Segal Consulting

University of California Retirement Plan (UCRP)

JULY 1, 2016 VALUATION PRESENTATION

Completed by Segal Consulting San Francisco

UCRS Advisory Board
November 18, 2016

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Highlights of 2016 Actuarial Valuation

- Approximately -2% market value return for 2015/16
  - Actuarial value return of 6.0% due to five-year smoothing of gains/losses
  - Market value of $54.2 billion trails actuarial value by $3.1 billion
- Increase in funded ratio (82% to 83%) and decrease in UAAL ($12.079 to $12.077 billion) and total funding policy contribution (28.4% to 28.0%) due to:
  - Contributions funding the total funding policy contributions
  - Offset to some extent by investment loss on actuarial value of assets
- $564 million STIP to UCRP transfer occurred in November 2015
  - Transfer is reflected in the valuation results
  - Represents an amount that along with actual contributions results in full funding of the total funding policy contributions for 2015/16

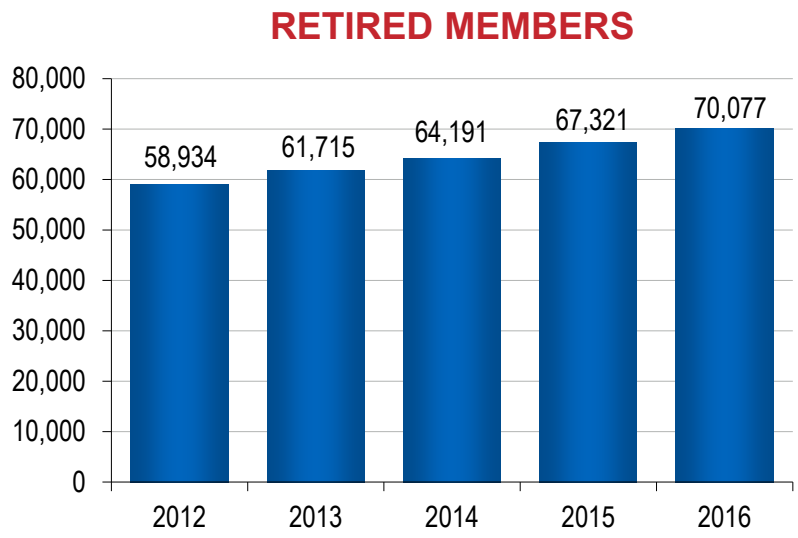
Highlights of 2016 Actuarial Valuation

Changes in Plan Provisions

- Regents approved a new tier of UCRP benefits ("2016 Tier")
  - Applies to employees hired (or in some cases rehired) on or after July 1, 2016
  - Limits pensionable salary to mirror the pensionable salary limit under the 2013 California Public Employees' Pension Reform Act (PEPRA)
  - Employees will have choice to enter the 2016 Tier ("Pension Choice") or a defined contribution plan ("Savings Choice")
  - For employees who elect the defined contribution plan, the University will maintain a 6.0% contribution rate on pensionable salary up to the Internal Revenue Code limit to go towards paying down the unfunded liability of UCRP
- The 2016 Tier has no impact on the valuation results since there were no 2016 Tier members as of July 1, 2016
  - Plan provisions section reflects the plan provisions applicable to the 2016 Tier

UCRP Demographics

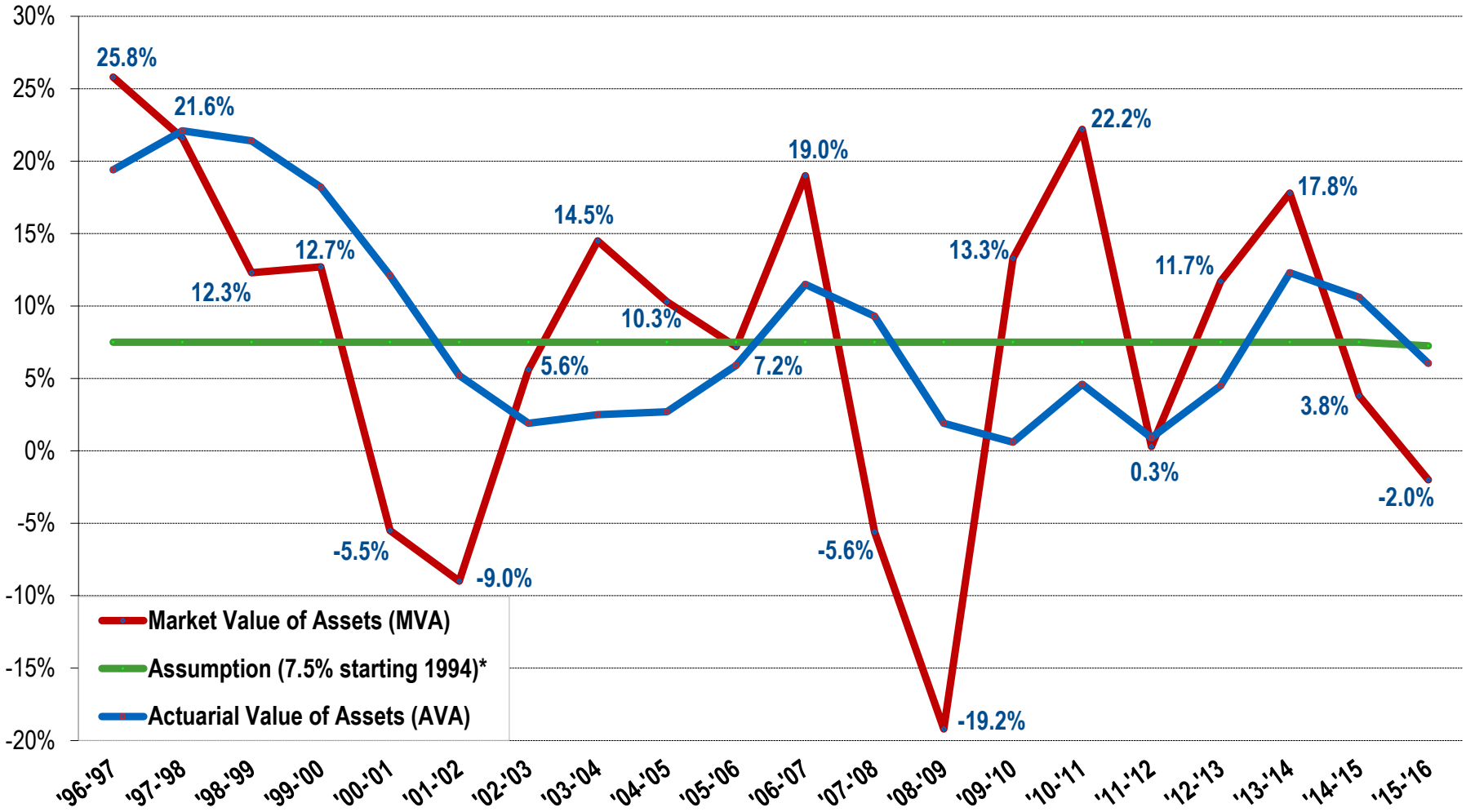
	2016	2015
Active Members	**128,513**	**123,768**
• Average Age	44.6	44.8
• Average Service	9.2	9.4
• Average Compensation	$92,424	$89,578



	2016	2015
Retired Members (in Pay Status)	**70,077**	**67,321**
• Average Age	71.3	71.1
• Average Annual Benefit	$40,511	$39,370

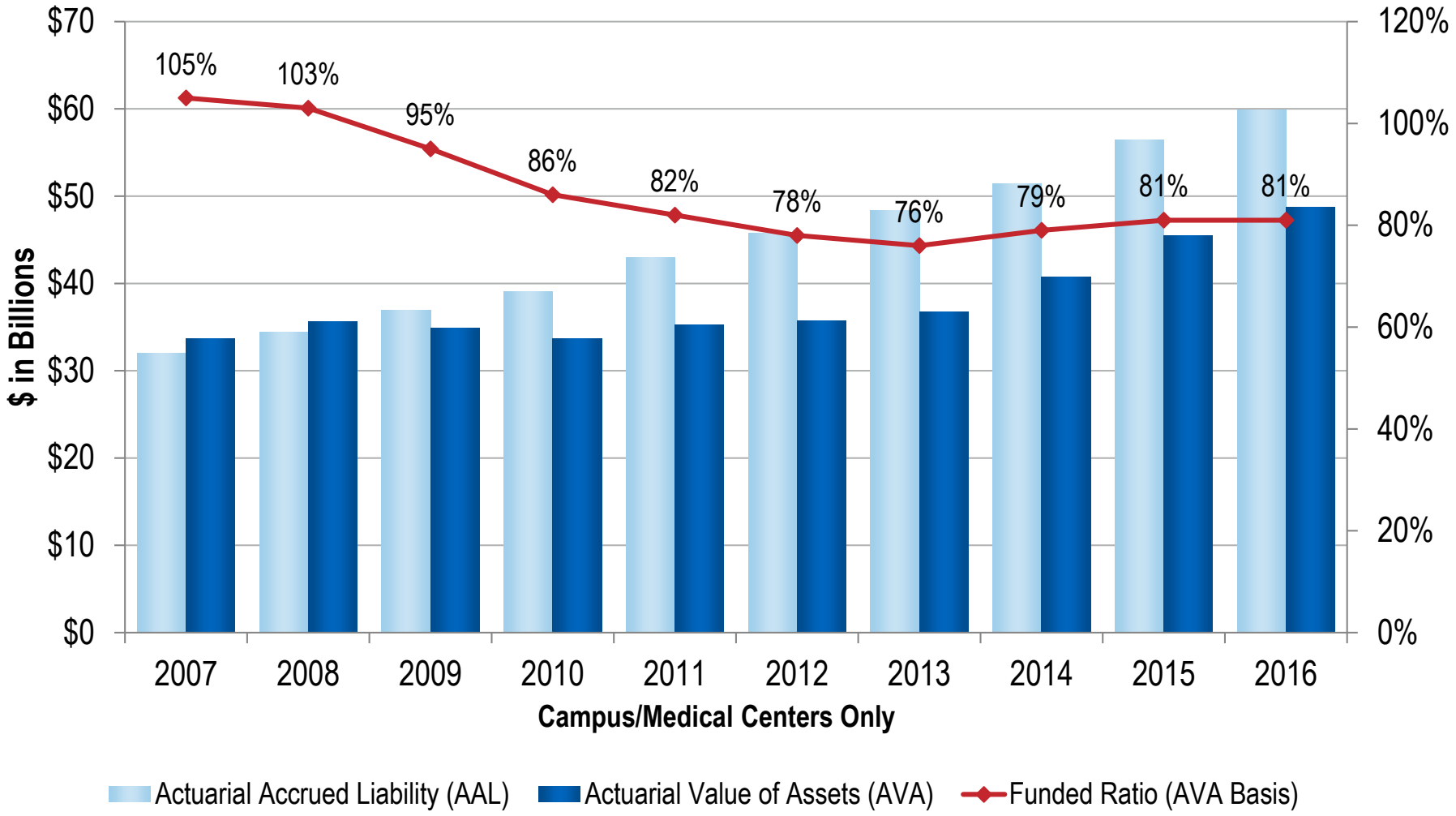
	2016	2015
Terminated Vested Members	**34,624**	**34,166**

UCRP Investment Rates of Return



*Investment rate of return assumed changed to 7.25% per annum starting July 1, 2015

UCRP Historical Funded Status and Funded Ratio (5 year smoothing) as of July 1



UCRP Valuation Results ($ in billions)

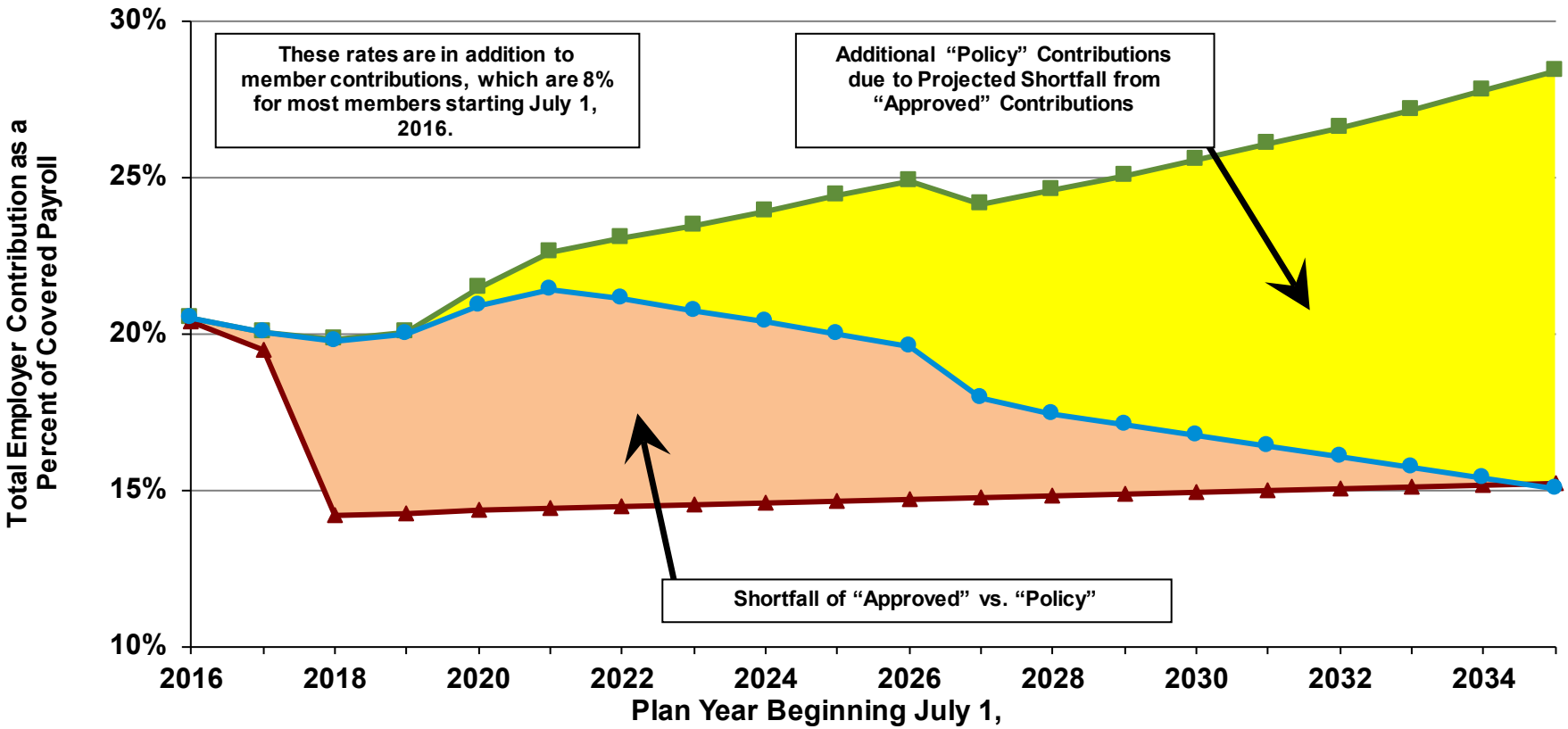
	07/01/2016	07/01/2015
Market Value of Assets (MVA)	$54.2	$55.1
Actuarial Value of Assets (AVA)	$57.2	$53.8
Actuarial Accrued Liability (AAL)	$69.3	$65.8
Unfunded AAL – AVA Basis (AAL less AVA)	$12.1	$12.1
Unfunded AAL – MVA Basis (AAL less MVA)	$15.1	$10.8
Funded Percentage (AVA Basis)	83%	82%
Funded Percentage (MVA Basis)	78%	84%
Normal Cost (beginning of year)	$1.9	$1.8
Normal Cost (% of pay, middle of year)	18.16%	18.36%
Funding Policy Contributions (% of pay)*	27.99%	28.44%

* Campus and Medical Centers Segment only

Future Expectations

- Based on a recommendation from audit actuary (Cheiron), projections are included in valuation report (Appendix A)
  - Compares Approved and Total Funding Policy Contributions
  - Shows how current shortfall increases future Funding Policy Contributions
- Projected funded status
  - Assets, liabilities, funded ratio
  - Assuming only Approved Contributions are made
  - Assuming full Total Funding Policy Contributions are made
- Scenario #1 graphs are shown on the following slides
  - 7.25% market value return per year beginning July 1, 2016
  - 0% active member growth per year (level active member population)
- Additional scenarios are included in the valuation report

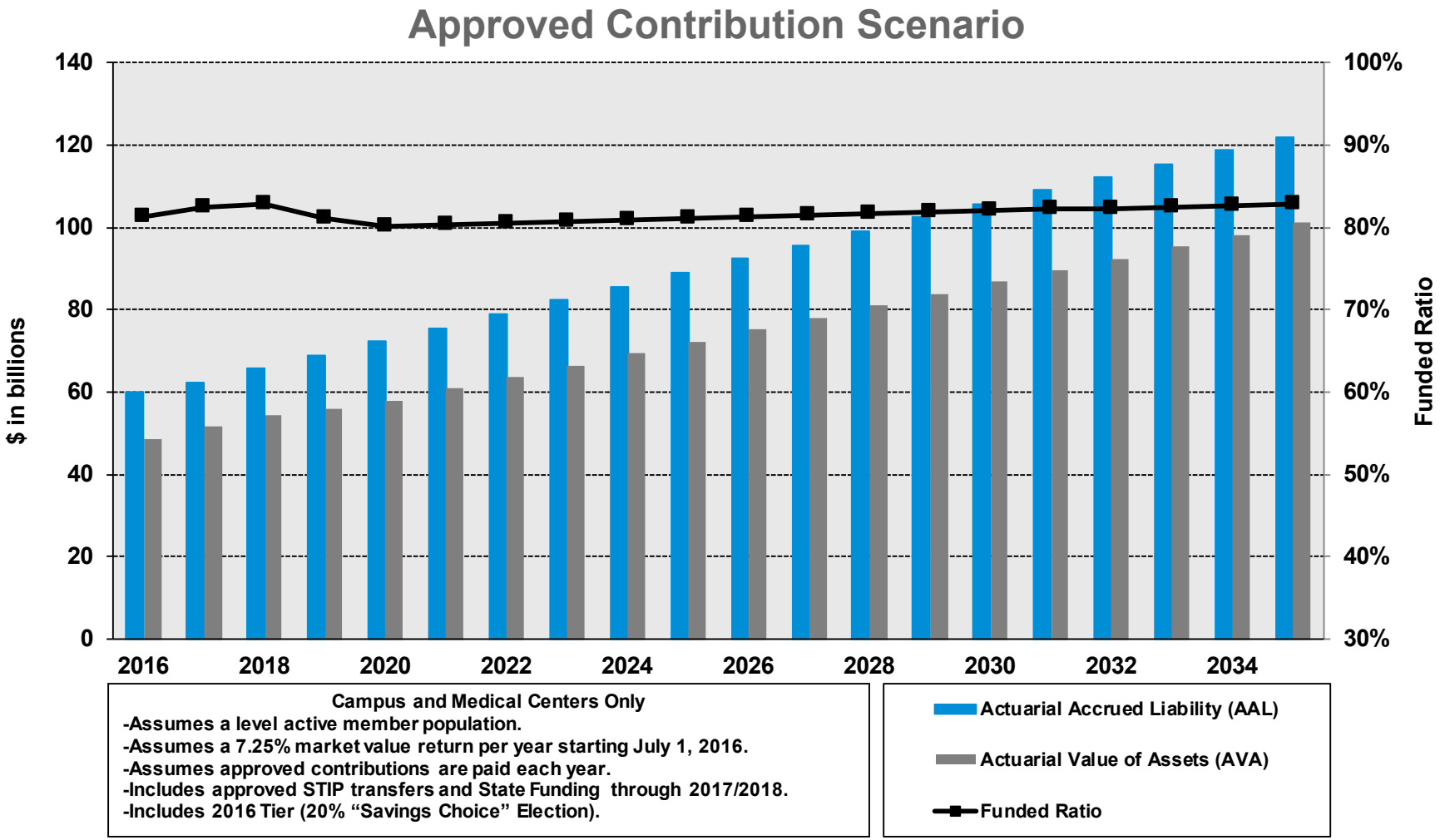
Projected UCRP Employer Contributions Campus and Medical Center Segment Only



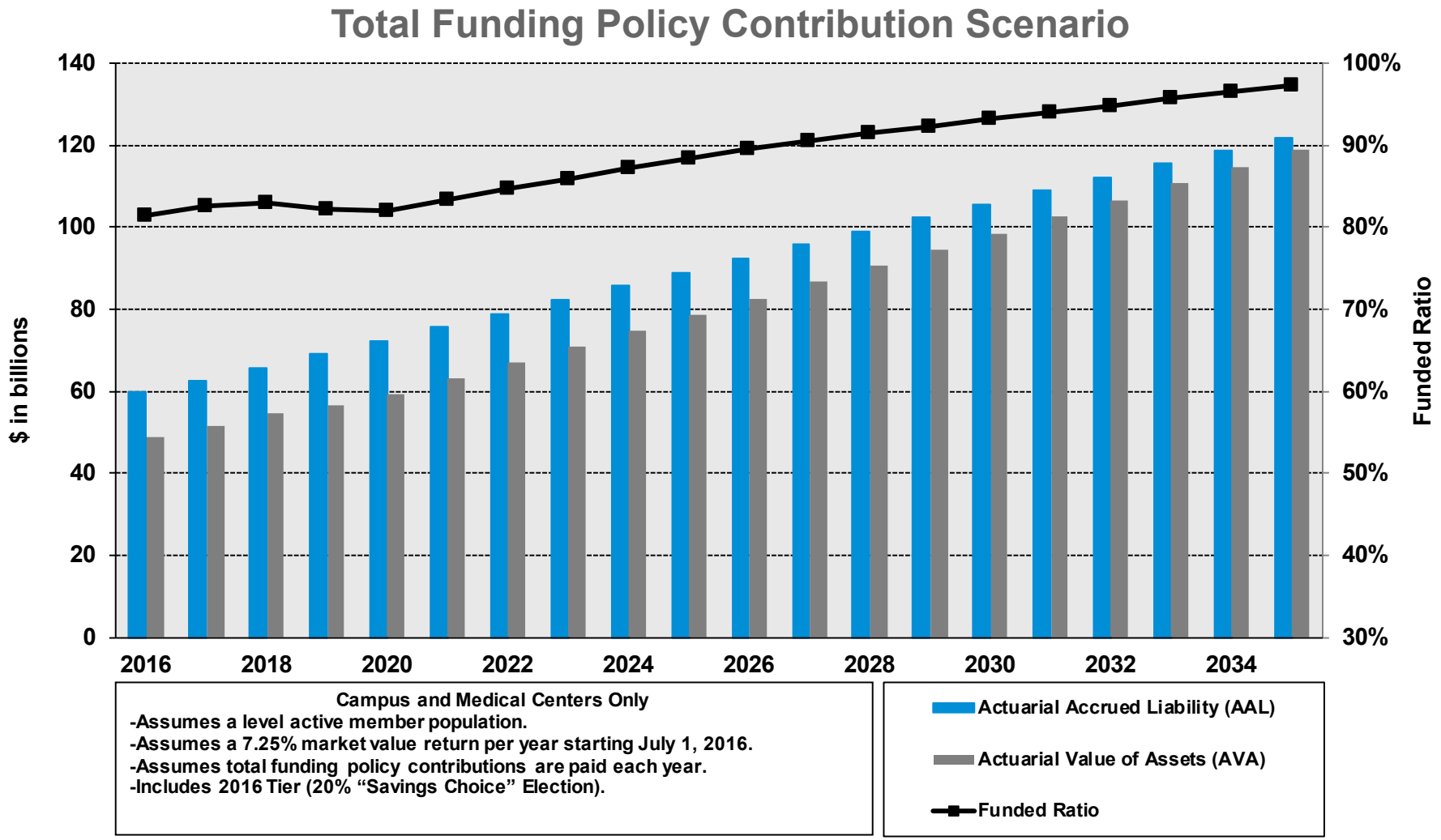
Campus and Medical Centers Only
-Assumes a level active member population.
-Assumes a 7.25% market value return per year starting July 1, 2016.
-Includes approved STIP transfers and State Funding through 2017/2018.
-Includes 2016 Tier (20% "Savings Choice" Election).

- Total Funding Policy Contribution - Assumes Approved Contributions Made
- Approved Contribution (including UAAL Surcharge)
- Total Funding Policy Contribution - Assumes Funding Policy Contributions Made

Projected UCRP Funded Status
Campus and Medical Center Segment Only



Projected UCRP Funded Status
Campus and Medical Center Segment Only



Assumptions and Methods Used in Projections

- Unless otherwise noted, the cost calculations and projections were made using generally accepted actuarial practices and are based on July 1, 2016 actuarial valuation results. This includes the participant data and actuarial assumptions on which this valuation was based. Here are some of the important assumptions used:
  - Campus and medical center segment only
  - Assumes market value returns of 7.25% per year beginning July 1, 2016
  - Reflects choice of either UCRP 2016 or defined contribution (DC) plan for new hires on or after July 1, 2016
  - Take-rate of 80% UCRP and 20% defined contribution plan. Cost of choice of 0.6% of payroll added to UCRP's Normal Cost for new hires
  - Active member population headcount remains constant
  - Transfers from STIP of $481 million in 2016-17 and $392 million in 2017-18 along with State Funding of $171 million in each of 2016-17 and 2017-18 is reflected.
  - DC plan UAAL surcharge of 6% of compensation up to IRC limit paid by employer
  - Total of UCRP employer and member contribution rates are assumed to be no greater than the Total Funding Policy Contribution rate for any year with the exception that the employer contribution rate can be no less than the member contribution rate
  - Demographics for future new entrants are assumed to be the same as those for members hired during the two years prior to July 1, 2016

Other Information

- Projections, by their nature, are not a guarantee of future results. The modeling projections are intended to serve as illustrations of future financial outcomes that are based on the information available to us at the time the modeling is undertaken and completed, and the agreed-upon assumptions and methodologies described herein. Emerging results may differ significantly if the actual experience proves to be different from these assumptions or if alternative methodologies are used. Actual experience may differ due to such variables as demographic experience, the economy, stock market performance and the regulatory environment.
- All calculations were completed under the supervision of John Monroe, ASA, MAAA, Enrolled Actuary who is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.