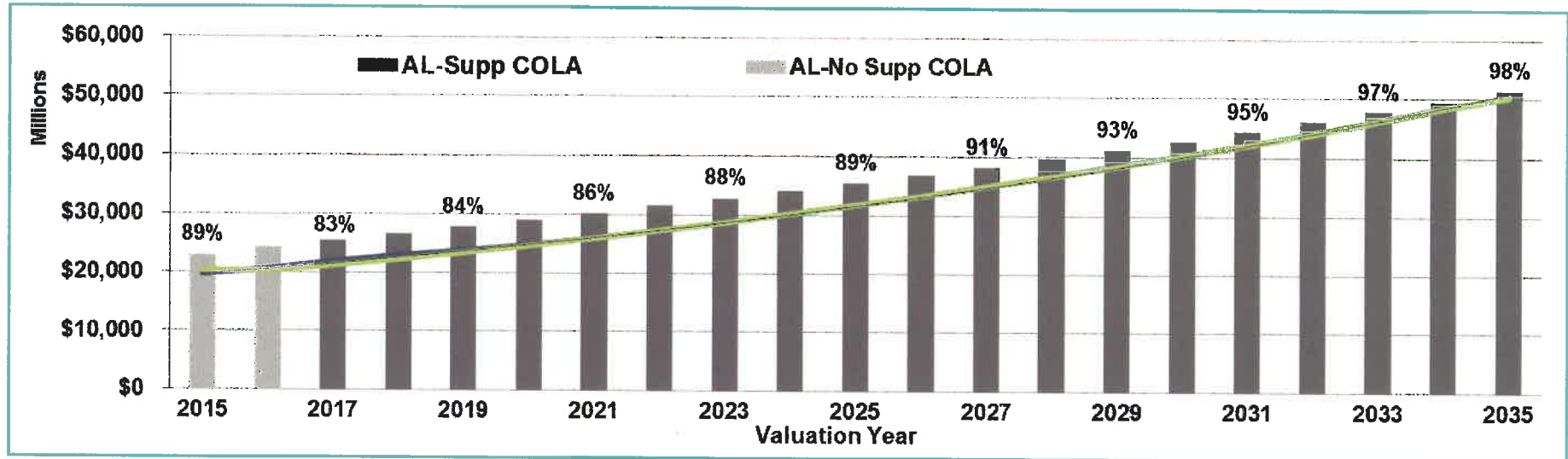
Amortization Period: 2013 Supp COLA – 17 Years, 2014 Supp COLA – 5 Years



# Post '96 Supplemental COLA Only

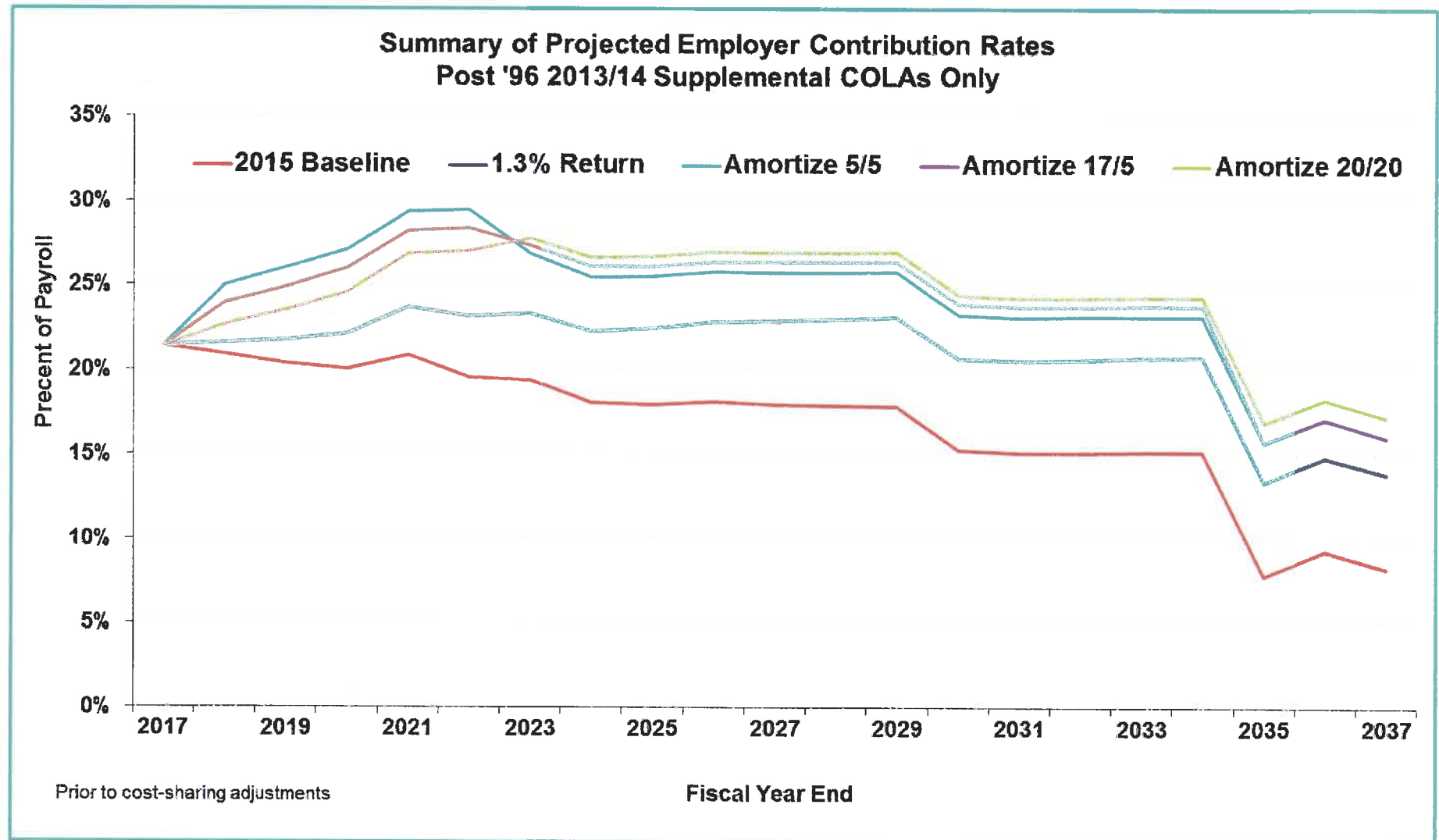


Amortization Period: 2013 Supp COLA – 20 Years, 2014 Supp COLA – 20 Years





# Summary of Projections



# Impact on 2017 Valuation



- At its July meeting, Board determined that, for reasons stated in the Resolution, no full funding requirement will apply to Pre '97 Retirees
- Consistent with GASB recognition requirements, we suggest this decision be recognized in the 2017 valuation
- The increase in AL represents the present value of payments on and after 7/1/2017 due to the 2013 and 2014 Supplemental COLAs
- The decrease in AVA represents the payments for the 2013 and 2014 Supplemental COLAs through 6/30/2017

## Impact of 2013 and 2014 Supplemental COLAs Pre '97 Retirees July 1, 2017 (\$ in millions)

|   | Total      |
|---|------------|
| Actuarial Liability (AL)                  | 114        |
| Actuarial Value of Assets (AVA)           | (34)       |
| <b>Unfunded Actuarial Liability (UAL)</b> | <b>148</b> |

# Impact on 2017 Valuation



- No decision on amortization of Pre '97 Retirees 2013/2014 Supplemental COLAs needed now
- Information is provided only as context for decision on 2016 valuation
- Under current amortization policy, Supplemental COLAs would be amortized over 5 years
  - Benefit change for retirees, so amortization period is short
  - 5 years matches the recognition period for the investment gains that triggered the Supplemental COLA in the asset smoothing method
- The amortization period for the Supplemental COLA should not exceed the average expected future lifetime of those receiving the Supplemental COLA
  - Average expected remaining lifetime of Pre '97 Retirees is 10 years
  - The amortization period for this group should not exceed 10 years

# Projections – Pre '97 Retirees



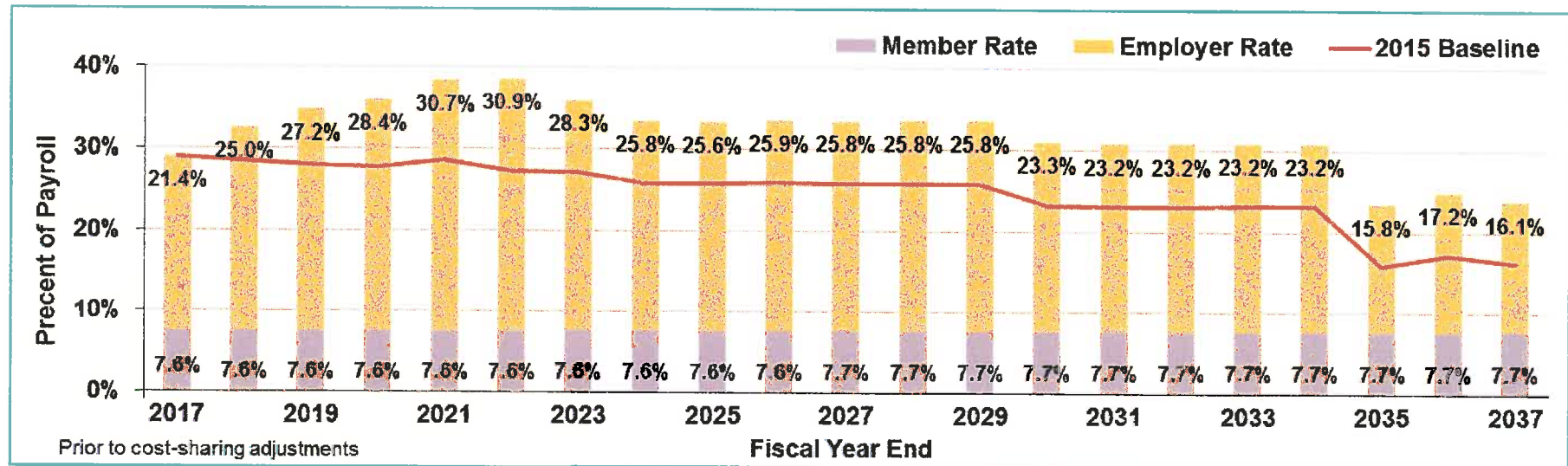
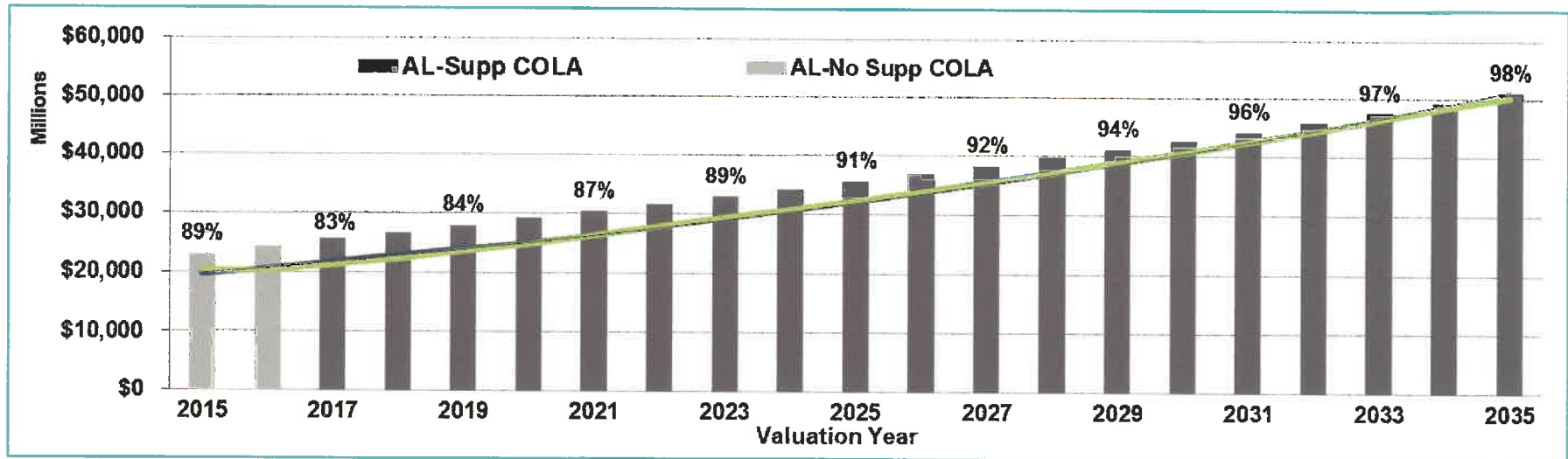
- The following projections are shown
  - 2013 and 2014 Supplemental COLAs for Post '96 and Pre '97 Retirees
    - 5 year amortization for Pre '97 Retirees
      - Post '96 Retirees - 5 year amortization
      - Post '96 Retirees - 17 year amortization of 2013 Supplemental COLA and 5 year amortization of 2014 Supplemental COLA
    - 10 year amortization for Pre '97 Retirees
      - Post '96 Retirees - 20 year amortization
- Impact on projections includes the change in expected frequency of future Supplemental COLAs
  - Pre '97 and Post '96 Retirees – Supplemental COLA of 0.75% (50% x 1.5%) each year
  - Future Supplemental COLAs are amortized over 5 years from the date they are expected to be granted



# Pre and Post '96 Supplemental COLA



Amortization Period: 2013 Supp COLA – 5 Years, 2014 Supp COLA – 5 Years, Pre – 5 Years

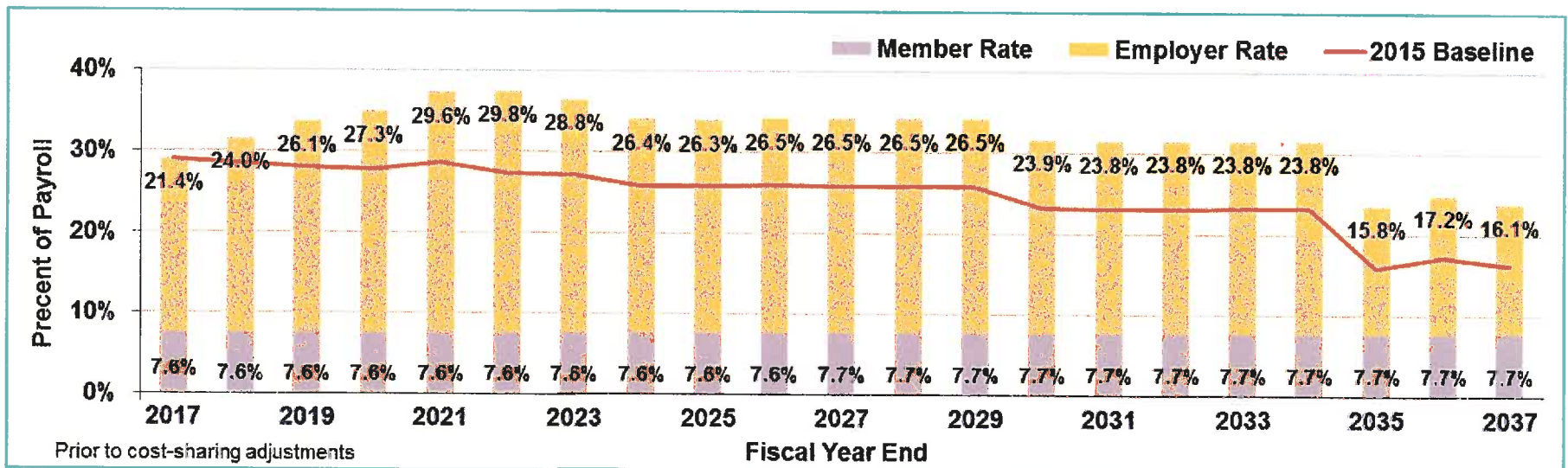
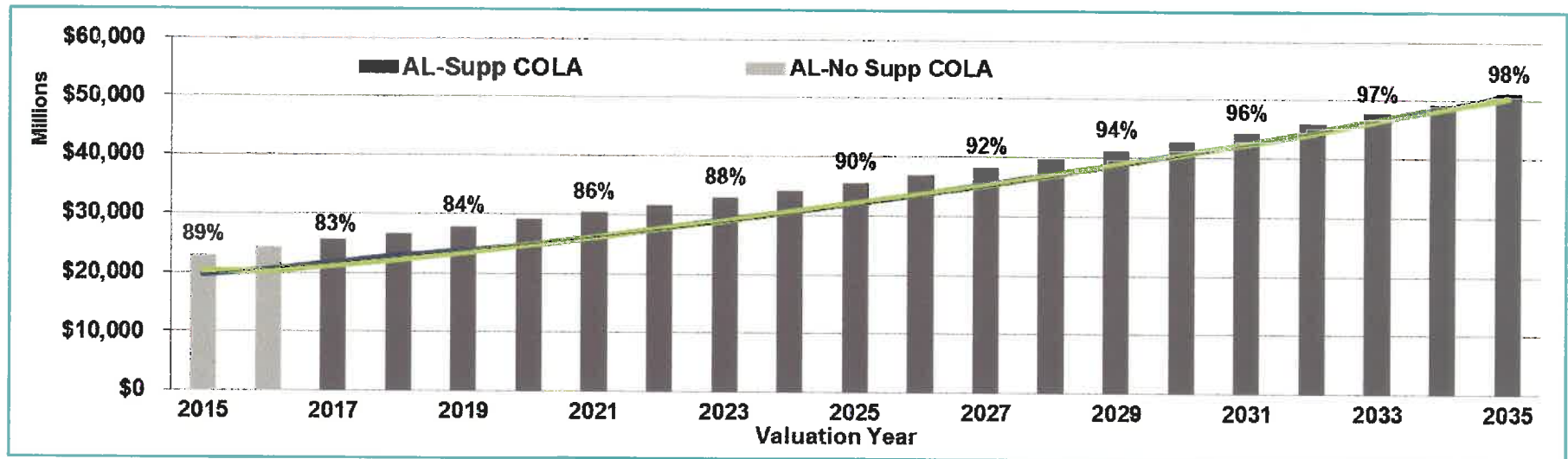




# Pre and Post '96 Supplemental COLA



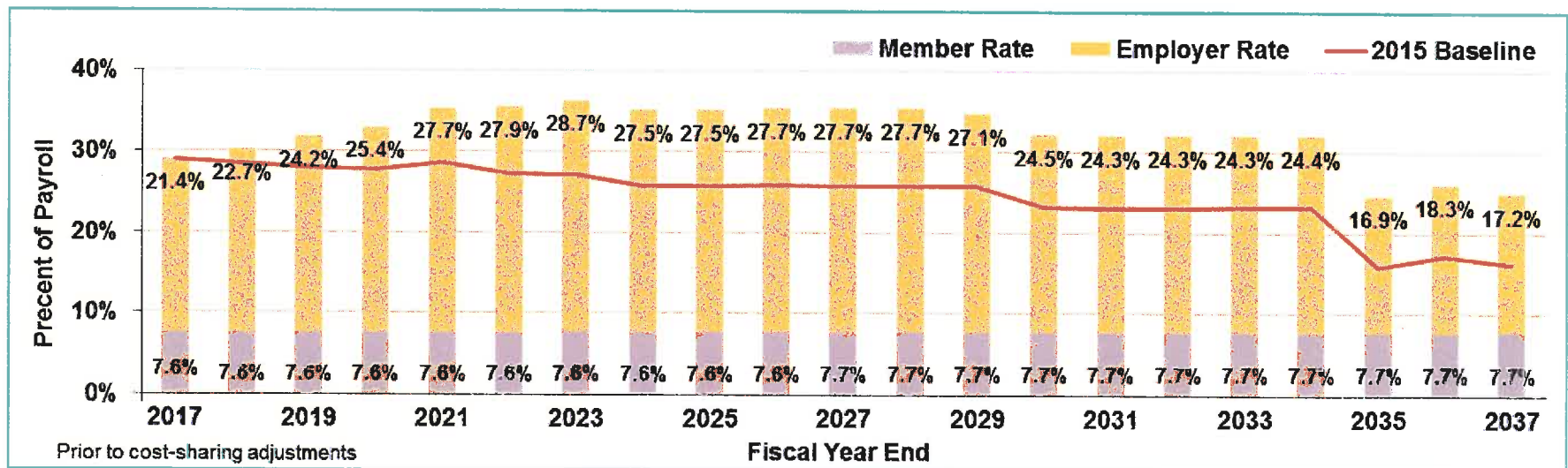
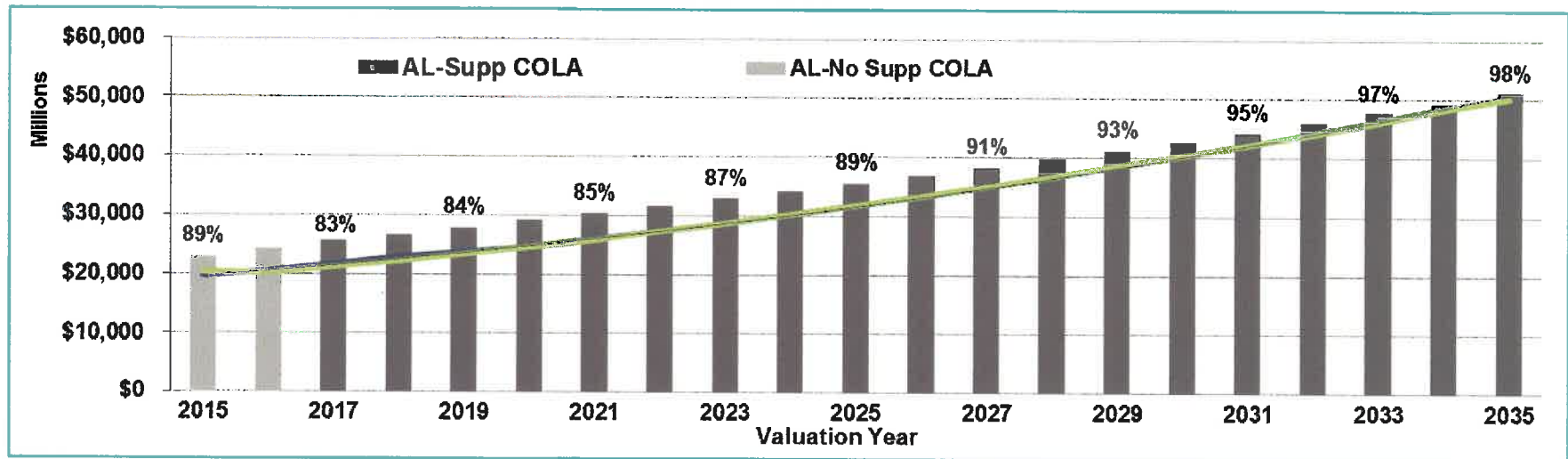
Amortization Period: 2013 Supp COLA – 17 Years, 2014 Supp COLA – 5 Years, Pre – 5 Years



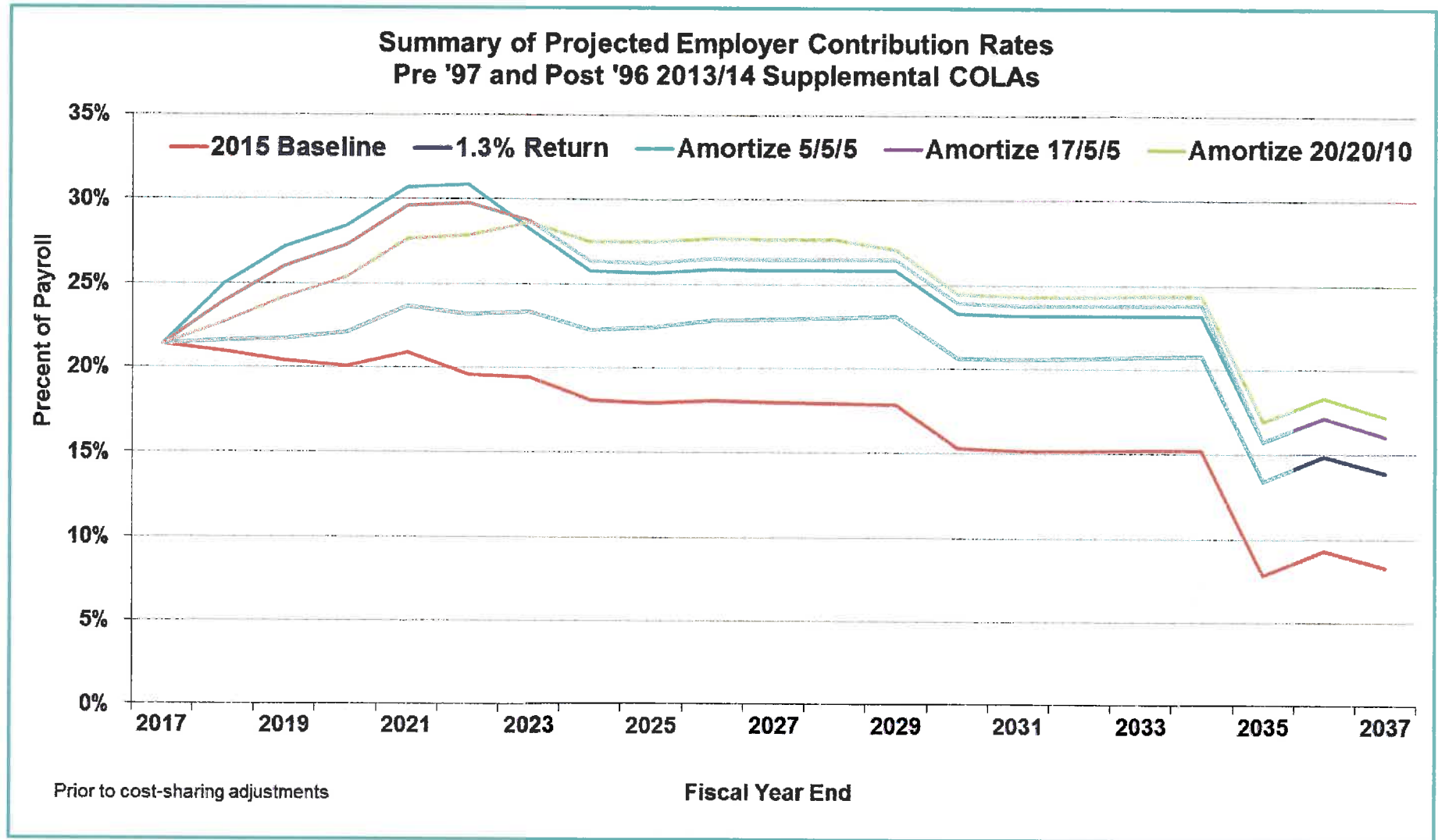
# Pre and Post '96 Supplemental COLA



Amortization Period: 2013 Supp COLA – 20 Years, 2014 Supp COLA – 20 Years, Pre – 10 Years



# Summary of Projections



# Board Decision for 2016 Valuation



- Amortization period for 2013 and 2014 Supplemental COLAs for Post '96 Retirees
  - Option 1 – 5 years
  - Option 2 – 17 years for 2013, 5 years for 2014
  - Option 3 – 20 years
- No decision needed for amortization for Pre '97 Retirees
  - Will address with 2017 valuation



# Appendix



# Certification



The purpose of this presentation is to present the impact of the Protect Our Benefits court ruling on the results of the July 1, 2016 actuarial valuation of the San Francisco Employees' Retirement System. This presentation is for the use of the San Francisco Employees' Retirement System Board.

In preparing this presentation, we relied on information, some oral and some written, supplied by the San Francisco Employees' Retirement System. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23. For a summary of the data, assumptions, methods, and plan provisions used as a basis for this presentation, please refer to the July 1, 2015 actuarial valuation report.

Future actuarial valuations and projections may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the assumptions; changes in assumptions; and, changes in plan provisions or applicable law.

We hereby certify that, to the best of our knowledge, these projections and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices that 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.

This presentation was prepared for the San Francisco Employees' Retirement System Board for the purpose described herein. Other users of this presentation are not intended users as defined in the actuarial standards of practice, and Cheiron assumes no duty or liability to such other users.

William R. Hallmark, ASA, EA, FCA, MAAA  
Consulting Actuary

Anne D. Harper, FSA, EA, MAAA  
Consulting Actuary



Classic Values, Innovative Advice

August 10, 2016

# Supplemental COLA Assumptions



|        | 2015<br>Baseline | 1.3%<br>Return | 2016 Valuation<br>(pages 10-13) |         | 2017 Valuation<br>(pages 17-20) |         |
|--------|------------------|----------------|---------------------------------|---------|---------------------------------|---------|
| July 1 | All              | All            | Post '96                        | Pre '97 | Post '96                        | Pre '97 |
| 2016   | 0.000%           | 0.000%         | 0.000%                          | 0.000%  | 0.000%                          | 0.000%  |
| 2017   | 0.000%           | 0.000%         | 0.750%                          | 0.000%  | 0.750%                          | 0.750%  |
| 2018   | 0.000%           | 0.000%         | 0.750%                          | 0.000%  | 0.750%                          | 0.750%  |
| 2019   | 0.000%           | 0.068%         | 0.750%                          | 0.060%  | 0.750%                          | 0.750%  |
| 2020   | 0.000%           | 0.130%         | 0.750%                          | 0.112%  | 0.750%                          | 0.750%  |
| 2025   | 0.000%           | 0.290%         | 0.750%                          | 0.270%  | 0.750%                          | 0.750%  |
| 2030   | 0.000%           | 0.347%         | 0.750%                          | 0.346%  | 0.750%                          | 0.750%  |
| 2035+  | 0.000%           | 0.375%         | 0.750%                          | 0.375%  | 0.750%                          | 0.750%  |

- The typical Supplemental COLA is 1.5%.
- Without the full funding requirement, we assume a 50% probability of a Supplemental COLA each year.
- With the full funding requirement, we estimate a probability of being fully funded and earning excess investment returns. The probability starts at 0% and gradually increases to 25%.