KPERS Update

2016 valuation, Pension obligation bonds, Funding projections, and Reamortization

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House Appropriations Committee

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KPERS

Kansas Public Employees Retirement System

Dependable Benefits. Trusted Partner.

KPERS is a fiduciary providing retirement, disability and survivor benefits to our members and their beneficiaries with a 98-member staff.

KPERS administers three statewide, defined benefit plans for public employees.

- Kansas Public Employees Retirement System
- Kansas Police and Firemen's Retirement System
- Kansas Retirement System for Judges

KPERS partners with more than 1,500 state and local government employers.

- State of Kansas
- 286 school districts
- 105 counties
- 425 cities and townships
- Other employers include libraries, hospitals, community colleges and conservation districts

KPERS Overview

Board of Trustees

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Vice President for Investments and
Chief Investment Officer,
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Appointed by the Governor

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Appointed by the Governor

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Elected member – school

Shawn Creger, Prairie Village
Financial Advisor, Edward Jones
Appointed by the Speaker of the House

James Cusser CFA, Mission Hills
Wall Street Investment Banker and Mutual Fund Manger;
Adjunct Associate Professor of Political Science,
Johnson County Community College
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Michael Rogers, Manhattan
Certified Public Accountant
Appointed by the Governor

Ryan Trader, Olathe
Firefighter/Paramedic, City of Olathe
Elected member - non-school

2016 Valuation

- Summary of results
- Key factors
- Unfunded liability
- Assets

KPERS

2016 Valuation

Summary of Valuation Results

- As a system, KPERS' funded ratio remained stable, but the unfunded actuarial liability increased in the 12/31/2016 funding valuation.

	12/31/2016	12/31/2015
Funded Ratio	67%	67%
Unfunded Actuarial Liability	$9.06 billion	$8.54 billion

- Actuarially required contribution (ARC) rates increased for all groups, primarily due to the change in actuarial assumptions.
- The State/School group statutory employer contribution remains below the actuarial contribution rate.
  - The statutory State/School employer contribution rate is projected to reach the actuarial required contribution rate in FY 2021, if actuarial assumptions are met and statutory contributions are paid as scheduled.

Actuarial Valuation

Key Factors in 2016 Valuation

Two particularly significant factors in the 2016 valuation:

- 2017 legislative appropriations changes
- Triennial experience study

2017 Legislation

Changes to employer contributions

- The appropriations bills passed by the 2017 Legislature made several changes to employer contributions.
  - The payment of the FY 2016 employer contribution reduction ($97.4 million plus interest) that was scheduled to be paid on June 30, 2018 was eliminated.
  - FY 2017 employer contributions were reduced by $64 million, but will be paid over 20 years starting in FY 2018 (the first payment has already been made).
  - FY 2019 employer contributions are reduced by $194 million, but will be paid over 20 years starting in FY 2020.

2017 Legislation

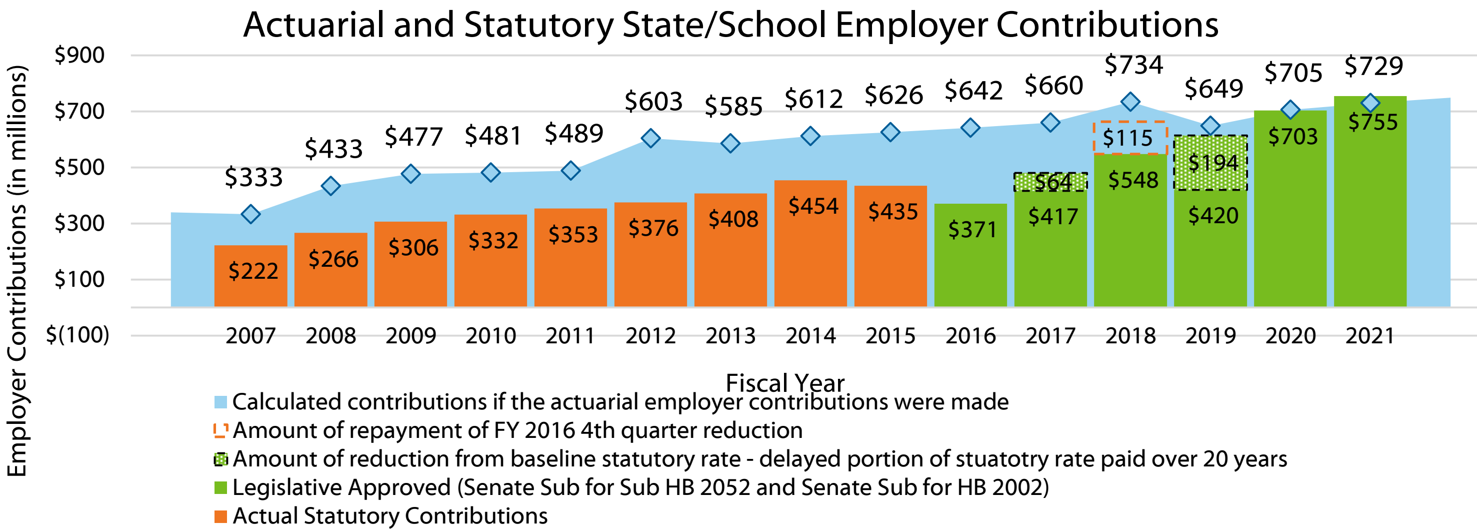
Changes to employer contributions

- Reductions that are scheduled to be paid are counted as a long-term receivable.
  - Any changes to the repayment are reflected as non-collectible contributions (as was the case after the actions of the 2017 Legislature to cancel payment of FY 2016 deferred contributions).

- The employer contributions reductions were made without adjusting the statutory employer contribution rate.

2017 Legislation

State/School Employer Contributions



- Over three years (Fiscal Years 2017, 2018, and 2019), the State will pay or promise to pay KPERS $1.63 billion, of which $258 million will be layered or paid over 20-year periods, which totals the statutory amount that is due to KPERS over the three fiscal years.
- Assuming the layering payments are made, this will represent 3 years of the State paying at the statutory rate. The last year that the full statutory rate was paid was Fiscal Year 2014.
- No payment for the delayed $115 million payment from Fiscal Year 2016 in Fiscal Year 2018. That amount has been added to the unfunded actuarial liability as non-collectible pension contributions.
- The approved reductions in FY 2017 and FY 2019 will be treated as a long-term receivable and are included as assets in the 12/31/2016 actuarial valuation.

Experience Study

Updating actuarial methods and assumption

- During CY 2016, the Board of Trustees adopted a number of changes to actuarial assumptions and method, based on the statutory triennial experience study.
- The Board has a **fiduciary responsibility** to set the actuarial assumptions using their best judgment in light of available information.
- Assumptions are long-term in nature and try to anticipate what will happen over decades, not react to short-term trends.
- Having accurate assumptions is important so that costs are not too high today or passed on to future generations.

Experience Study

Updating actuarial methods and assumption

- Based on the recommendation of the Board's actuarial consultant, changes were made to both economic assumptions (i.e. inflation, wage growth, investment returns) and demographic assumptions (i.e. mortality, retirement rates)
- The new assumptions are reflected in the 12/31/2016 actuarial valuation.
- The change in assumptions, primarily the lowering of the investment return assumption from 8.0% to 7.75%, increased the unfunded actuarial liability for all groups.

Experience Study

Updating actuarial methods and assumption

- Actuarial methods were also reviewed in the experience study
- Changes were made to the amortization method
- Previously amortized the entire unfunded actuarial liability as a level percent of pay over closed 40-year period, starting in 1994
- As recommended by the consulting actuary, revised to reduce the contribution rate volatility of a shorter period by –
  - Maintaining the same amortization schedule for the "legacy" unfunded actuarial liability
  - Establishing separate "layers" amortized over 20-25 years for future changes in the unfunded actuarial liability

Unfundead Actuarial Liability

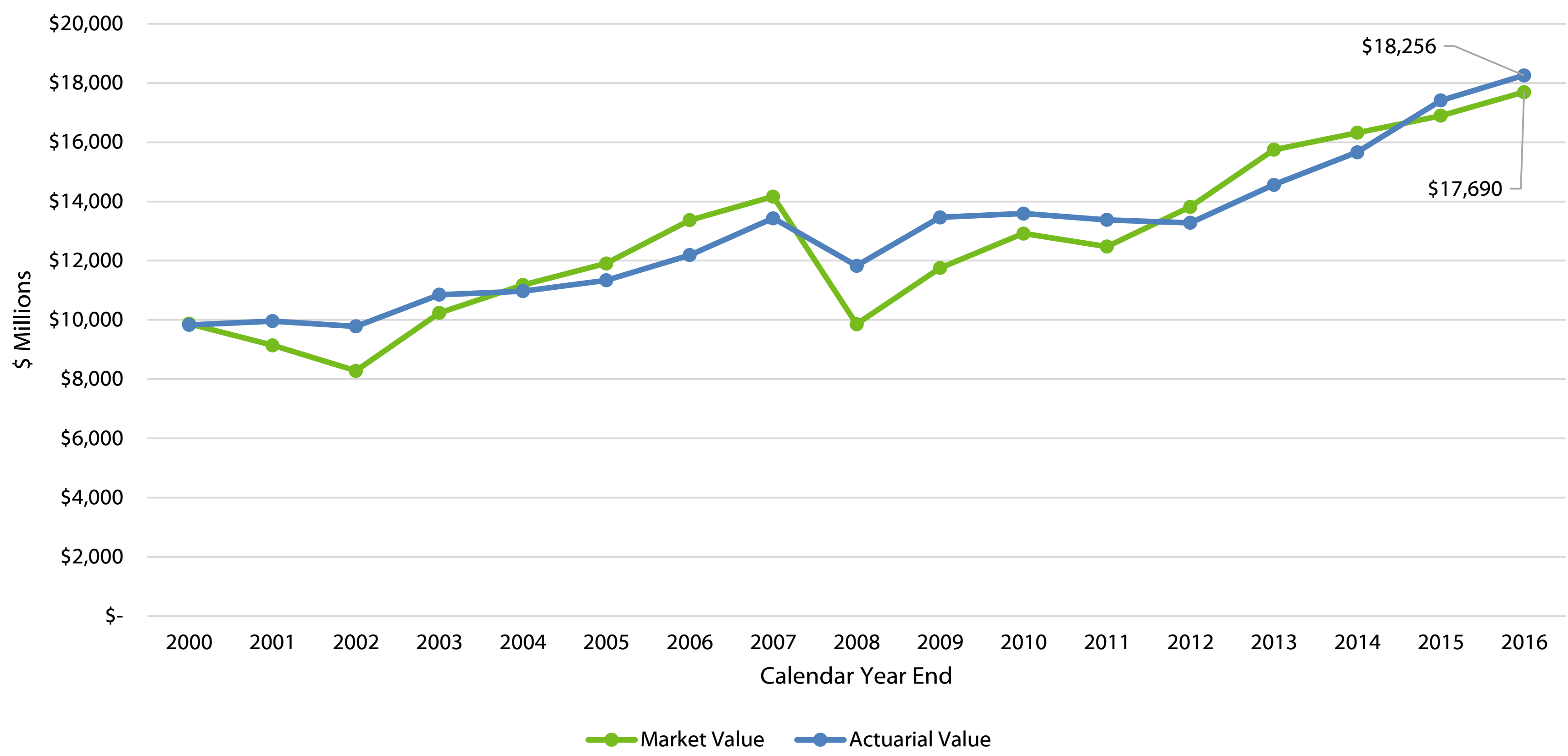
Factors affecting the unfunded actuarial liability

- Unfunded Actuarial Liability increased by $522 million to $9.061 billion

- In 2016, the unfunded actuarial liability was impacted by:
  - **experience gains/losses** (e.g. investment return and demographic changes like slower payroll growth)
  - **actual contributions** (e.g. reduced State/School employer contributions)
  - **amortization method** (set in 1993 as a level percent of pay, added layering of annual changes in 2016)
  - **assumption changes** (changes to economic and demographic assumptions as part of statutorily required triennial review)

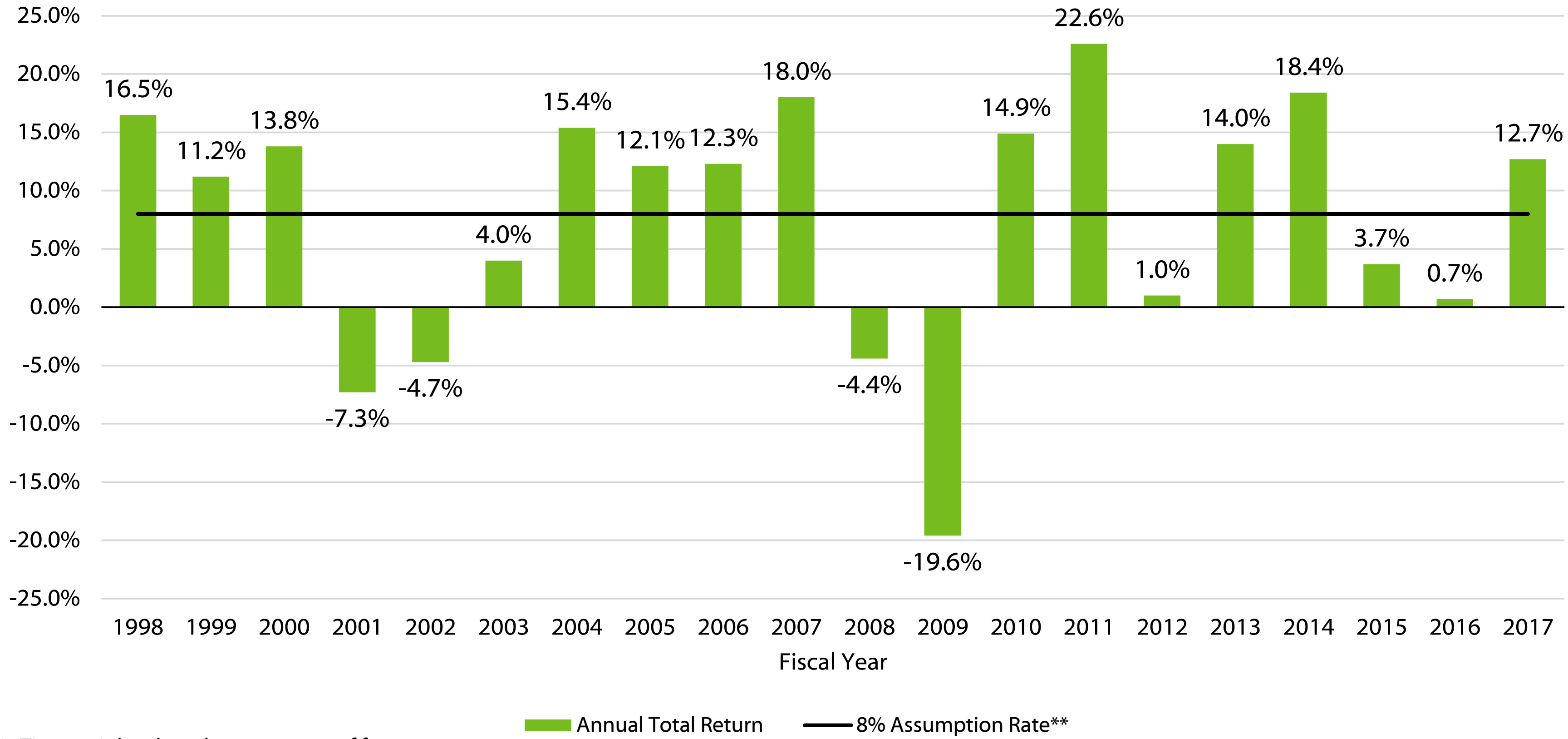
Actuarial Value of Assets

Historical Asset Growth



KPERS Investment Returns

Historical Fiscal Year Returns



* Time weighted total return, gross of fees

** The investment return assumption was changed to 7.75%, effective 1/1/2018, as part of the most recent statutory triennial experience study.

Pension Obligation Bonds

- Current pension obligation bond issues outstanding

- System investment performance since bond sales

KPERS

Pension Obligation Bonds

2004C bond issue

- In 2004, the Legislature approved a $500 million bond issue to be deposited in the KPERS Trust Fund.

- The bonds are 30-year maturity bonds with a total interest cost of 5.39%.

- The structure of the bonds included capitalized interest totaling about $60 million.

- KPERS ultimately received $440,165,000 in net proceeds.

- Approximate annual debt service is $33 million. Funding source is the Expanded Lottery Act Revenues Fund.

Pension Obligation Bonds

2015H bond issue

- In 2015, the Legislature approved a $1.0 billion bond issue, net of fees, with proceeds to be deposited in the KPERS Trust Fund.
- The bonds are 30-year maturity bonds with a total interest cost of 4.68%.
- The 2015H bonds sold in August 2015 and KPERS received the full $1.0 billion in proceeds.
- Approximate annual debt service is $65 million. Funding source is the State General Fund.

Pension Obligation Bonds

System investment performance as of September 30, 2017

- As of September 30, 2017, investment returns on the System's investment portfolio have exceeded the interest cost of both bond issues.

- The System's average annualized total return for the time period since the 2004C bond issue is 7.38%, compared to the bond interest cost of 5.39%. The value added since issuance, after payment of the debt service, over **$259 million**.

- The System's average annualized total return for the time period since the 2015H bond issue is 7.95%, compared to the bond interest cost of 4.68%. The value added since issuance, after payment of the debt service, is over **$73.9 million**.

Funding Plan

- Paying off the unfunded actuarial liability
- Statutory and actuarial required contribution rates

KPERS

Funding plan

Paying off the unfunded liability

- The System has a funding plan to fully fund the System.
- The Legislature set a 40-year, closed amortization period in 1993.
- The Board of Trustees approved a layered amortization approach as part of the triennial experience study.
  - The existing unfunded liability (legacy unfunded liability) remains on the 40-year amortization schedule, ending in 2033.
  - Each year any experience different than the actuarial assumptions (either positive or negative) will be realized in separate 20-year amortization periods.
  - Each layer will have an annual "payment" calculated and each layer's payment is added together to calculate a single unfunded liability payment.

Funding plan

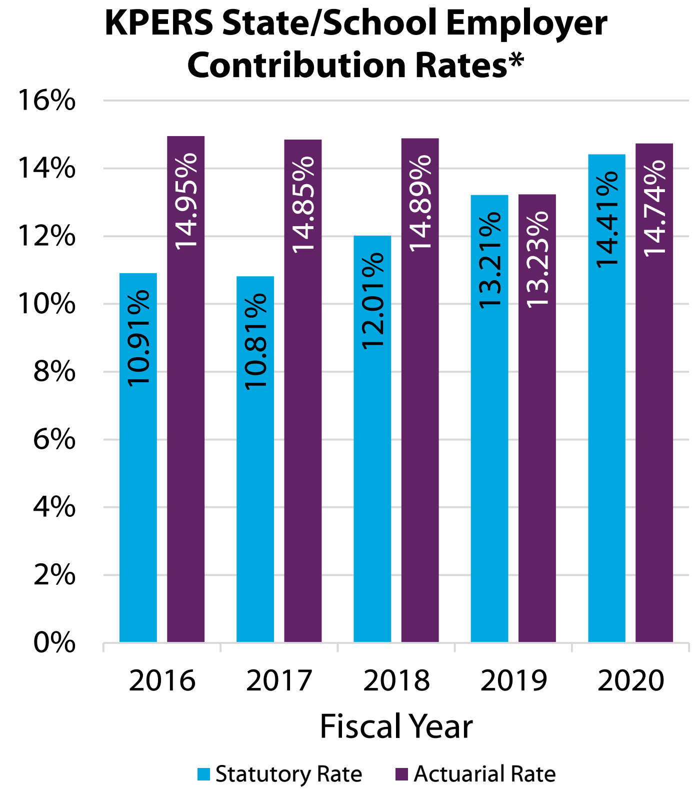
Statutory and actuarial required contribution rates

- Rates effective for years <u>beginning</u> in FY 2020.
- Employer contribution rates for State only continues to be at the full actuarial rate.
  - State actuarial rate went from 8.28% to 9.49%.
- School only actuarial rate totals 16.15%, higher than the statutory rate of 14.41% for FY 2020.
- State/School combined statutory rate is 0.33% below the actuarial required rate in the 12/31/16 valuation (14.41% vs 14.74%).

Funding Plan

State/School Employer Contribution Rates

- The statutory State/School employer contribution rate for FY 2018 is 12.01%.
- The employer contribution rate is scheduled to increase to 13.21% for FY 2019, but $194 million of that contribution will be delayed and paid over 20 years.
- The 12/31/2016 valuation sets the employer contribution rates for FY 2020 for State/School employers, but the rate is capped by statute.
- The State/School statutory employer contribution has been below the actuarial required contribution for 24 years.

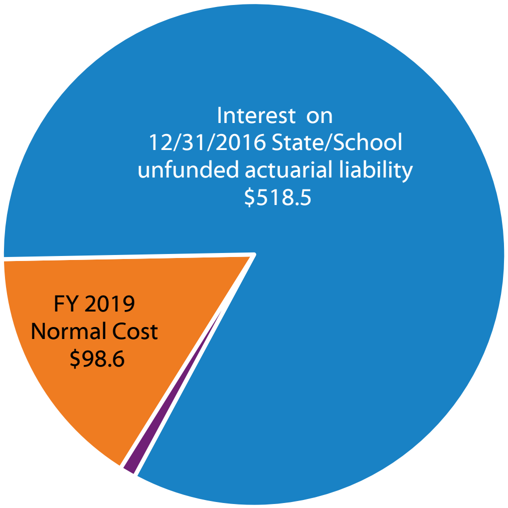


*Does not reflect reductions to the State/School employer contributions of $94 million in FY 2016, $64 million in FY 2017 and $194 million FY 2019.

Employer Contributions

"Steady state" State/School contributions

FY 2019 "Steady State" State/School Contributions
(in Millions)



Total State/School employer contributions needed to maintain "steady state"
$623.5 million

Payment of layer on FY 2017 deferred School contribution
$6.4 million

12/31/2016 State/School unfunded actuarial liability	X	KPERS Investment Return Assumption	=	Interest on 12/31/2016 State/School unfunded actuarial liability
$6.690 billion	X	7.75%	=	**$518.5 million**

Actuarial payroll projection for FY 2019	X	Employer Normal Cost Rate	=	FY 2019 normal cost
$4.610 billion	X	2.14%	=	**$98.6 million**

Funding Projections

- State/School funding
- Long-term actuarial funding progress
- Short-term projections

KPERS

Funding Projections

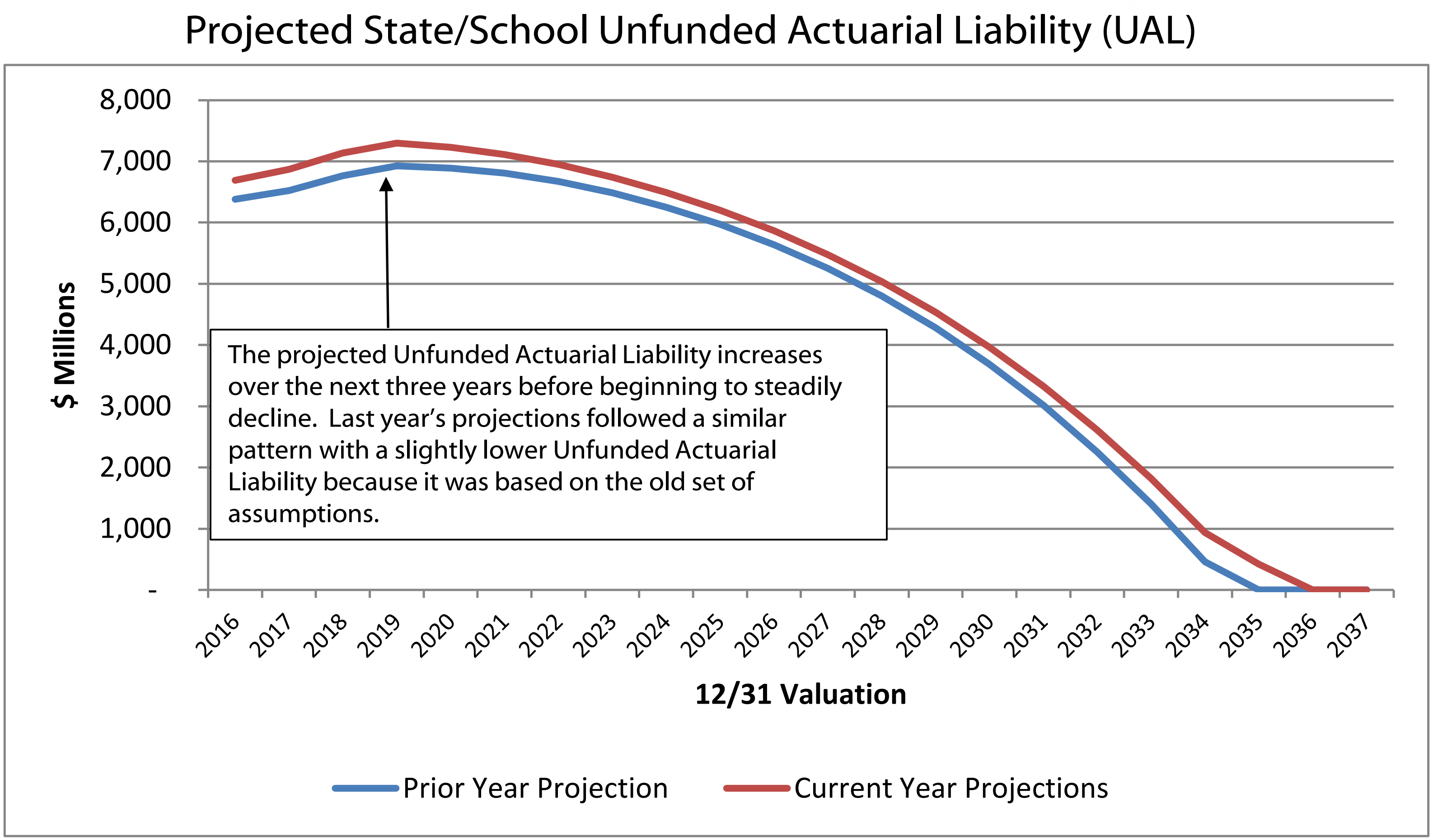
State/School funding

- 12/31/16 Valuation, used to set the employer contribution rates in FY 2020
  - Funded Ratio: 64.5%
  - Actuarial rate: 14.74%
  - Statutory rate: 14.41%

- Actuarial required contribution date/rate (actuarial and statutory contribution rates are equal)
  - Date: FY 2021 at rate of 14.99%
  - Projected Date and Rate, based on prior valuation, was 13.12% in FY 2020
  - State/School statutory rate has exceeded the State-only actuarial rate since the December 31, 2010 valuation (setting the FY 2014 contribution rate), except for the Legislature's reset of the FY 2016 statutory rate
  - Reductions of $64 million in FY 2017 and $194 million in FY 2019 in State/School contributions are assumed to be paid over 20 years starting in FY 2018 and FY 2020 respectively.

Funding Projections

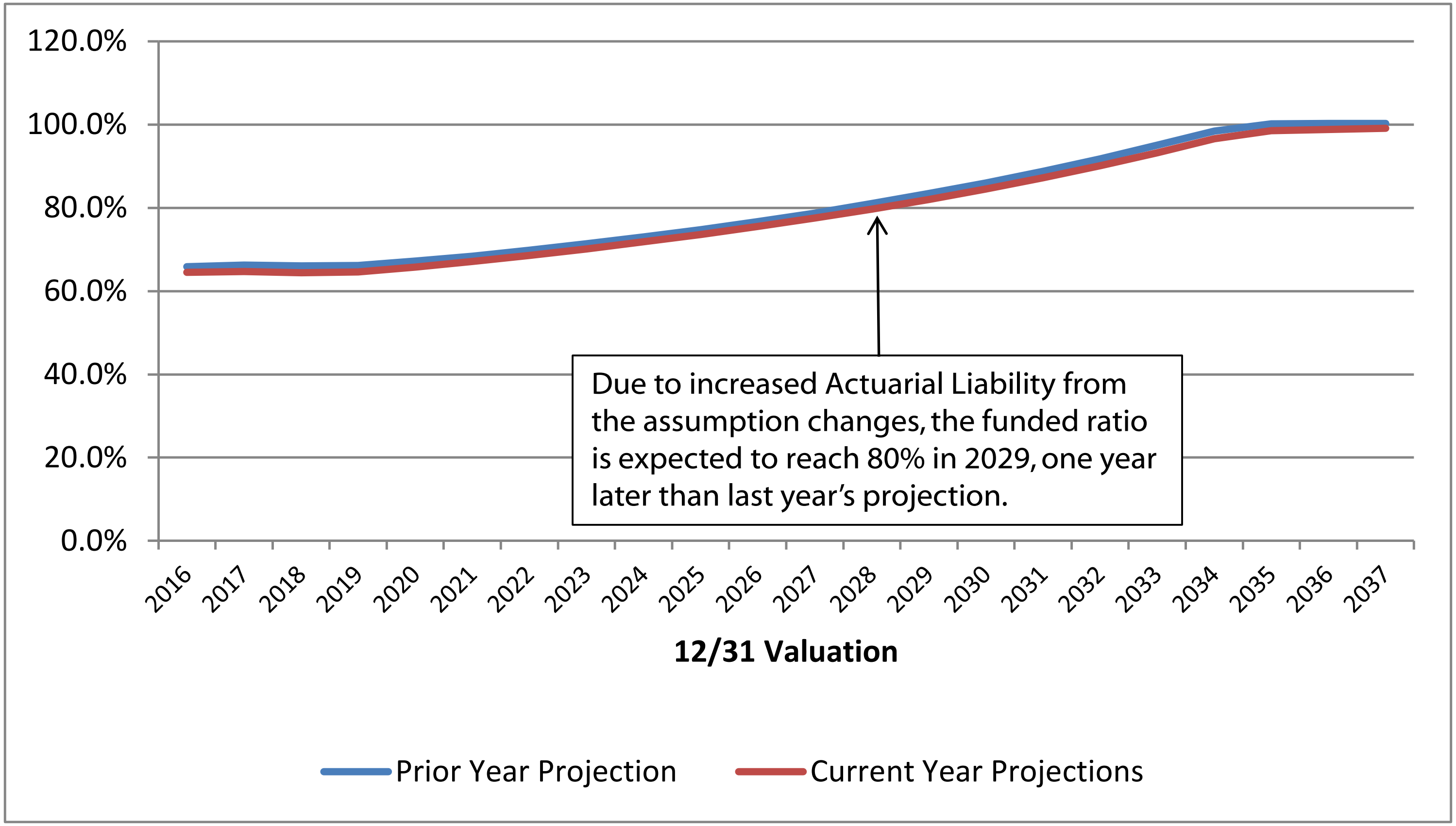
Long-term actuarial funding progress



Funding Projections

Long-term actuarial funding progress

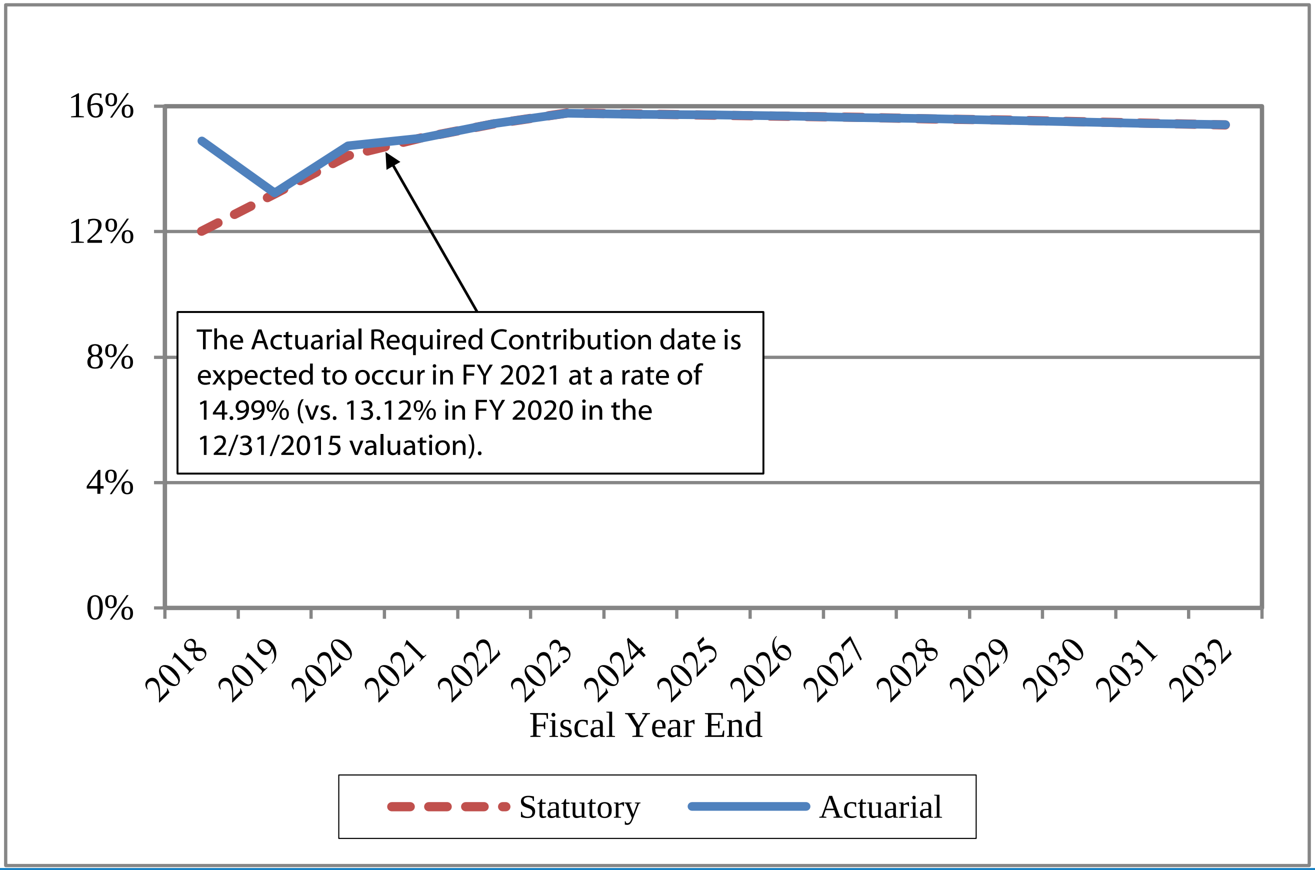
Projected State/School Funded Ratio



Funding Projections

Long-term actuarial funding progress

Projected State/School Employer Contribution Rates



Funding Projections

Short term projections (Total system)

Return in 2017*

Valuation Date (12/31)	7.75% Unfunded Actuarial Liability	7.75% Funded Ratio	0% Unfunded Actuarial Liability	0% Funded Ratio	-7.75% Unfunded Actuarial Liability	-7.75% Funded Ratio
2017	$9,284M	67%	$9,554M	66%	$9,824M	65%
2018	9,665M	67%	10,309M	65%	10,953M	63%
2019	9,900M	67%	10,927M	64%	11,954M	60%
2020	9,807M	68%	11,209M	64%	12,611M	59%

*Assumes a 7.75% return in all years after 2017 so current deferred investment experience is reflected in future years. Also assumes reduced contributions for FY 2017 and FY 2019 are paid as scheduled.

Reamortization

- Lower contributions in the short term
- Much higher long-term costs

Reamortization

- The current 40-year amortization schedule was set by the Legislature in 1993.
- By statute, the KPERS Board of Trustees sets the amortization schedule.
- The "legacy" unfunded liability is currently scheduled to be fully paid in 2033.
- Reamortizing to a closed 30-year period would move the payoff date to 2044.
- Based on current actuarial and accounting standards, a public pension plan amortization period can not exceed 30 years.

Reamortization

State/School Employer Contributions

- Extending the amortization period lowers required annual employer contribution rates in the short-term.
  - FY 2018 contributions are projected to be $516 million, compared to $540 million, or $24 million less.
  - FY 2019 contribution are projected to be $269 million (plus $194 million paid over 20 years) compared to $408 million (plus $194 million paid over 20 years), or $140 million less.

- Employer contributions are projected to be **$306 million** lower from FY 2018 through FY 2020.

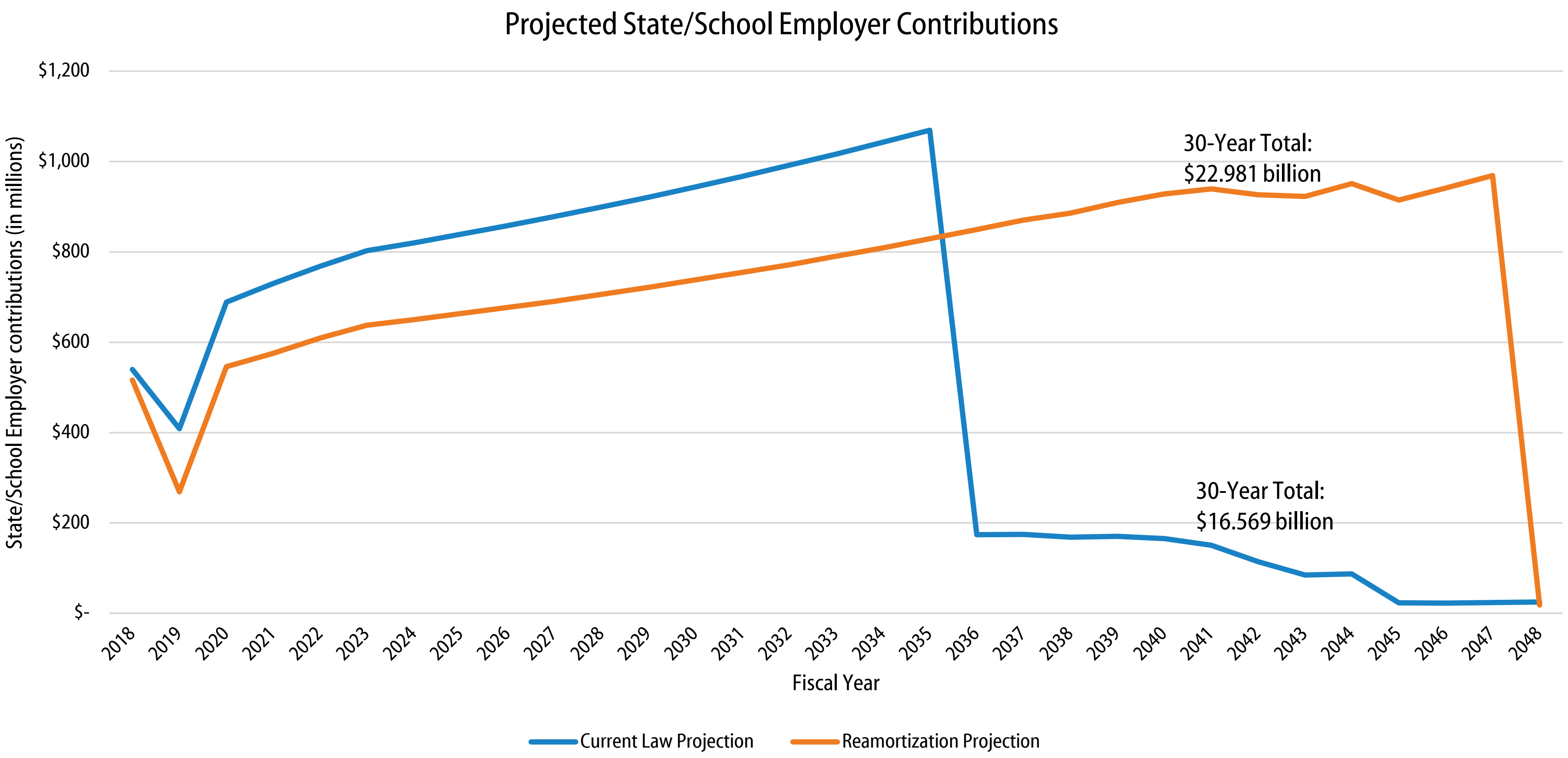
Reamortization

State/School Employer Contributions

- Long-term, employer contribution rates stay higher for an additional 14 years.
- The projected cost of the additional employer contributions is **$6.4 billion** over the 30-year projection period.

Reamortization

State/School Employer Contributions



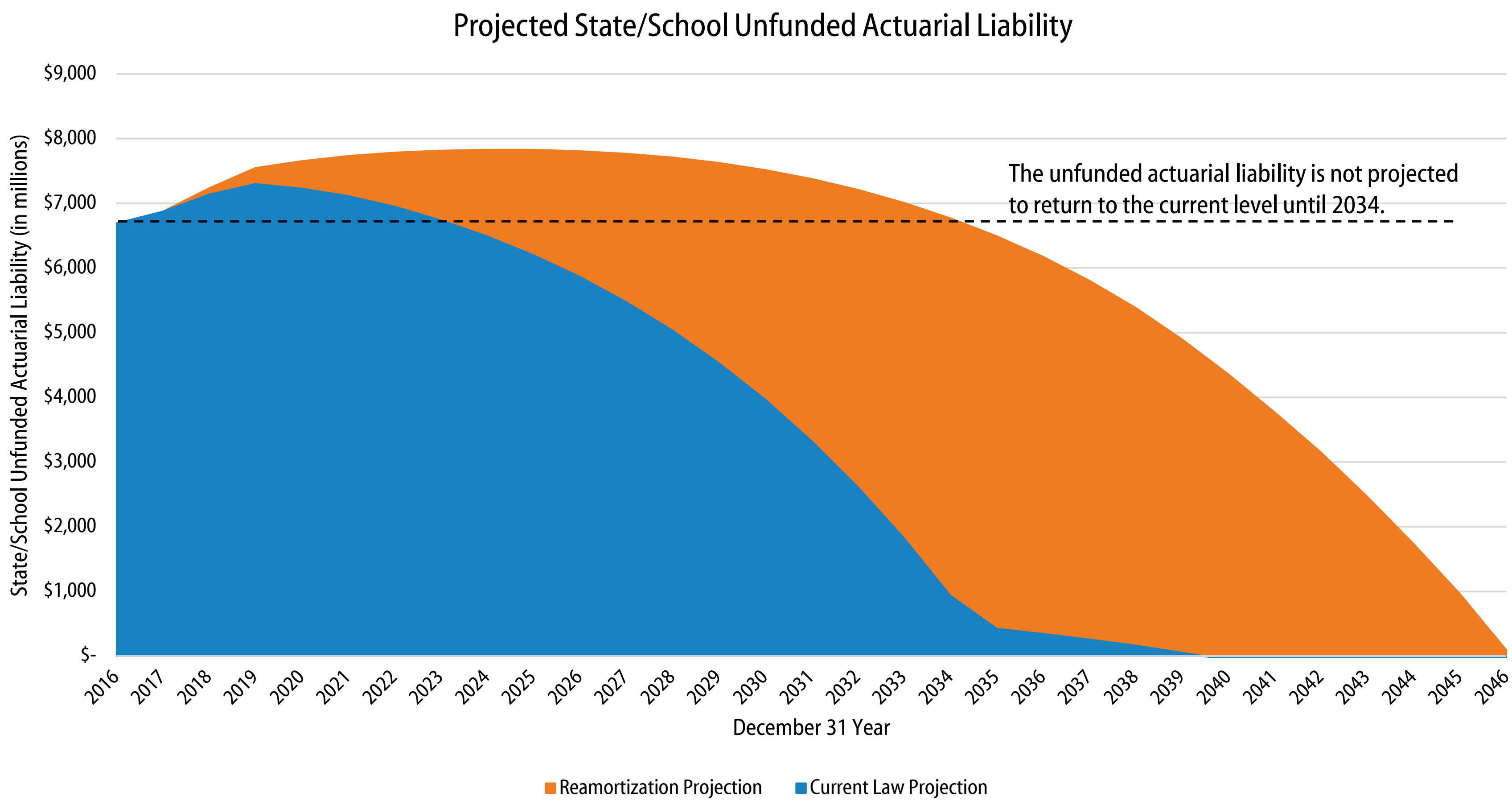
Reamortization

State/School Unfunded Actuarial Liability

- The unfunded actuarial liability of the State/School group would rise in the early years of the new 30-year period.
- The unfunded actuarial liability is projected to reach a peak of $7.8 billion under reamortization, compared to a peak of $7.3 billion under current law.
- The current unfunded liability ($6.7 billion) would be reached again under the new 30-year amortization in 2034 or 16 years from now.

Reamortization

State/School Unfunded Actuarial Liability



Reamortization

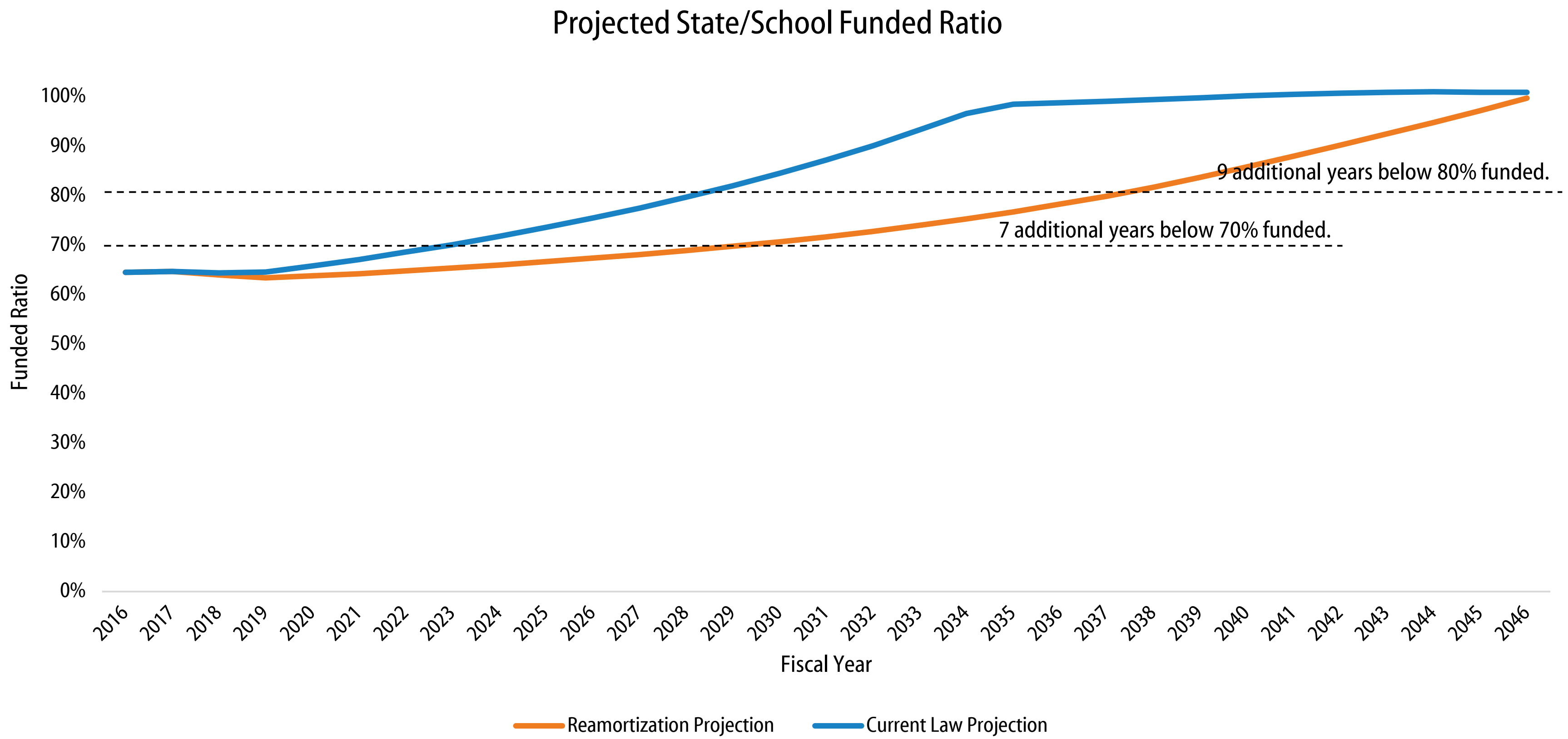
State/School Funded Ratio

- Reamortizing the legacy unfunded actuarial liability keeps KPERS funded ratio below 80% until 2038, compared to 2029 under current law.

- Lower funded ratios make the system more vulnerable to a market correction.

Reamortization

State/School Funded Ratio



Reamortization

Long-term effects

- Effect on Funding
  - The State/School employer contribution rate settles around 12% through FY 2040 before beginning to decline toward the end of the new 30-year period.
  - KPERS' funded ratio will stay in the 60% "cautionary" range for many more years (until 2030).
  - The State/School unfunded actuarial liability is projected to peak at $7.8 billion, $500 million higher than the peak unfunded actuarial liability under current law.
  - Reducing contributions affect cash flow projections and could require higher cash allocations to meet cash flow needs.
  - Reamortizing will have an affect on Government Accounting Standards Board (GASB) accounting and could increase the net pension liability reflected on accounting balance sheets of KPERS employers.

- Effect on Members
  - Current retirees (and those thinking about retiring) are not affected.
  - Employee contributions are not affected, they are fixed by statute.

Questions?