# Modeling of Various Hypothetical Maximum Employer Contribution Rates

## University of California Retirement Plan

## UCRS Advisory Board
## February 28, 2014

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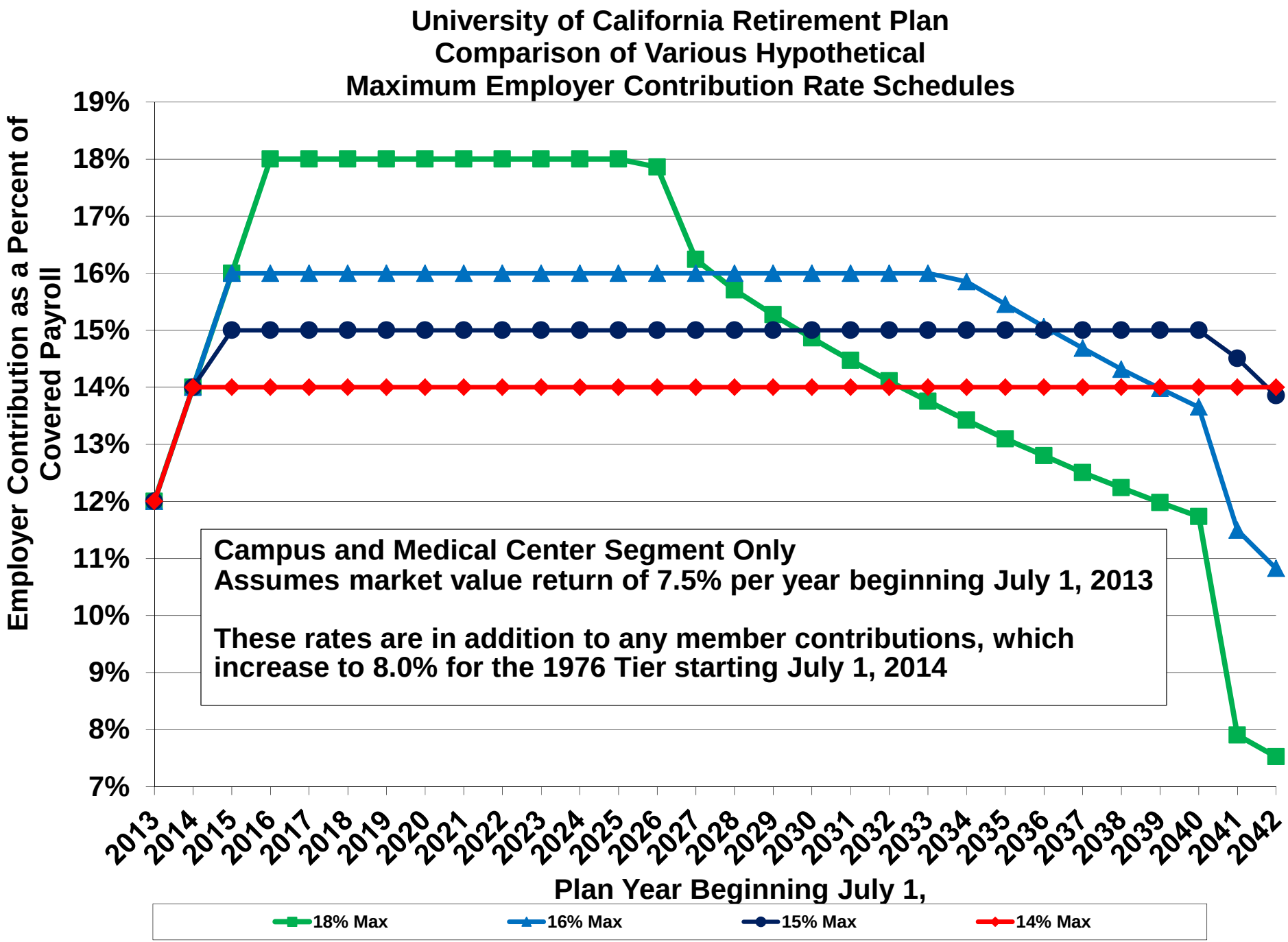
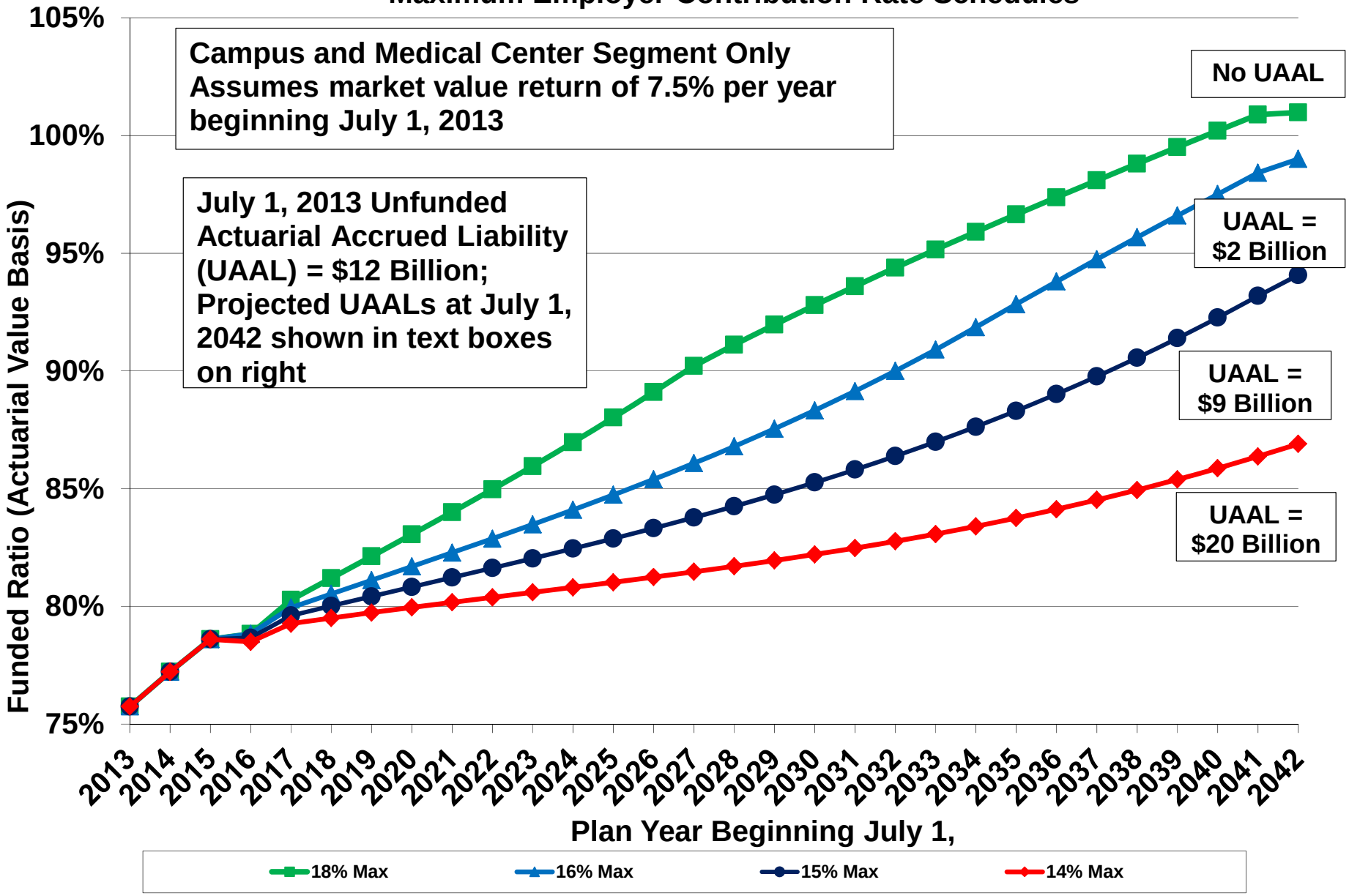
# Modeling of Various Hypothetical Maximum Employer Contribution Rates

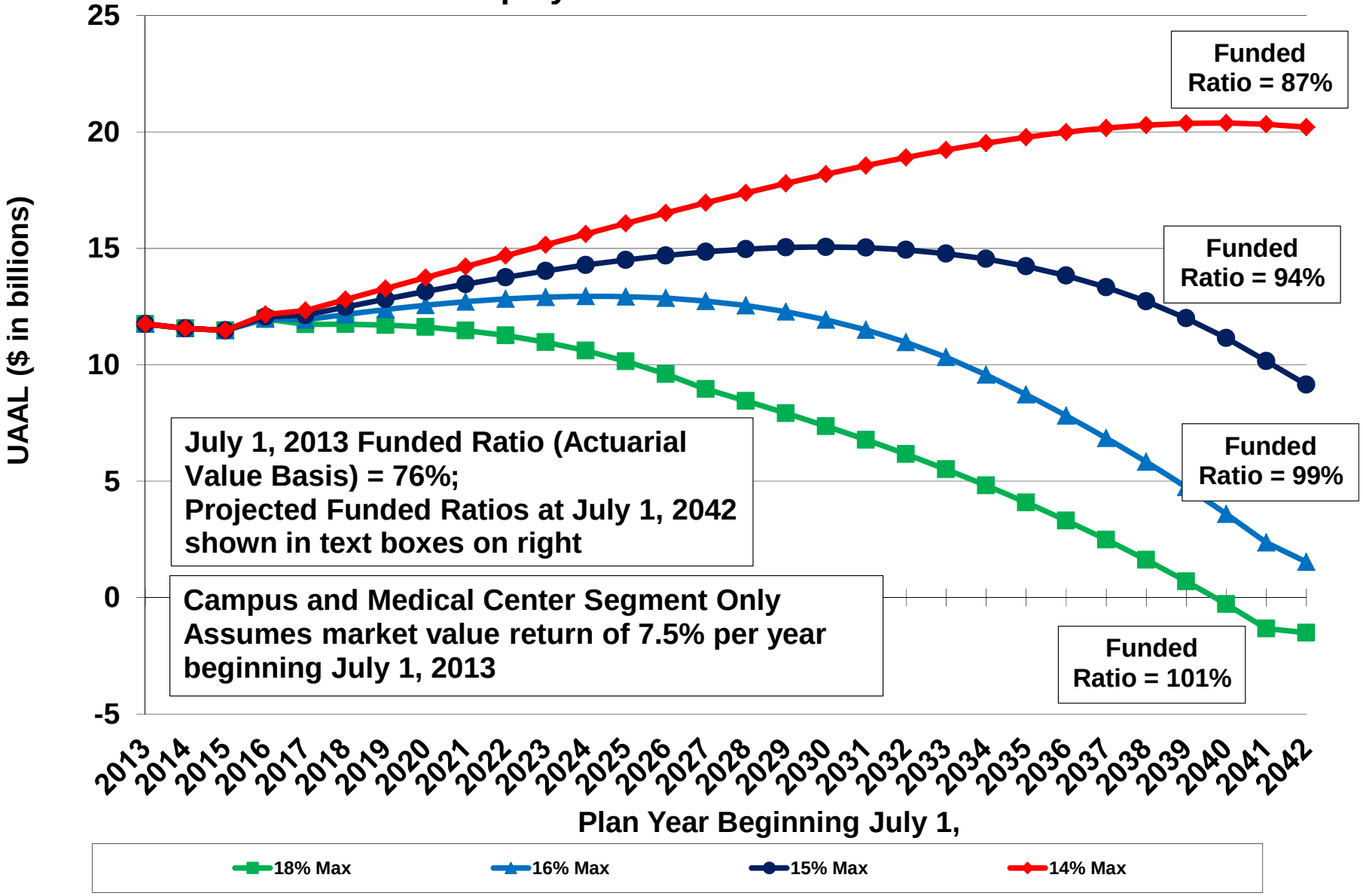
- Rates modeled are "actual" employer contribution rates and not the total Funding Policy Contribution rates
  - Employer rates are in addition to member contributions
- Maximum employer contribution rate scenarios modeled:
  - 14%, 15%, 16% and 18% of covered payroll
    - Total of employer and member contribution rates are assumed to be no greater than the total Funding Policy Contribution rate for any year in the projection
    - Contribution rates are modeled on the next slide with the corresponding funded ratios and UAAL amounts shown on the two slides after that, respectively
- Projection results may change significantly from year to year depending on actual experience, including future market returns
- Projections based on plan terms in effect as of July 1, 2013


University of California Retirement Plan
Comparison of Various Hypothetical
Maximum Employer Contribution Rate Schedules
Employer Contribution as a Percent of Covered Payroll
19%
18%
17%
16%
15%
14%
13%
12%
11%
10%
9%
8%
7%
Campus and Medical Center Segment Only
Assumes market value return of 7.5% per year beginning July 1, 2013
These rates are in addition to any member contributions, which increase to 8.0% for the 1976 Tier starting July 1, 2014
2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042
Plan Year Beginning July 1,
18% Max
16% Max
15% Max
14% Max

## University of California Retirement Plan
## Funded Ratio Based on Various Hypothetical Maximum Employer Contribution Rate Schedules



# University of California Retirement Plan
# UAAL Based on Various Hypothetical
# Maximum Employer Contribution Rate Schedules



# Assumptions and Methods Used in Projections

- Unless otherwise noted, the projections were made using generally accepted actuarial practices and are based on the July 1, 2013 actuarial valuation results, including the participant data and actuarial assumptions on which that valuation was based. Here is a summary of some of the important assumptions used in the projection.
  - Campus and medical center segment only
  - 7.50% market value return per year starting July 1, 2013
  - Reflects new pension tier starting July 1, 2013 (along with later retirement rate assumptions for members in this tier)
    - Projections based on plan terms in effect as of July 1, 2013
  - Member rate for most 1976 Tier members is 6.5% for 2013/2014 and 8.0% for 2014/2015 (less $19 per month) and stays at that level throughout the projection
  - Approved/projected employer rate is as shown in the modeling
  - Active member population has been assumed to remain constant in all future years
  - Demographics for future new entrants are assumed to be the same as those for members hired during the two years prior to July 1, 2013

# 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.

# Modeling of Various Hypothetical Employer Contribution Rates Requested by TFIR

## University of California Retirement Plan

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## February 28, 2014

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# Disclaimer

- These contribution scenarios were requested by TFIR and not proposed by Segal
- The hypothetical modeling that follows was authorized by UCOP, at the request of TFIR
- Segal remains a neutral party to these proposals
- Projections based on plan terms in effect as of July 1, 2013

# Modeling of Various Hypothetical Employer Contribution Rates

- Rates modeled are those requested by TFIR
  - Employer rates shown are in addition to member contributions
- Contribution rate scenarios modeled:
  - Total Funding Policy Contribution ("ARC") for all years
  - Modified ARC (Normal Cost plus 7.5% Interest on UAAL) for all years
  - ARC for two years followed by either 14%, 16% or 18% of covered payroll maximum employer contribution rate thereafter
- Total of employer and member contribution rates are assumed to be no greater than the total Funding Policy Contribution ("ARC") rate for any year in the projection
- Contribution rates are modeled on slide 11 with the corresponding funded ratios and UAAL amounts shown on the two slides after that, respectively

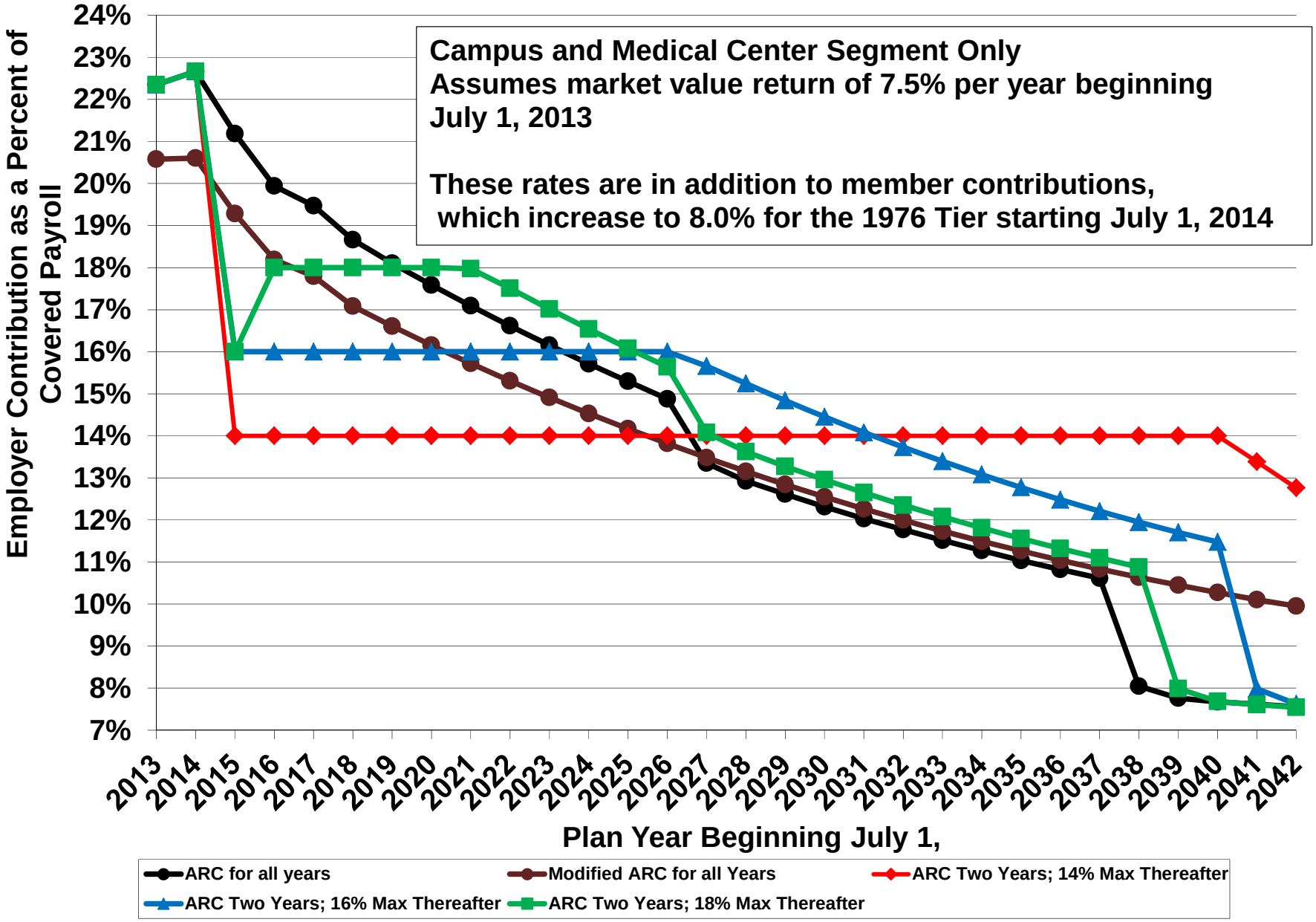
# Modeling of Various Hypothetical Employer Contribution Rates

- Hypothetical "borrowing" amounts to get to ARC or Modified ARC during first two years are as follows:

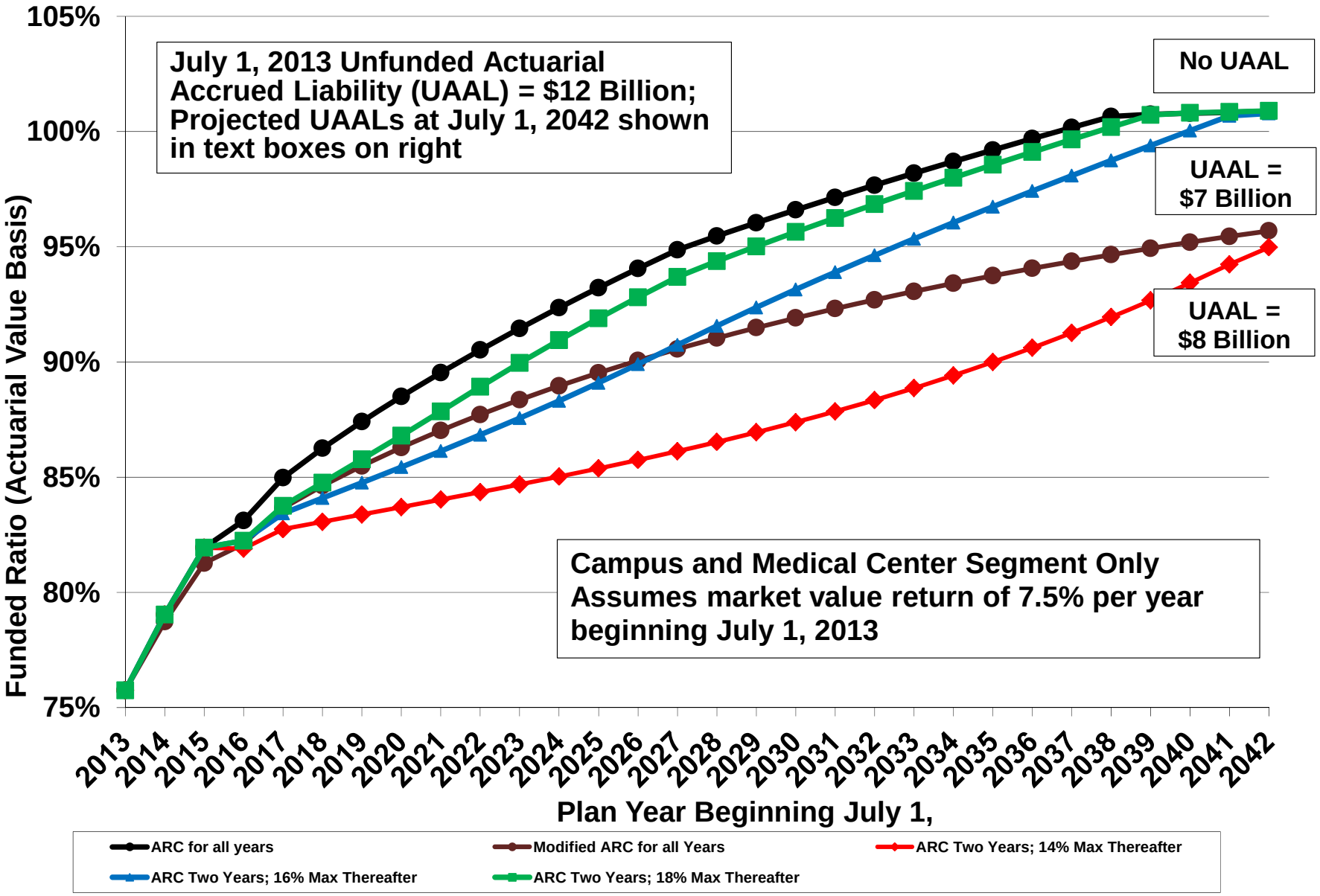
| $ in Billions | 2013/2014 | 2014/2015 |
|---|---|---|
| ARC | $0.9 | $0.8 |
| Modified ARC | $0.7 | $0.6 |

- Projection results may change significantly from year to year depending on actual experience, including future market returns

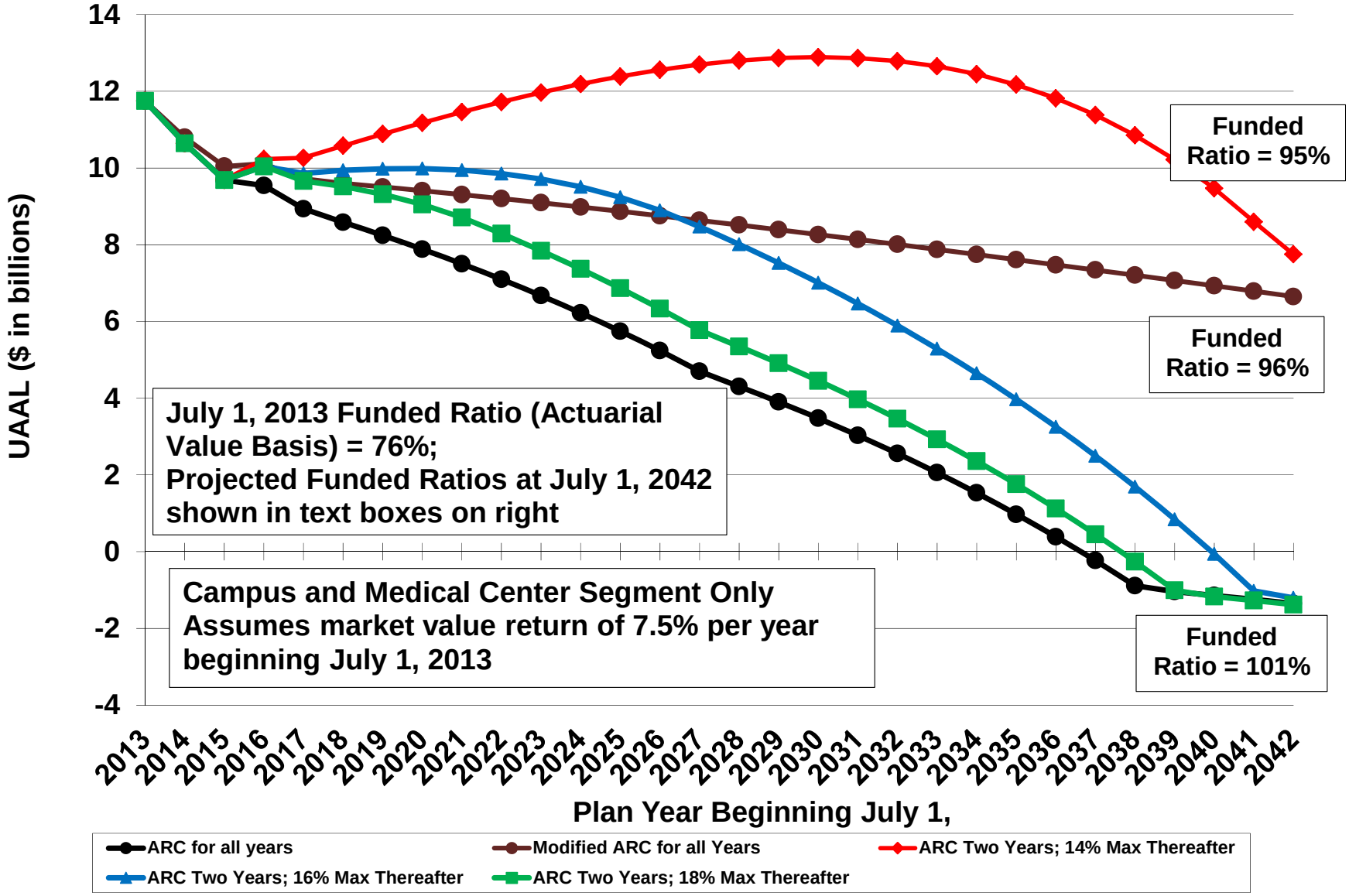
## University of California Retirement Plan
## Comparison of Hypothetical Employer Contributions



## University of California Retirement Plan
## Funded Ratio Based on Various Hypothetical Employer Contributions



## University of California Retirement Plan
## UAAL Based on Various Hypothetical Employer Contributions




**Note: UAAL under the Modified ARC Scenario decreases over time due to a combination of gains being recognized in early years under the asset smoothing method and the one-year delay between the valuation date and the date the rates would be effective.**

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  - Reflects 2013 Tier starting July 1, 2013 (along with later retirement rate assumptions for members in this tier)
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