

PSPRS Funding Plan Review

Central Arizona Fire and Medical
Authority – 10.28.19

Objectives

- Common Definitions
- Actuarial Report – FY 2018 (GRS)
- Review of Funding Plan (5 Reports)
- Summary

Common Definitions

- Assumptions – Calculation parameters provided by direction of the Board of Trustees (State Level)
- Experience – Actual results of financial assumptions for the fiscal year
- Funding Objective – percentage or dollar amount set as an objective for the health and sustainability of the pension fund.

Common Definitions Cont.

- Contribution Rate – Percentage of gross payroll paid by EE and ER towards the funding objective
- Contribution Requirement – Total dollar amount paid towards the funding objective.

Common Definitions Cont.

- $C+I = PB+E$ (Contributions + Investment returns must equal Pension Benefits + Operating Expenses) Pension 101
- UAAL – Unfunded Actuarial Accrued Liability (total accrued liability – total assets) Bill to pay
- Funding Ratio – how much of the total bill is covered by assets (51.8, 49.7, 49.9%)

Common Definitions Cont.

- UAL – Unfunded Accrued Liability – sum of UAAL plus costs, minus contributions and experience. True Bill
- Amortization – period of time to pay off UAL
- Negative Amortization – total contributions are insufficient to meet funding requirements

Actuarial Report – FY 2018 GRS

- Cycle of assumptions to experience – Report FY 2018 released in December 2019 and used for FY 2020 Contributions
- Assumptions – 7.4% Investment return
3.5% payroll increase
Mortality Table
20 year amortization

Actuarial Report – FY 2018 GRS

Present Value of Future Benefits and Accrued Liability – Tier 1 & 2

	<u>June 30, 2017</u>	<u>June 30, 2018</u>
Pension		
A. Accrued Liability		
1. For retirees and beneficiaries	\$ 36,910,772	\$ 38,440,429
2. For DROP members	9,403,302	10,911,037
3. For inactive/vested members	487,645	405,898
4. For present active members		
a. Value of expected future benefit payments	44,434,152	48,158,667
b. Value of future normal costs	<u>(13,873,163)</u>	<u>(14,574,118)</u>
c. Active member accrued liability: (a) - (b)	<u>30,560,989</u>	<u>33,584,549</u>
5. Total accrued liability	77,362,708	83,341,913
B. Present Assets (Funding Value)	38,434,940	41,598,880
C. Unfunded Accrued Liability: (A.5) - (B)	38,927,768	41,743,033
D. Stabilization Reserve	<u>-</u>	<u>-</u>
E. Net Unfunded Accrued Liability: (C) + (D)	<u>\$ 38,927,768</u>	<u>\$ 41,743,033</u>
F. Funding Ratio: (B) / (A.5)	<u>49.7%</u>	<u>49.9%</u>

Actuarial Report – FY 2018 GRS

Valuation Date	June 30, 2017		June 30, 2018	
Contribution for Fiscal Year ending	2019		2020	
TIERS 1 & 2 MEMBERS				
Pension	Rate	Dollar	Rate	Dollar
Normal Cost				
Service Pension	17.82%	\$ 1,544,103	17.68%	\$ 1,526,428
Disability Pension	1.62%	140,373	1.63%	140,728
Survivors of Active Members	0.88%	76,252	0.88%	75,976
Refund of Member Accumulated Contributions	1.26%	109,179	1.28%	110,511
Total Normal Cost	21.58%	\$ 1,869,907	21.47%	\$ 1,853,643
Total Employee Cost*	(7.65%)	\$ (662,872)	(7.65%)	\$ (660,474)
Employer Normal Cost	13.93%	1,207,034	13.82%	1,193,169
Employer Amortization of Unfunded Liabilities (Legacy)	35.17%	3,047,480	34.35%	3,176,885
Total Employer Cost (Pension)	49.10%	\$ 4,254,514	48.17%	\$ 4,370,054

* Tier 2 Members contribute 11.65%, but statutory requirements dictate only 7.65% is applied toward employer costs.

Actuarial Report – FY 2018 GRS

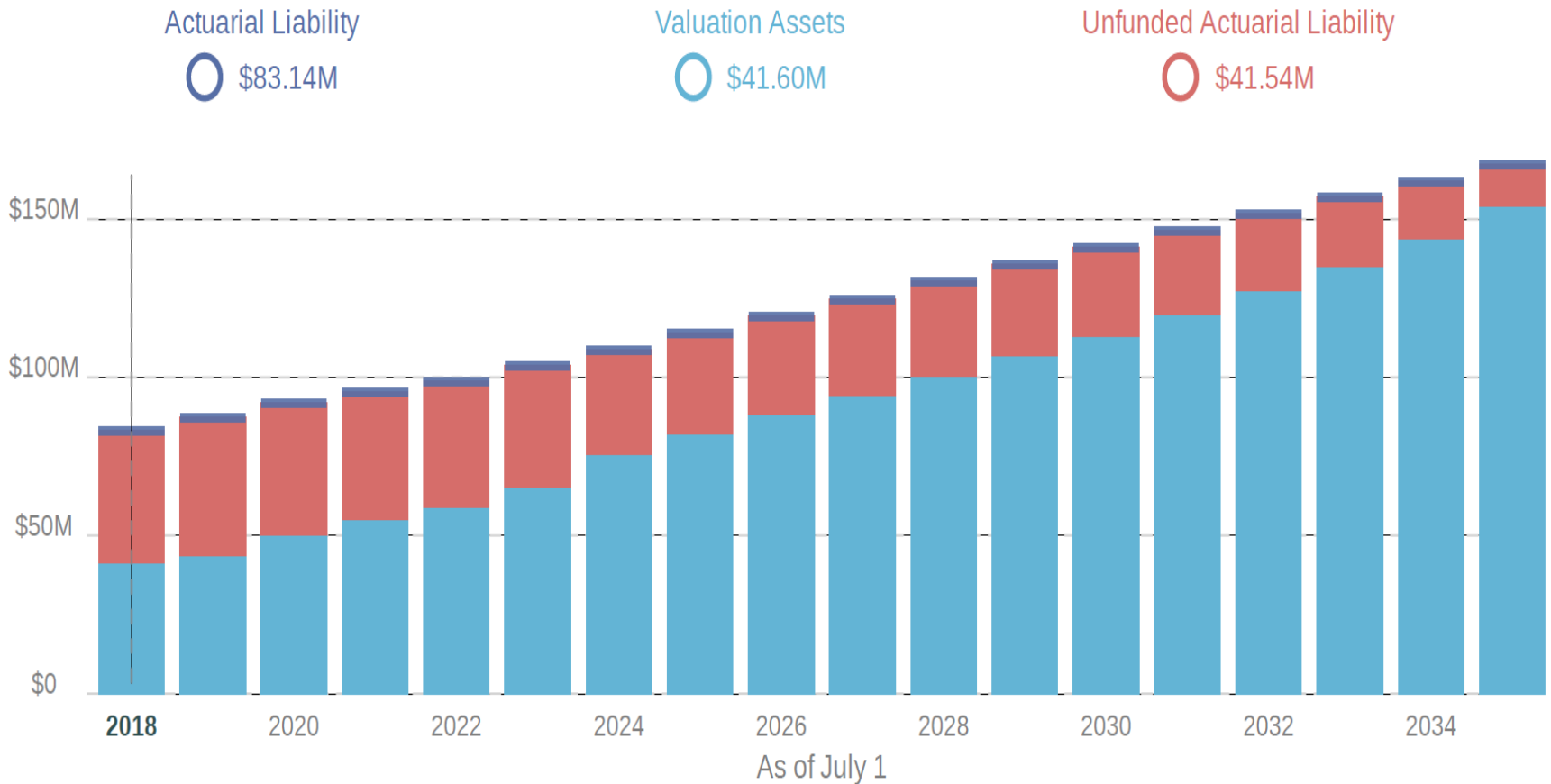
Pension Contribution Projection

<u>Fiscal Year Ending June 30</u>	<u>Contribution Rate</u>	<u>Contribution Amount (Estimate)</u>
2020	48.15 %	\$ 4,434,211
2021	47.95	4,675,076
2022	48.04	4,847,786
2023	48.35	5,049,836
2024	48.50	5,242,795
2025	48.27	5,400,560
2026	48.26	5,588,422
2027	48.26	5,784,016
2028	48.27	5,987,697
2029	48.29	6,199,835
2030	48.33	6,422,144

Contribution Amount estimated based on June 30, 2018 valuation data, methods, and assumptions, including 7.40% investment return and 3.50% payroll growth. Future years incorporated emerging Tier 3 normal cost.

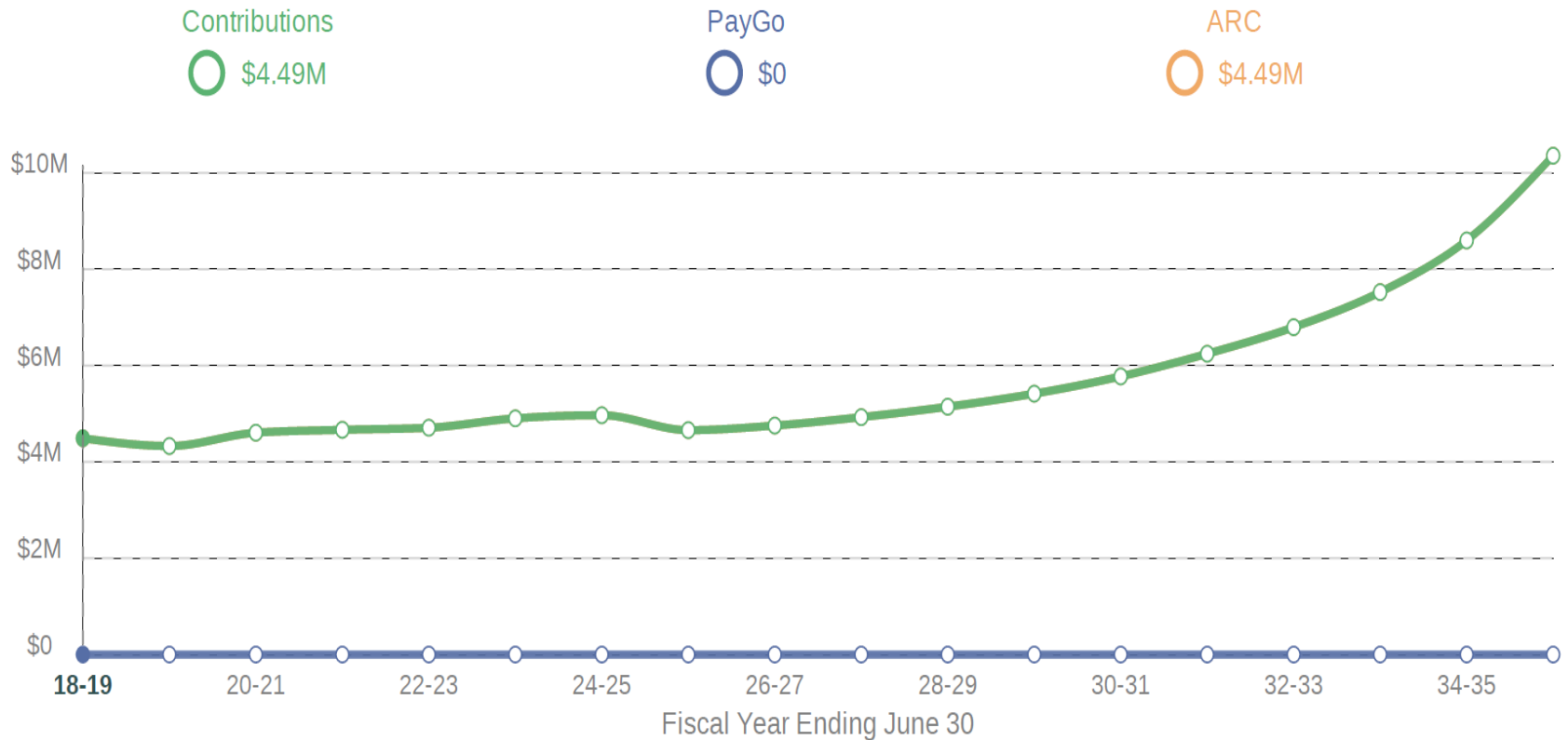
Review of Funding Plan

Unfunded Actuarial Liability



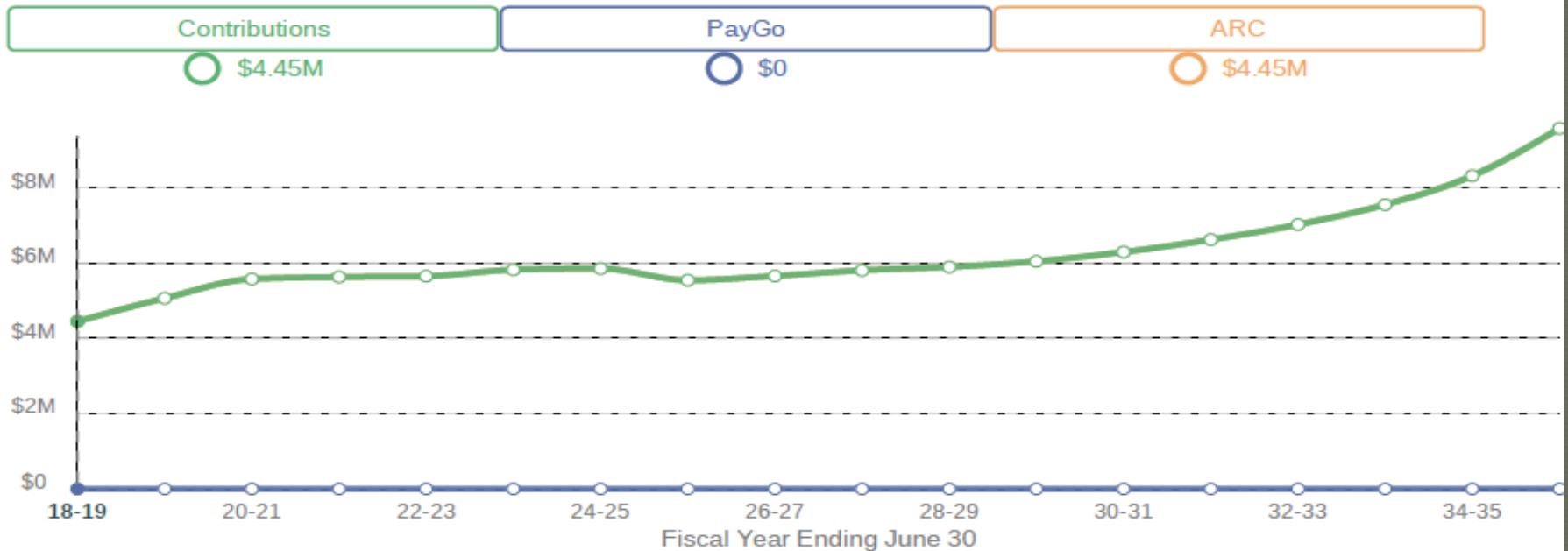
Review of Funding Plan

Contribution Comparison



Review of Funding Plan

Contribution Comparison



Parameters

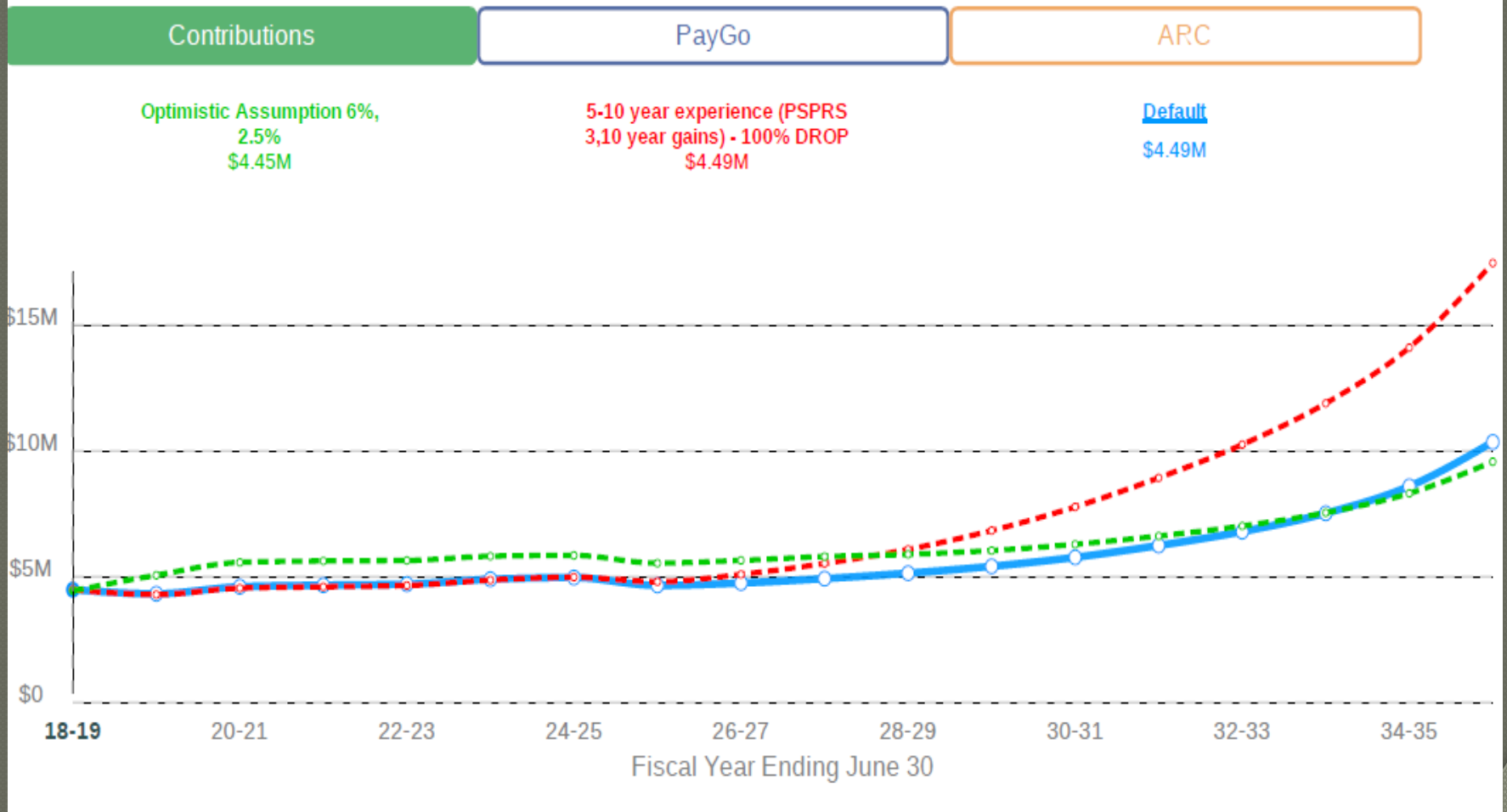
Global Adjustments

- Discount Rate (%) : 2018:6, 2019:6, 2020:6, 2021:6, 2022:6, 2023:6, 2024:6, 2025:6, 2026:6, 2027:6, 2028:6, 2029:6, 2030:6, 2031:6, 2032:6, 2033:6, 2034:6, 2035:6, 2036:6, 2037:6, 2038:6, 2039:6, 2040:6, 2041:6, 2042:6, 2043:6, 2044:6, 2045:6, 2046:6, 2047:6,
- Wage Growth (%) : 2018:2.5, 2019:2.5, 2020:2.5, 2021:2.5, 2022:2.5, 2023:2.5, 2024:2.5, 2025:2.5, 2026:2.5, 2027:2.5, 2028:2.5, 2029:2.5, 2030:2.5, 2031:2.5, 2032:2.5, 2033:2.5, 2034:2.5, 2035:2.5, 2036:2.5, 2037:2.5, 2038:2.5, 2039:2.5, 2040:2.5, 2041:2.5, 2042:2.5, 2043:2.5, 2044:2.5, 2045:2.5, 2046:2.5, 2047:2.5,
- Overtime Pay (%) : 2018:0, 2019:0, 2020:0, 2021:0, 2022:0, 2023:0, 2024:0, 2025:0, 2026:0, 2027:0, 2028:0, 2029:0, 2030:0, 2031:0, 2032:0, 2033:0, 2034:0, 2035:0, 2036:0, 2037:0, 2038:0, 2039:0, 2040:0, 2041:0, 2042:0, 2043:0, 2044:0, 2045:0, 2046:0, 2047:0,

Information projected to future years assuming experience matches default demographic and economic assumptions, with the following changes:

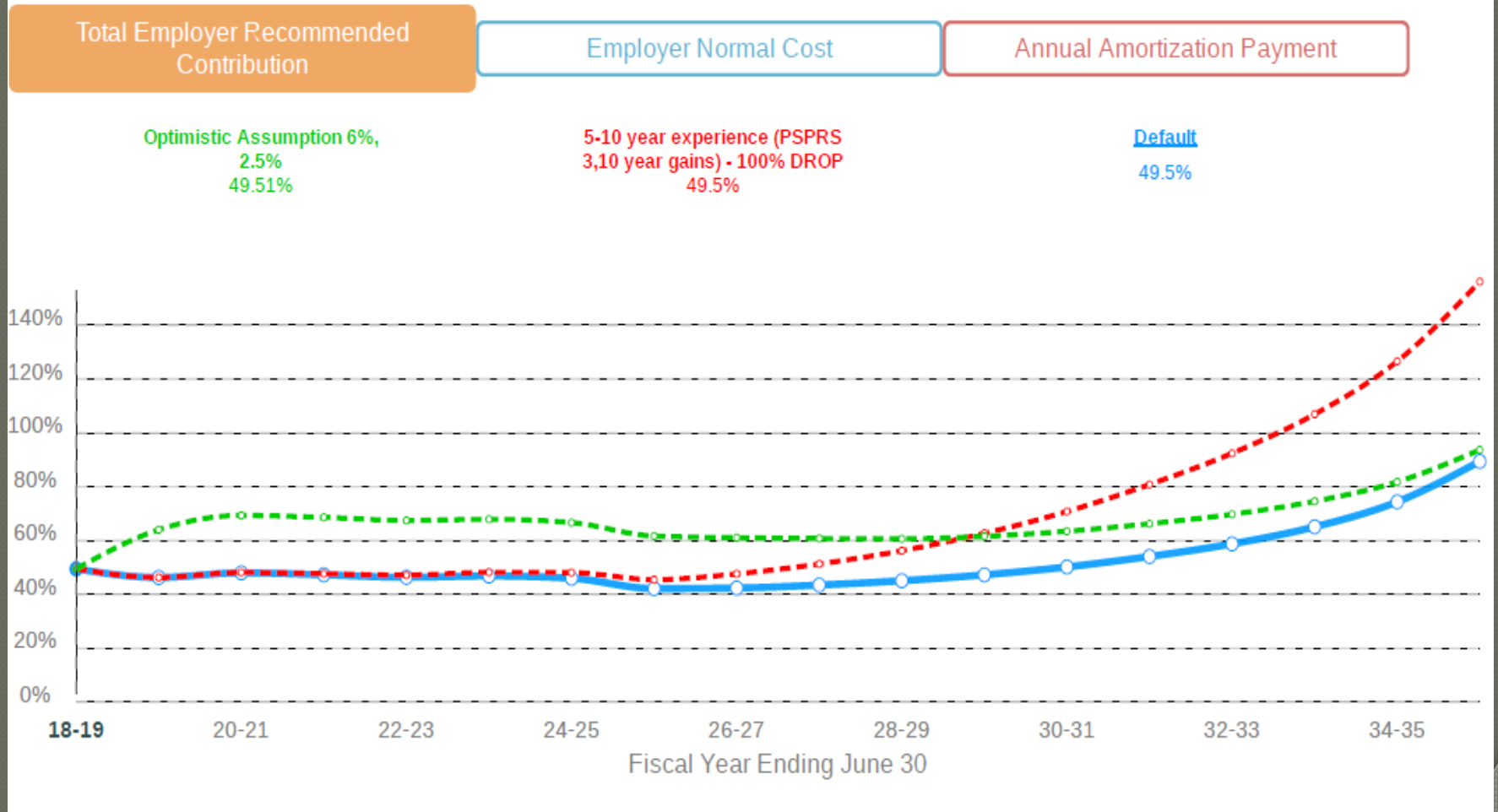
Review of Funding Plan

Contribution Comparison



Review of Funding Plan

Actuarial Recommended Contribution - Percent of Pay



Summary

- The PSPRS Funding Plan is not viable
- Changes to Assumed Earnings, Payroll Increases, and amortization (mortality)
- Additional funding will be required

Summary Continued

- ◉ Schedule workshop
- ◉ Discuss funding challenges
- ◉ Discuss alternative funding sources
- ◉ Discuss legislative options
- ◉ Develop new funding plan for the future