**Updated Pension Projections
Preliminary Investment Returns**

San Jose Police and Fire Department
Retirement Plan

August 5, 2021

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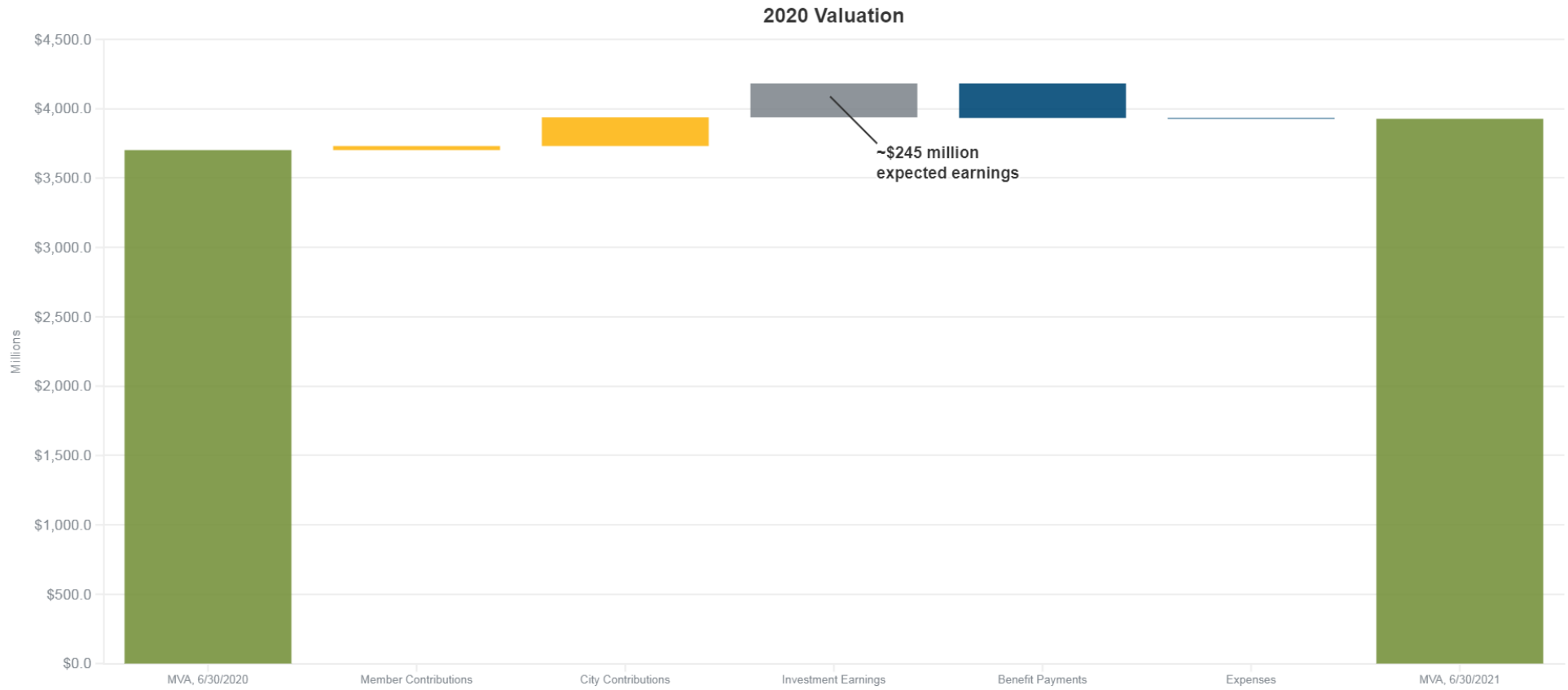
**Preliminary Pension Return = 25.25%**

**Changes Projected Funded Status**
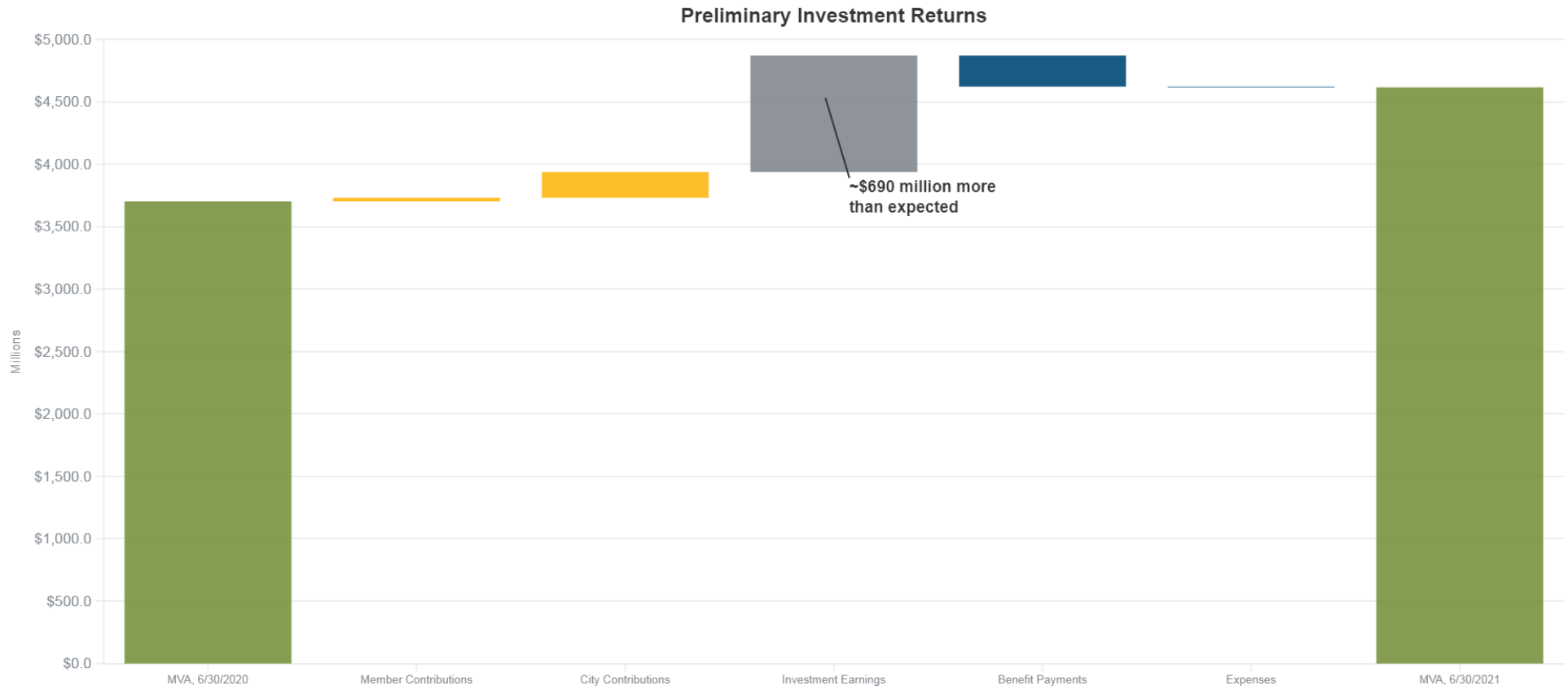
**Changes Projected Contributions**

Based on an expected return of **6.625%**, assets were **expected** to grow from $3.7 billion as of June 30, 2020 to **$3.9 billion as of June 30, 2021**



**2020 Valuation**

~$245 million expected earnings

Preliminary investment returns of **25.25%** have increased the projected assets as of 6/30/2021 to **$4.6 billion** - an increase of about $690 million above expectation

## Preliminary Investment Returns

~$690 million more
than expected

Millions

| | MVA, 6/30/2020 | Member Contributions | City Contributions | Investment Earnings | Benefit Payments | Expenses | MVA, 6/30/2021 |

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## Projected Funded Status

**2020 Valuation**



- Expected MVA
- Market Value of Assets
- Unfunded Actuarial Liability or (Surplus)

Based on the preliminary earnings, we now estimate the plan to be 85% funded

## Projected Funded Status

**Preliminary Investment Earnings**



Legend: Expected MVA | Market Value of Assets | Unfunded Actuarial Liability or (Surplus)
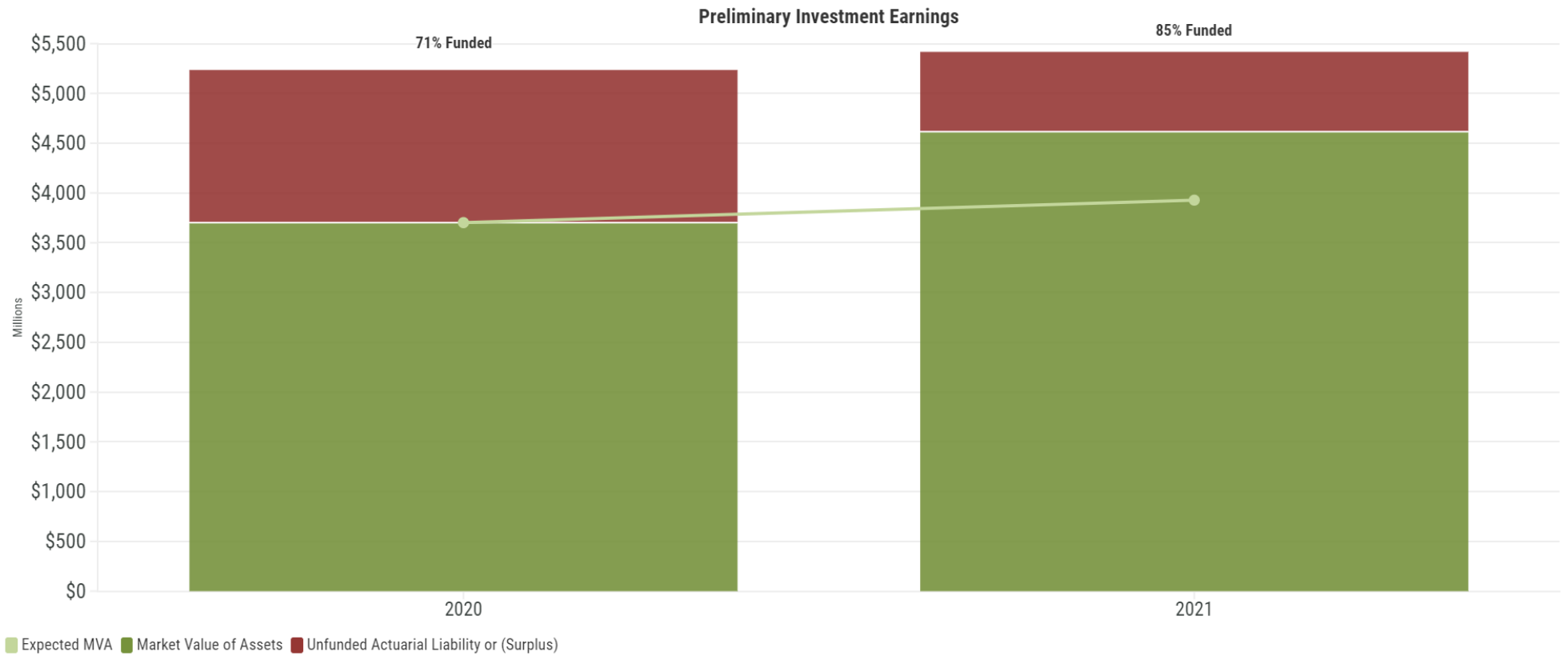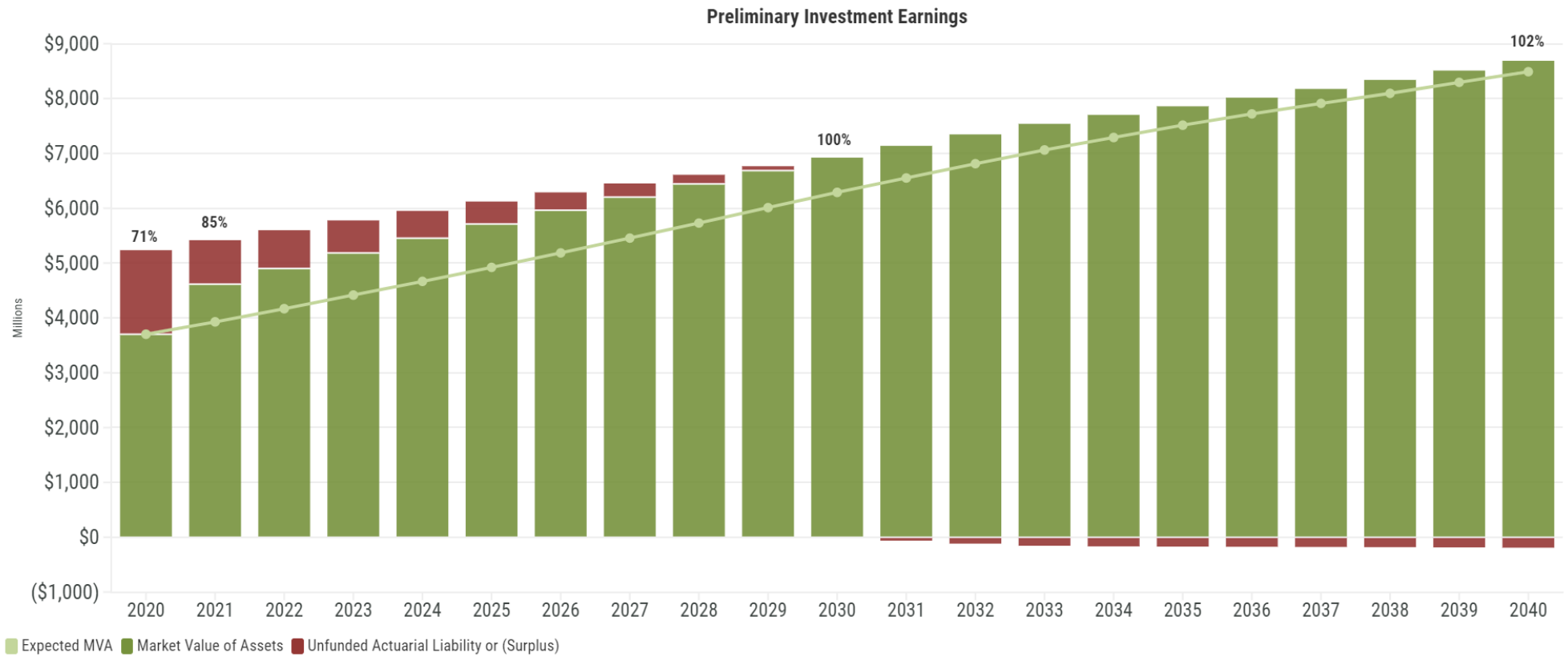
And the plan is now projected to reach 100% funding in 2030 - nine years earlier than the 2020 valuation projections

## Projected Funded Status



Preliminary Investment Earnings

Legend: Expected MVA · Market Value of Assets · Unfunded Actuarial Liability or (Surplus)

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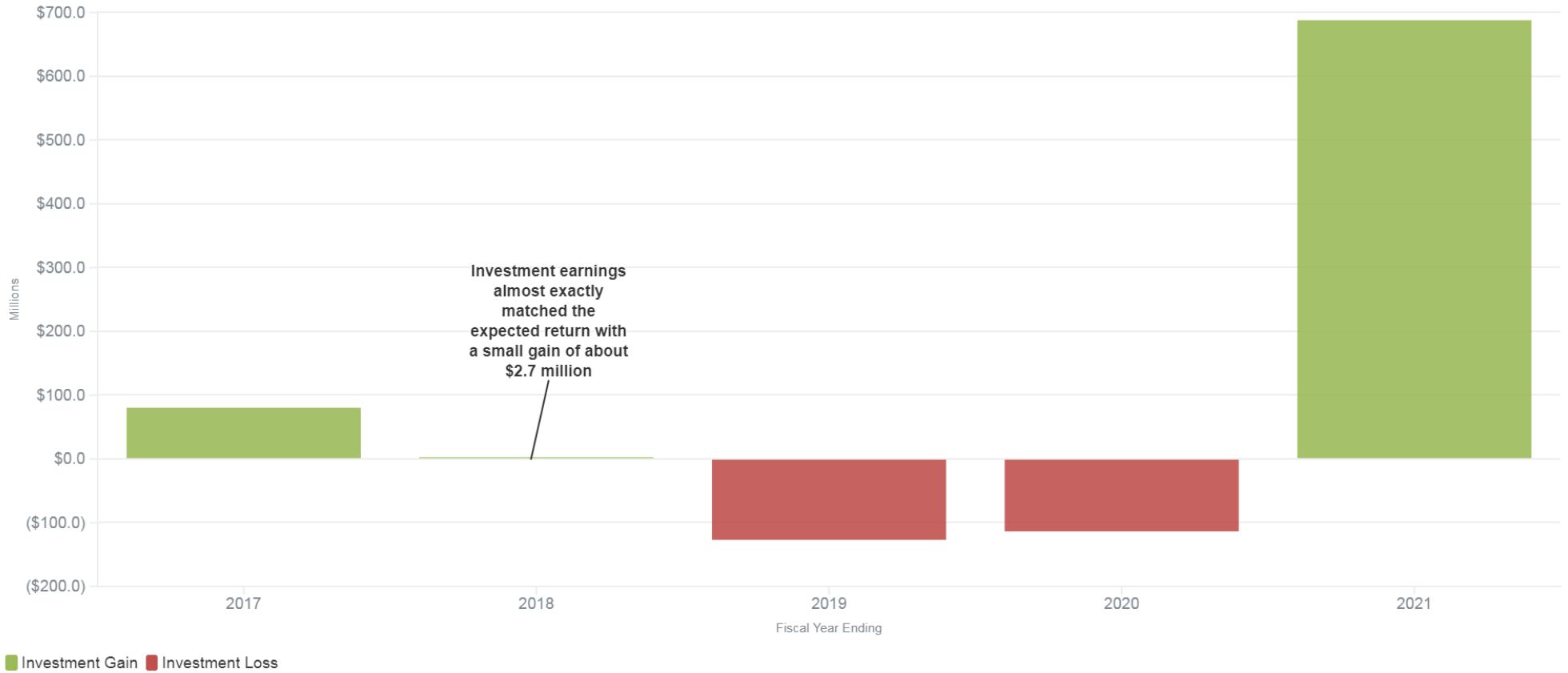
Contributions are based on the **actuarial value of assets** instead of the market value of assets. The actuarial value smooths investment gains and losses over 5 years.

## Investment Gains and Losses



Investment earnings almost exactly matched the expected return with a small gain of about $2.7 million

Millions

Fiscal Year Ending

■ Investment Gain ■ Investment Loss

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20% of the gain or loss is recognized each year for 5 years

## Deferred Investment Returns



Recognized Gain | Deferred Gain | Recognized Loss | Deferred Loss
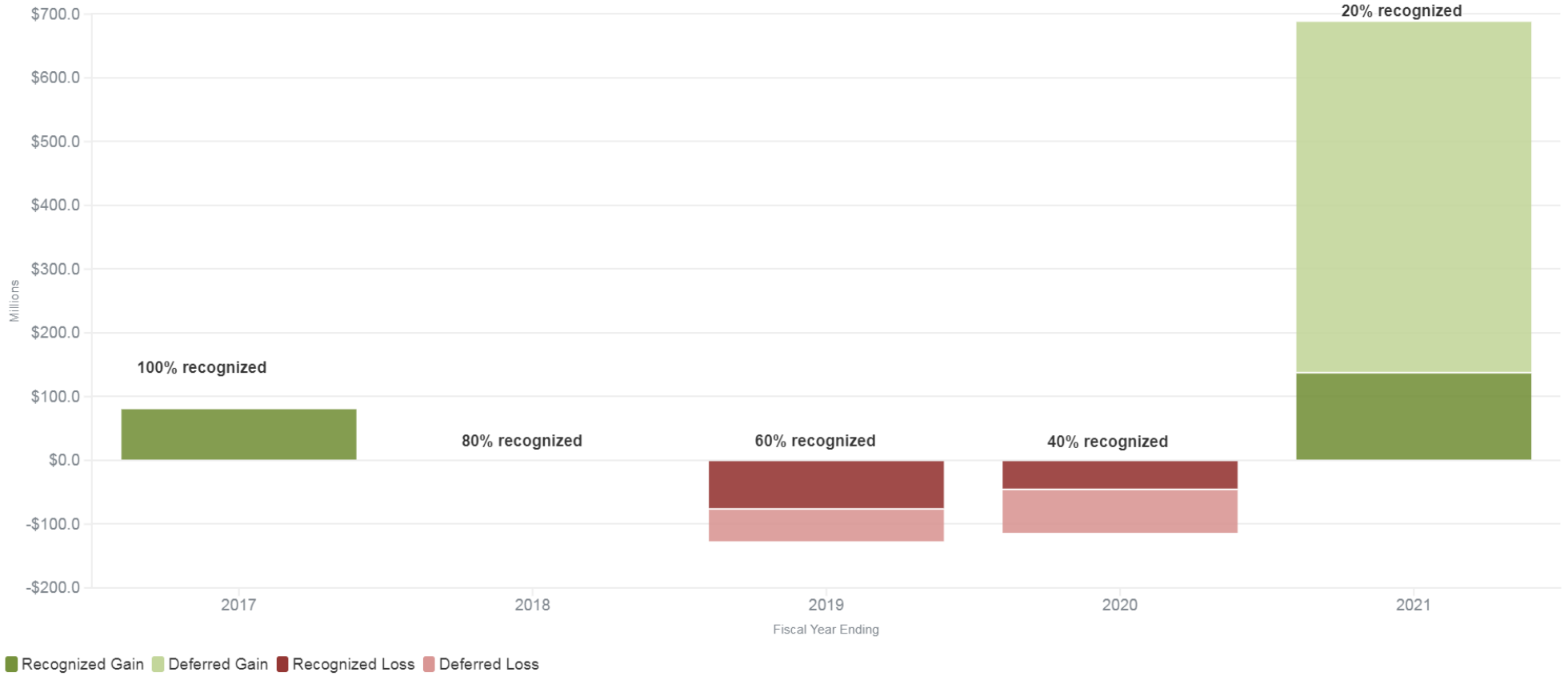
The remaining deferred losses are added to the market value and the deferred gains are subtracted from the market value to get the actuarial value of assets

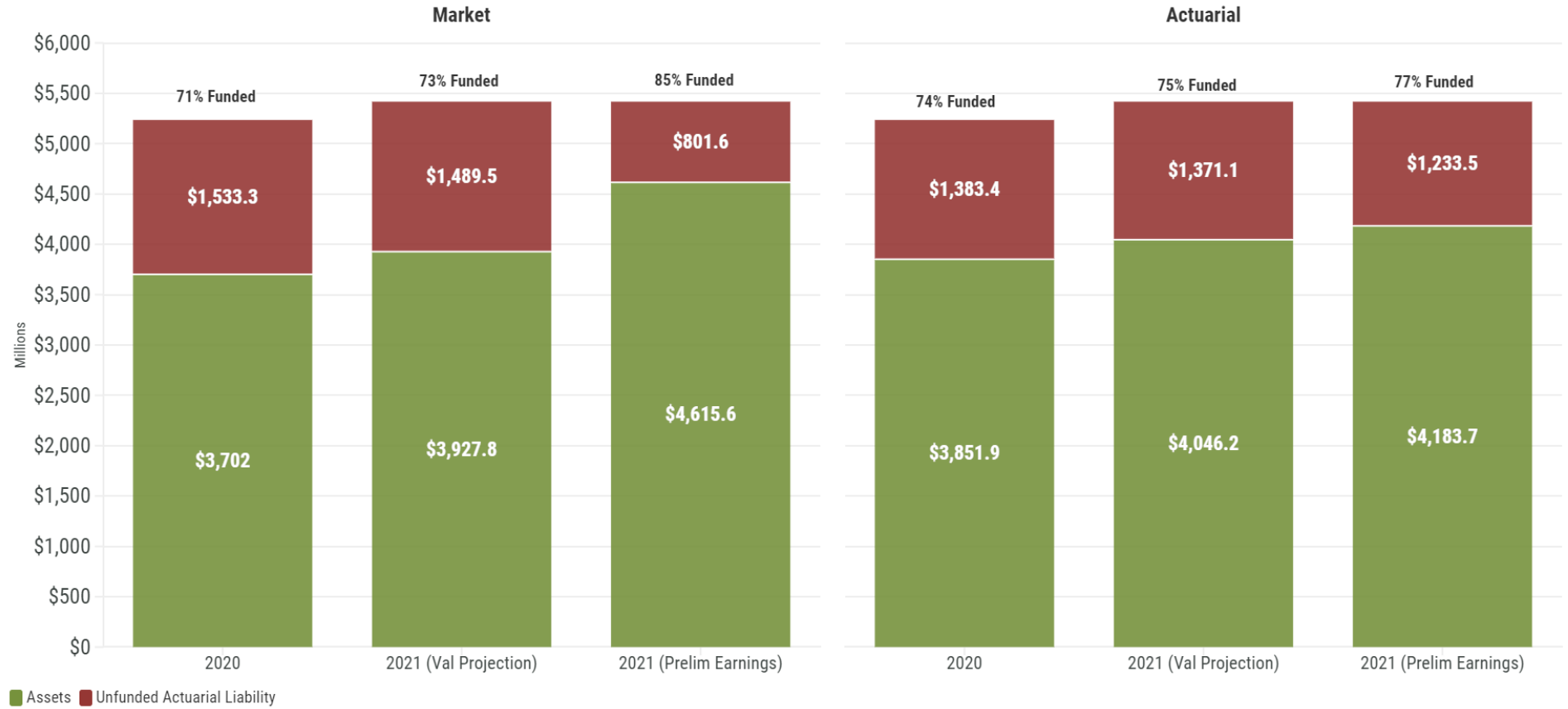## Market to Actuarial Value



| | | | |
|---|---|---|---|
| $4,615.6 | $119.0 | ($550.8) | $4,183.7 |
| Market Value of Assets | Deferred Loss | Deferred Gain | Actuarial Value of Assets |

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While the plan is estimated to be 85% funded based on the market value of assets, it is only estimated to be 77% funded based on the actuarial value of assets. The contributions calculated for the fiscal year ending 2023 are based on the 77% funded status and an estimated UAL of $1.2 billion. If future returns match expectations, the actuarial value will increase to equal the market value in four years.

## Funded Status

### Market

| | 2020 | 2021 (Val Projection) | 2021 (Prelim Earnings) |
|---|---|---|---|
| Funded % | 71% Funded | 73% Funded | 85% Funded |
| Unfunded Actuarial Liability | $1,533.3 | $1,489.5 | $801.6 |
| Assets | $3,702 | $3,927.8 | $4,615.6 |

### Actuarial

| | 2020 | 2021 (Val Projection) | 2021 (Prelim Earnings) |
|---|---|---|---|
| Funded % | 74% Funded | 75% Funded | 77% Funded |
| Unfunded Actuarial Liability | $1,383.4 | $1,371.1 | $1,233.5 |
| Assets | $3,851.9 | $4,046.2 | $4,183.7 |

Legend: ■ Assets ■ Unfunded Actuarial Liability

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The City contribution for FYE 2022 is $216.9 million (87.4% of pay) and was expected to increase for FYE 2023 to $223.5 million (87.5% of pay). With the preliminary investment earnings, the City's contribution is now expected to decrease for FYE 2023 to $210.2 million (82.3% of pay)

## Employer Contribution Amounts

| Police Tier 1 | Fire Tier 1 | Police Tier 2 | Fire Tier 2 | **Total** |



**2020 Valuation**

**Preliminary Investment Earnings**

Legend: 2020 Projection · Normal Cost · UAL

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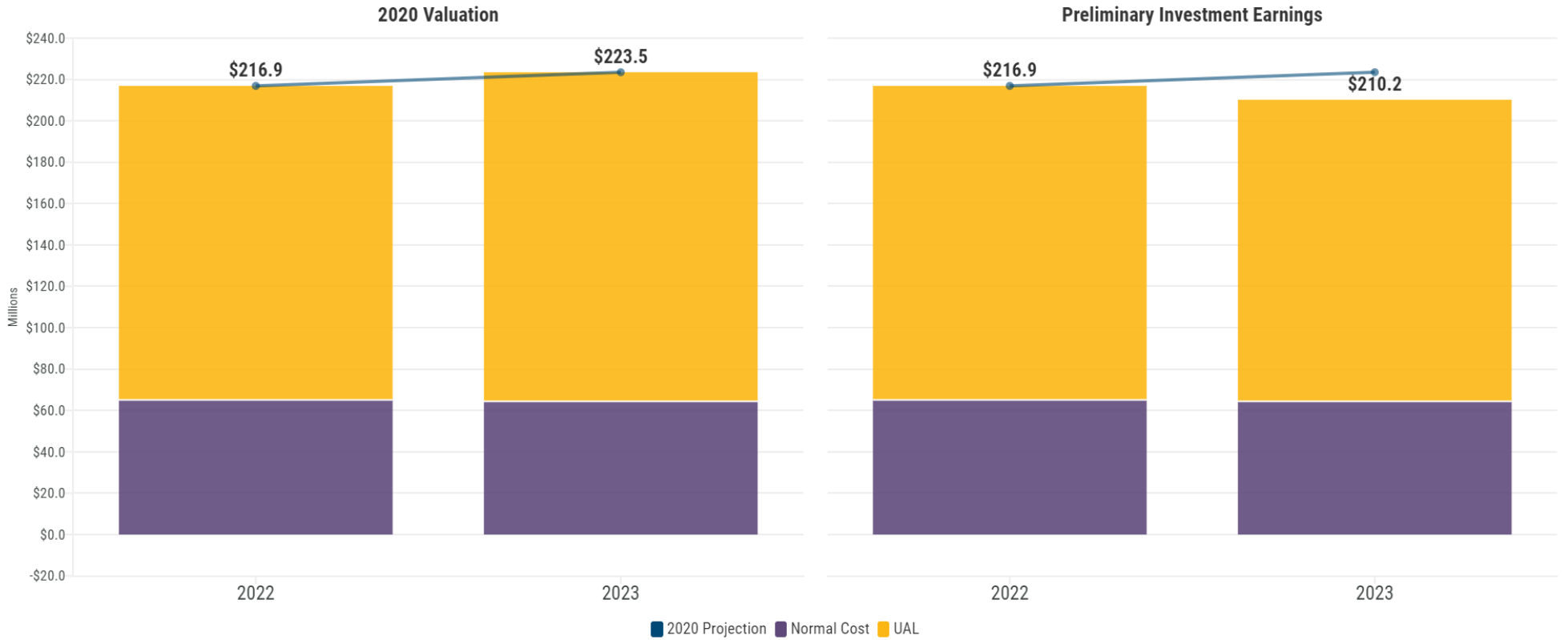
As the 2021 investment gains are recognized in the actuarial value of assets, the projected decrease in City contributions becomes more significant, reaching $78.3 million in 2027 when the gain is fully recognized. The projected decrease peaks at almost $92 million in 2035

## Projected City Contributions
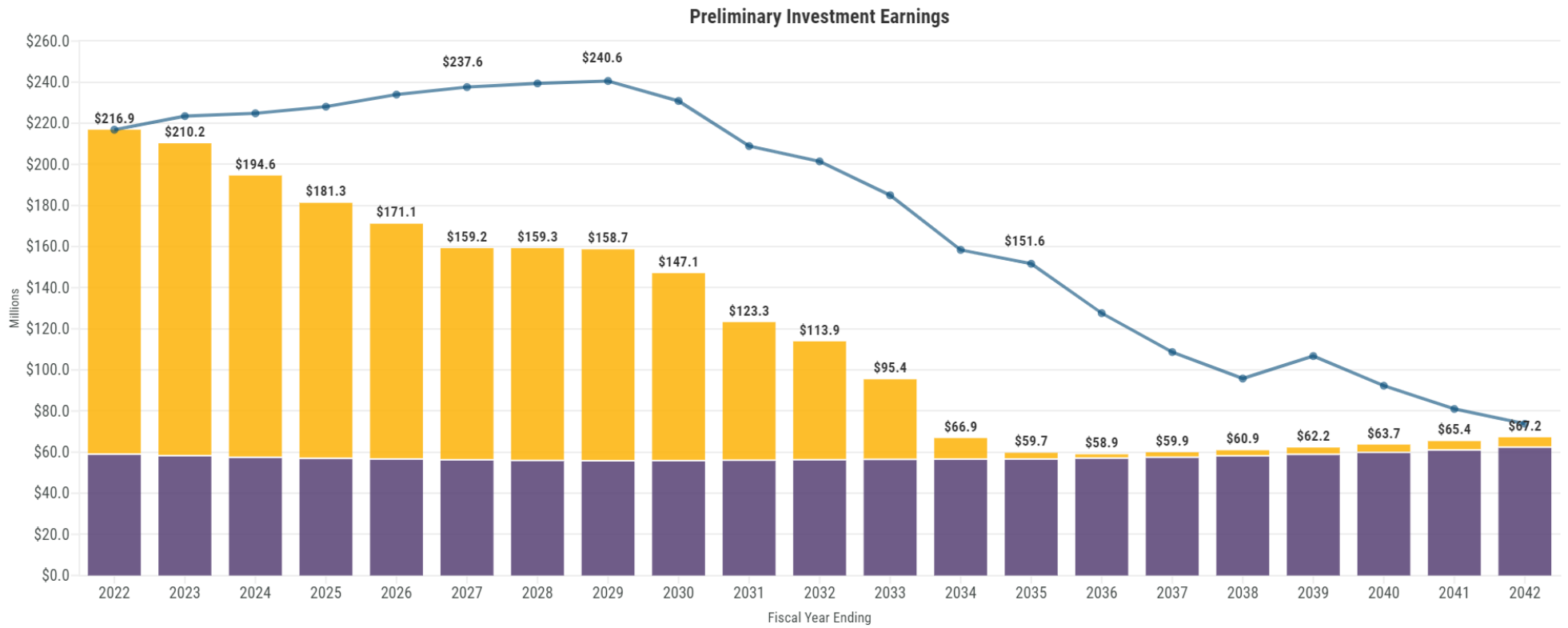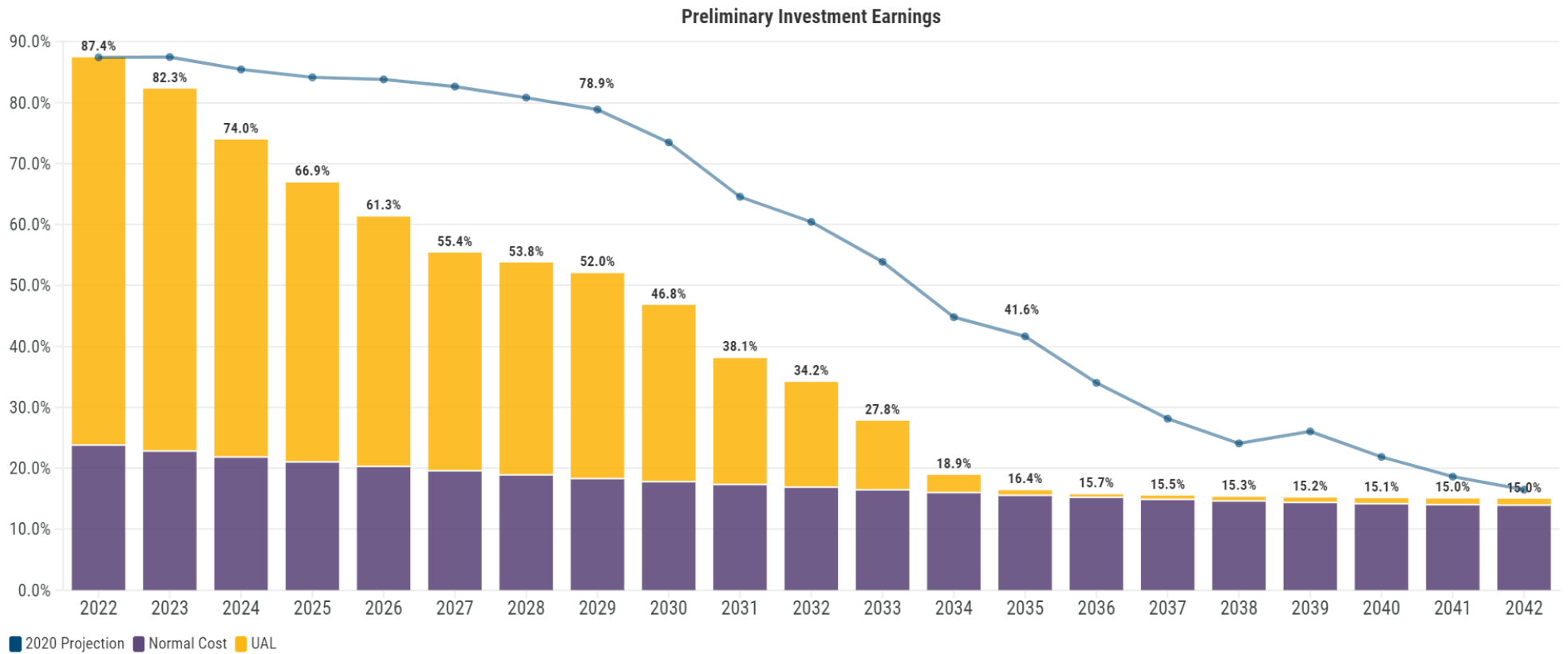


Preliminary Investment Earnings

As a percentage of payroll, City contributions had been projected to gradually decrease until 2029 when the decrease became more rapid. Based on the preliminary investment earnings, we now project a rapid decline over the next 5 years if all assumptions are met in the future, including a 6.625% annual return

## Projected City Contributions

**Preliminary Investment Earnings**



Legend: ■ 2020 Projection ■ Normal Cost ■ UAL

Data labels (UAL line, by year):
- 2022: 87.4%
- 2023: 82.3%
- 2024: 74.0%
- 2025: 66.9%
- 2026: 61.3%
- 2027: 55.4%
- 2028: 53.8%
- 2029: 52.0%
- 2030: 46.8%
- 2031: 38.1%
- 2032: 34.2%
- 2033: 27.8%
- 2034: 18.9%
- 2035: 16.4%
- 2036: 15.7%
- 2037: 15.5%
- 2038: 15.3%
- 2039: 15.2%
- 2040: 15.1%
- 2041: 15.0%
- 2042: 15.0%

2020 Projection line labels: 78.9%, 41.6%

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Preliminary pension return = 25.25%

~85% funded on market value of assets

Significant reductions in contributions expected over next five years

Projections will change when final asset information is available, any new assumptions are adopted, and new census data is valued

# Certification

The purpose of this presentation is to update the Board of Administration for the San José Police and Fire Department Retirement Plan for the estimated impact of FYE 2021 investment returns on the plan's funded status and projections of future contributions.

In preparing our presentation, we relied on information (some oral and some written) supplied by the San José Office of Retirement Services. 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. The data and actuarial assumptions used (unless modified within this communication) are described in our June 30, 2020 actuarial valuation report.

Future projections may differ significantly from the projections presented in this presentation due to such factors as the following: plan experience different from that anticipated by the assumptions; changes in assumptions; and changes in plan provisions or applicable law.

Cheiron utilizes ProVal actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate liabilities and project benefit payments. We have relied on WinTech as the developer of ProVal. We have a basic understanding of ProVal and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this valuation.

Deterministic and stochastic projections in this presentation were developed using R-scan, a proprietary tool used to illustrate the impact of changes in assumptions, methods, plan provisions, or actual experience (particularly investment experience) on the future financial status of the Plan. R-scan uses standard roll-forward techniques that implicitly assume a stable active population. Because R-scan does not automatically capture how changes in one variable affect all other variables, some scenarios may not be consistent.

To the best of our knowledge, this presentation and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices which 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 José Police and Fire Retirement Board for the purposes 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 any other user.

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