Amortization Policy

San Jose Police & Fire Department Retirement Plan

September 9, 2021

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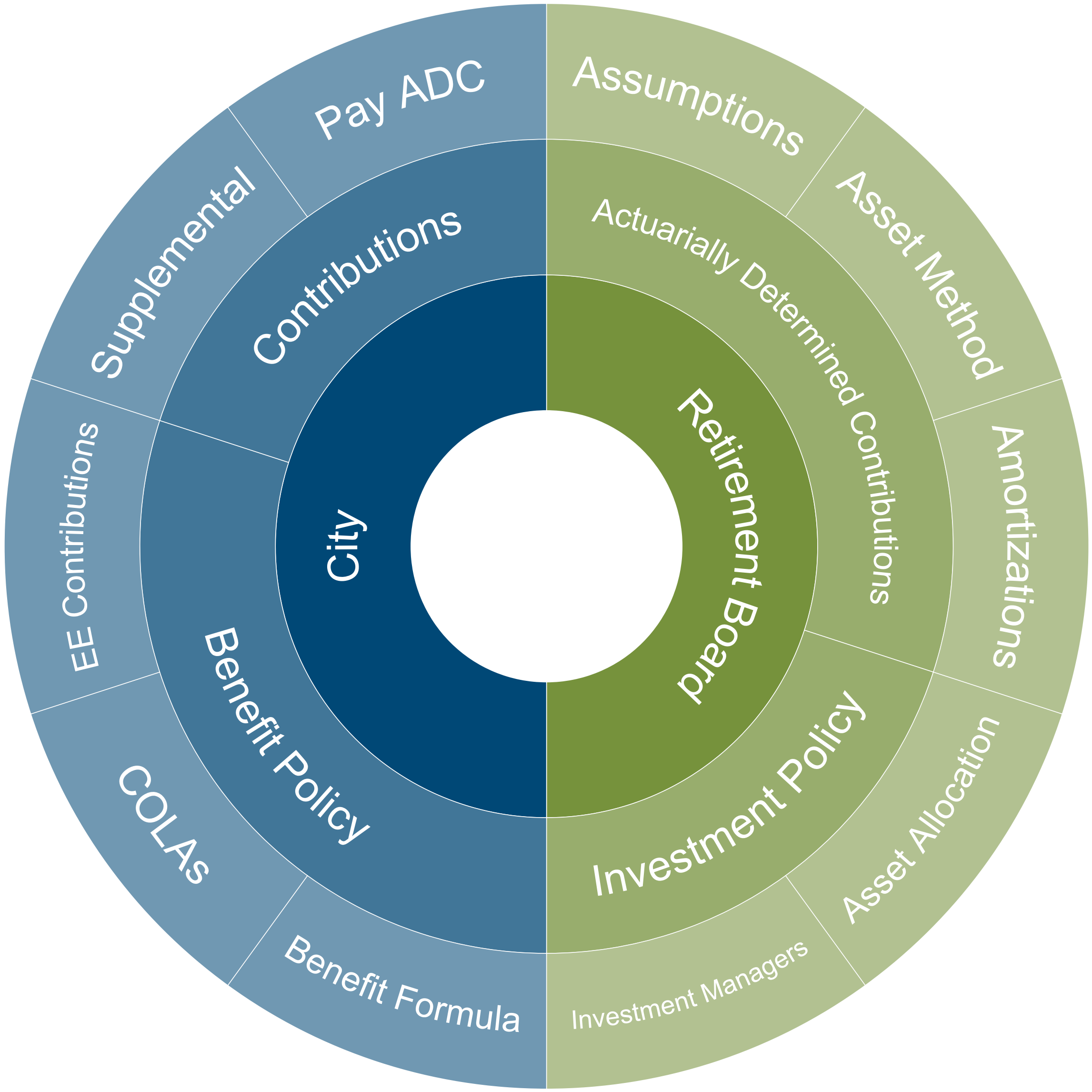
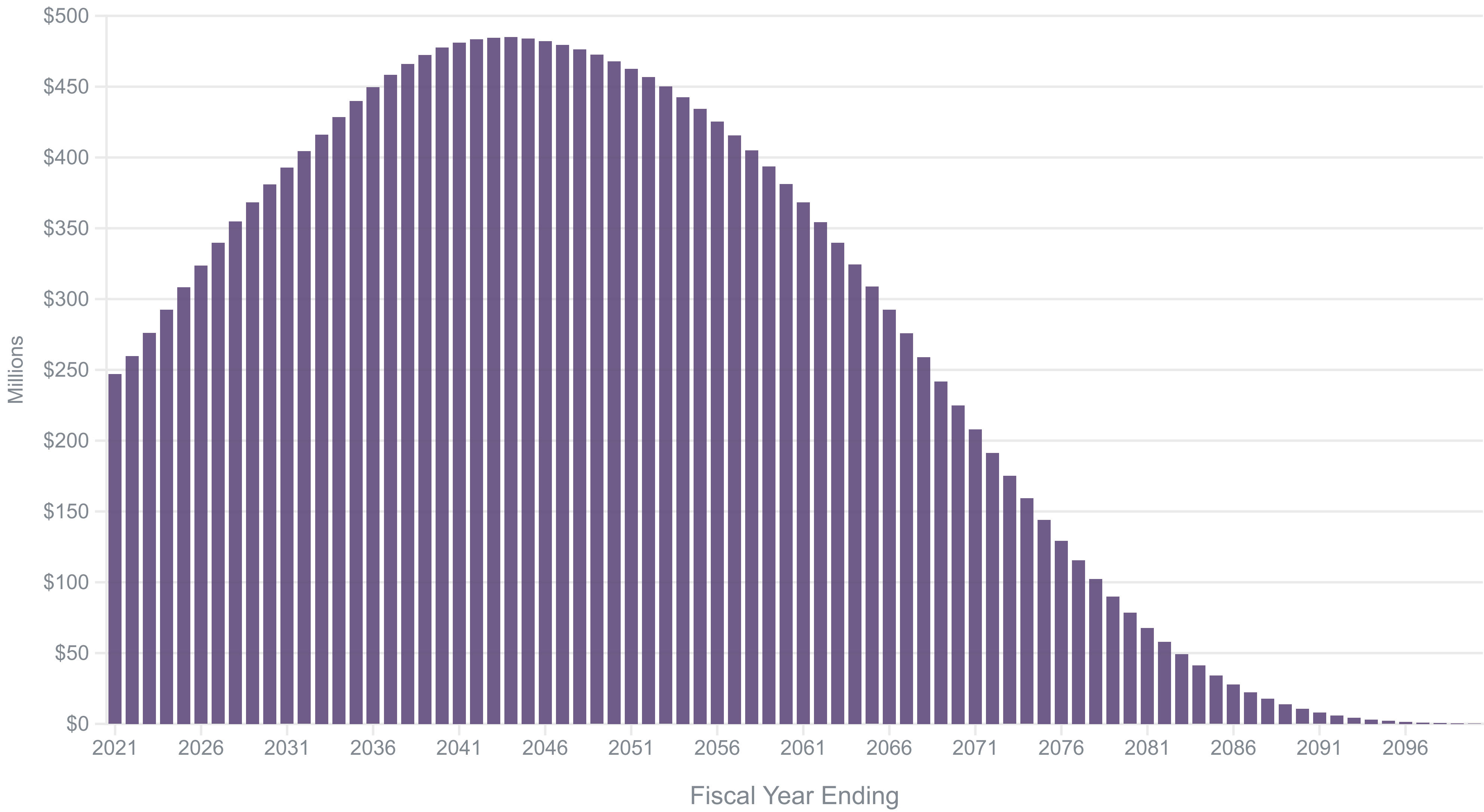
The City and Retirement Boards have independent responsibilities related the pension plans. If the City decides to issue a POB and contribute the proceeds to the retirement plan, the Retirement Board would need to decide how to invest the assets and how the additional assets would affect the Actuarially Determined Contribution (ADC). For this discussion, we are going to focus on the potential impact to the ADC.



Developing an Amortization Policy

Based on the plan provisions, census data, and actuarial assumptions, we develop a projection of the future benefit payments to be paid to the current members of the plan

Projected Benefit Payments



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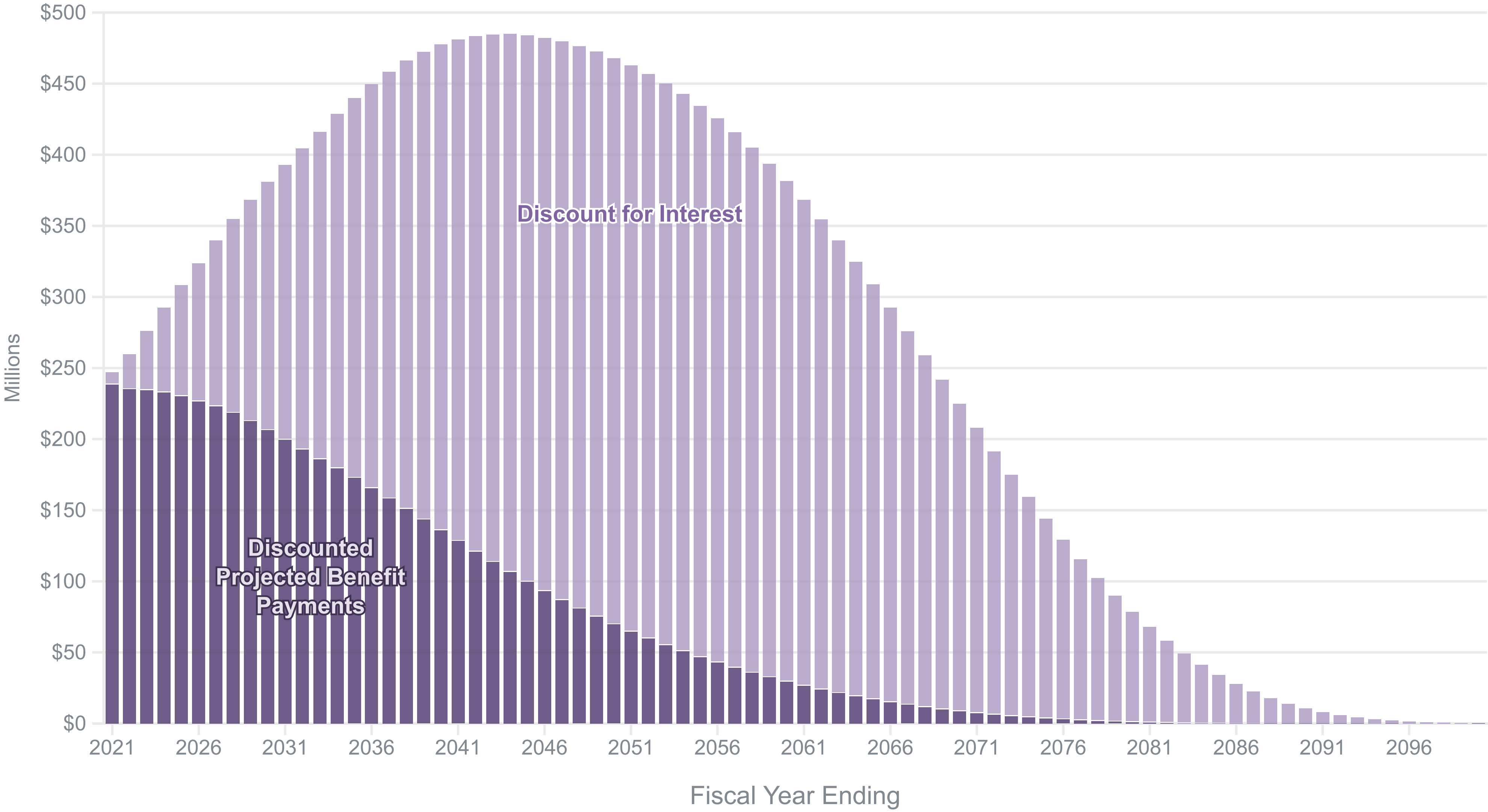
The future benefit payments are discounted using the expected rate of return. This gives us the amount of assets needed today to make all of the projected benefit payments **IF the assets earn the assumed rate of return and all other assumptions are met**

Projected Benefit Payments



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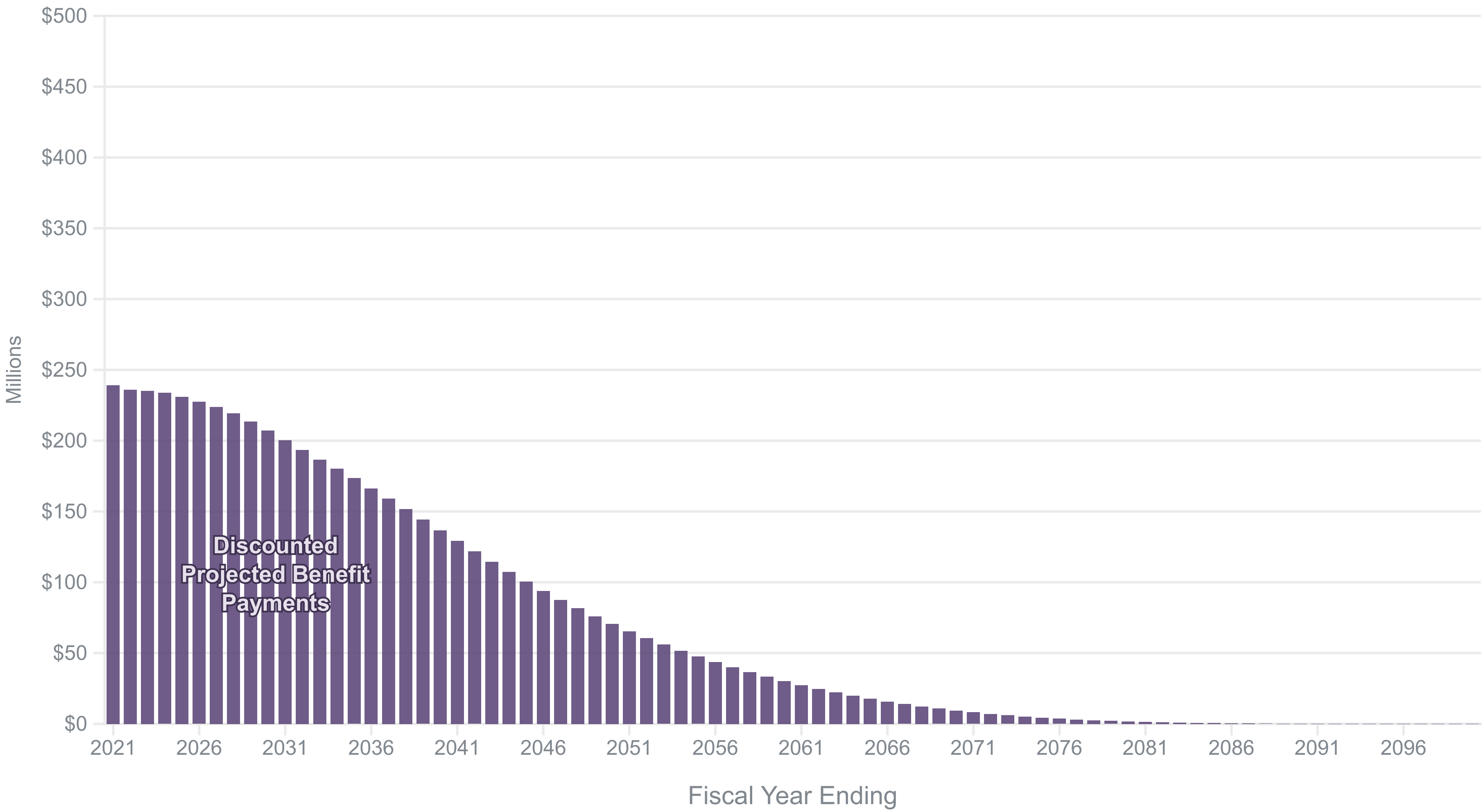
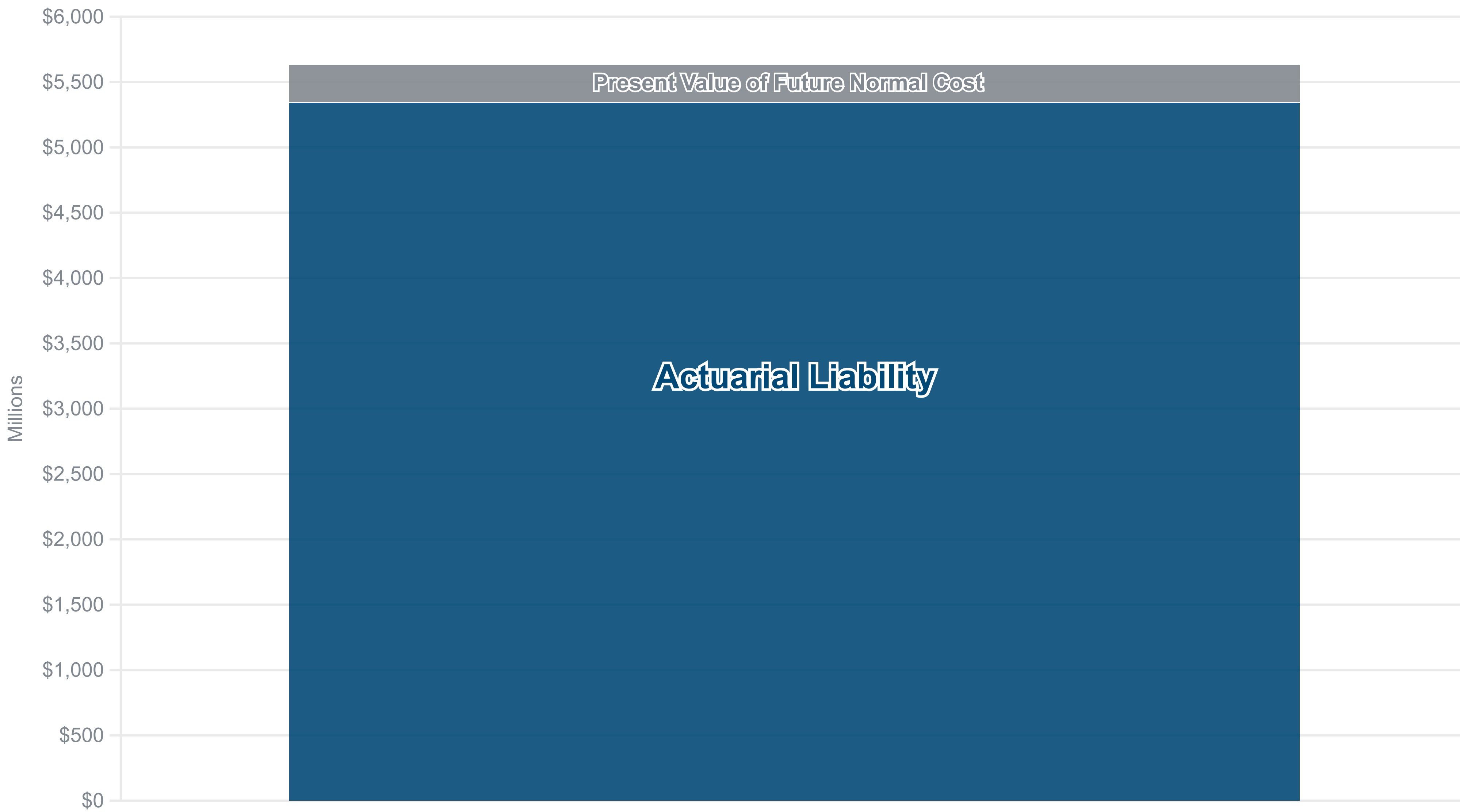
We remove the interest and add up the discounted projected benefit payments. Higher or lower expected returns do not change the projected benefit payments. The expected return just affects the amount of interest subtracted to get the discounted projected benefit payments.

Projected Benefit Payments

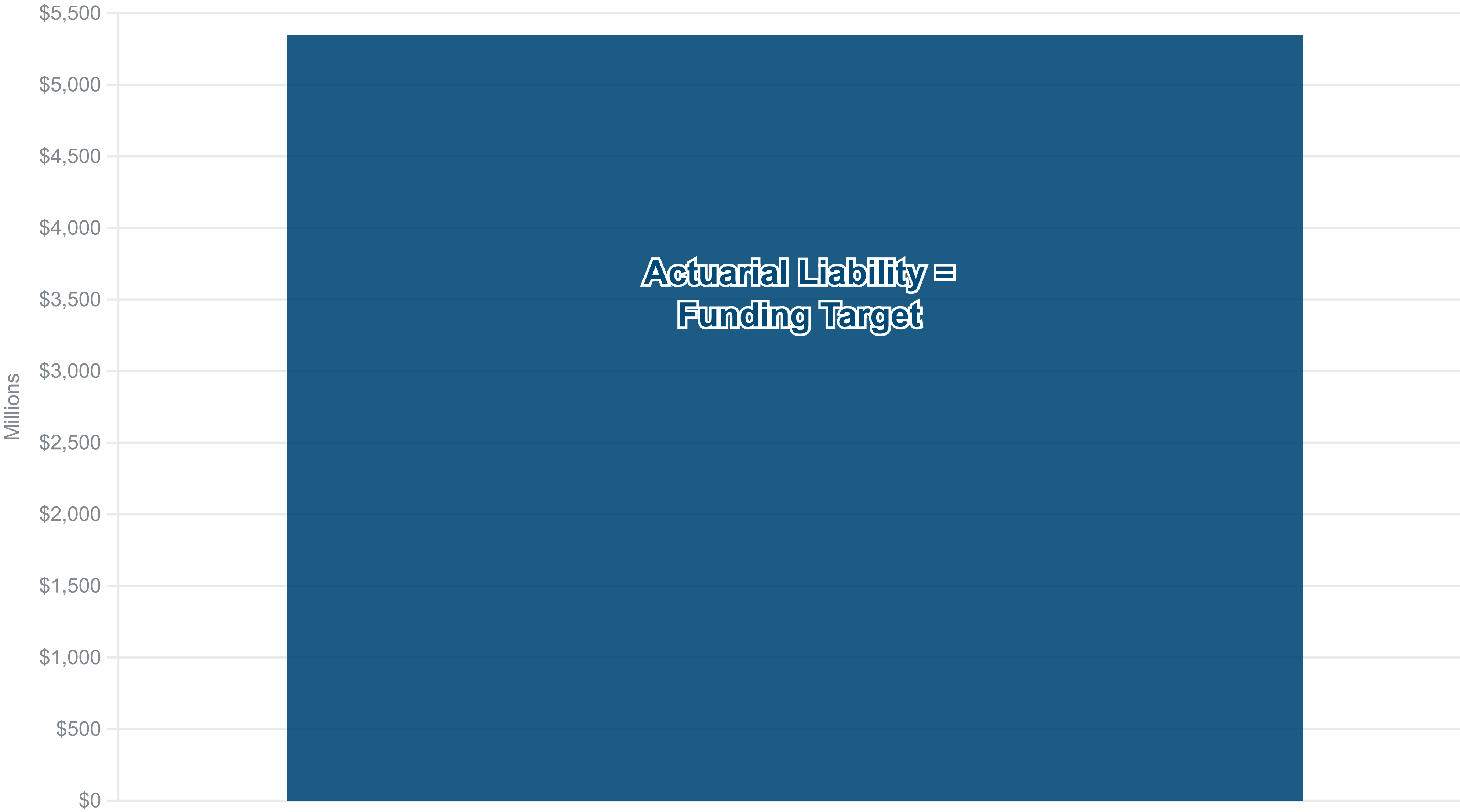


The present value of future benefits is the sum of the discounted projected benefit payments

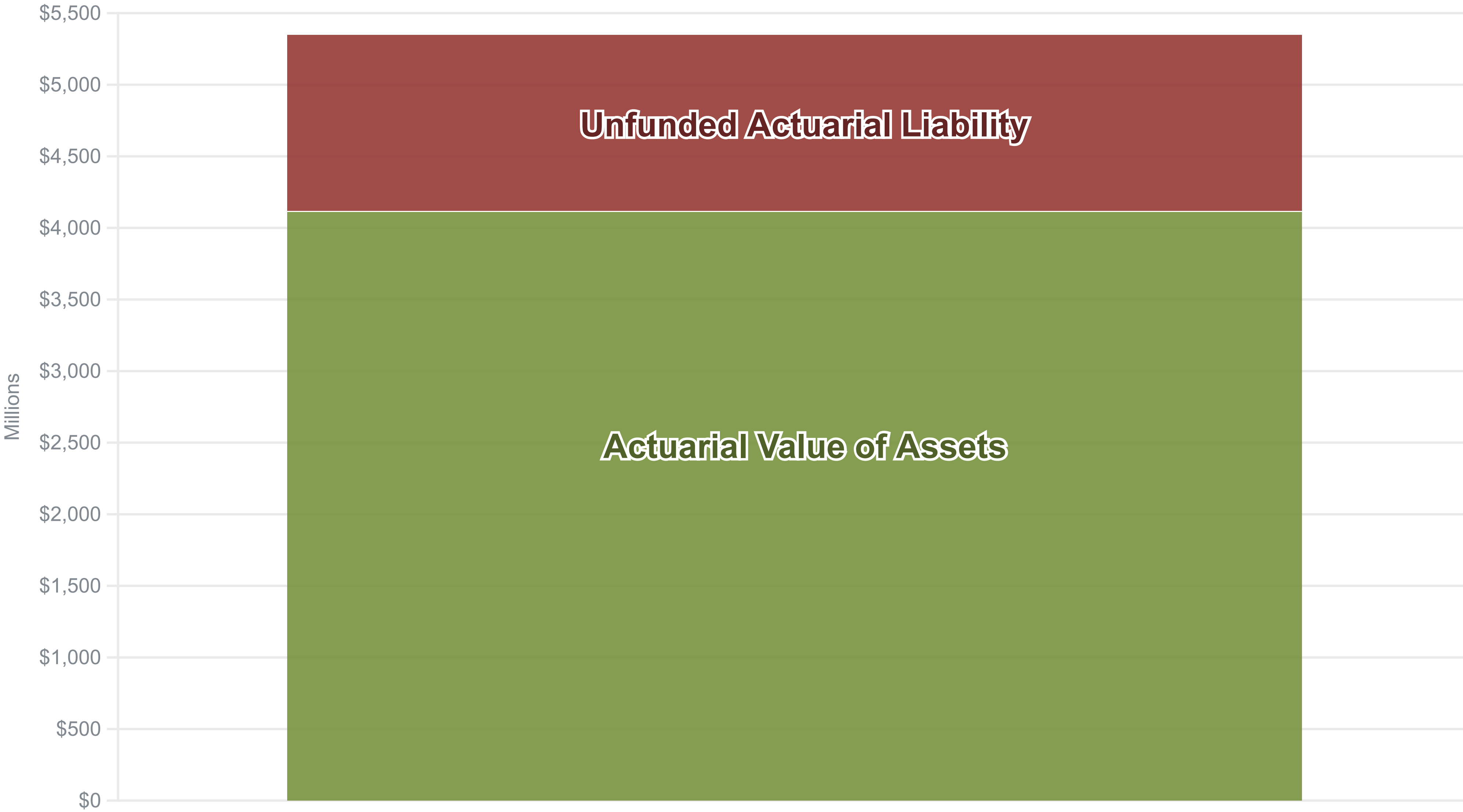
To develop a Funding Target, the Present Value of Future Benefits is allocated between past and future service. The portion allocated to past service is referred to as the Actuarial Liability and the remainder is the Present Value of Future Normal Costs.



The Actuarial Liability is the Funding Target - the amount of assets we should have as of the valuation date.



The Funding Target is compared to the Actuarial Value of Assets and the difference is the Unfunded Actuarial Liability (UAL)



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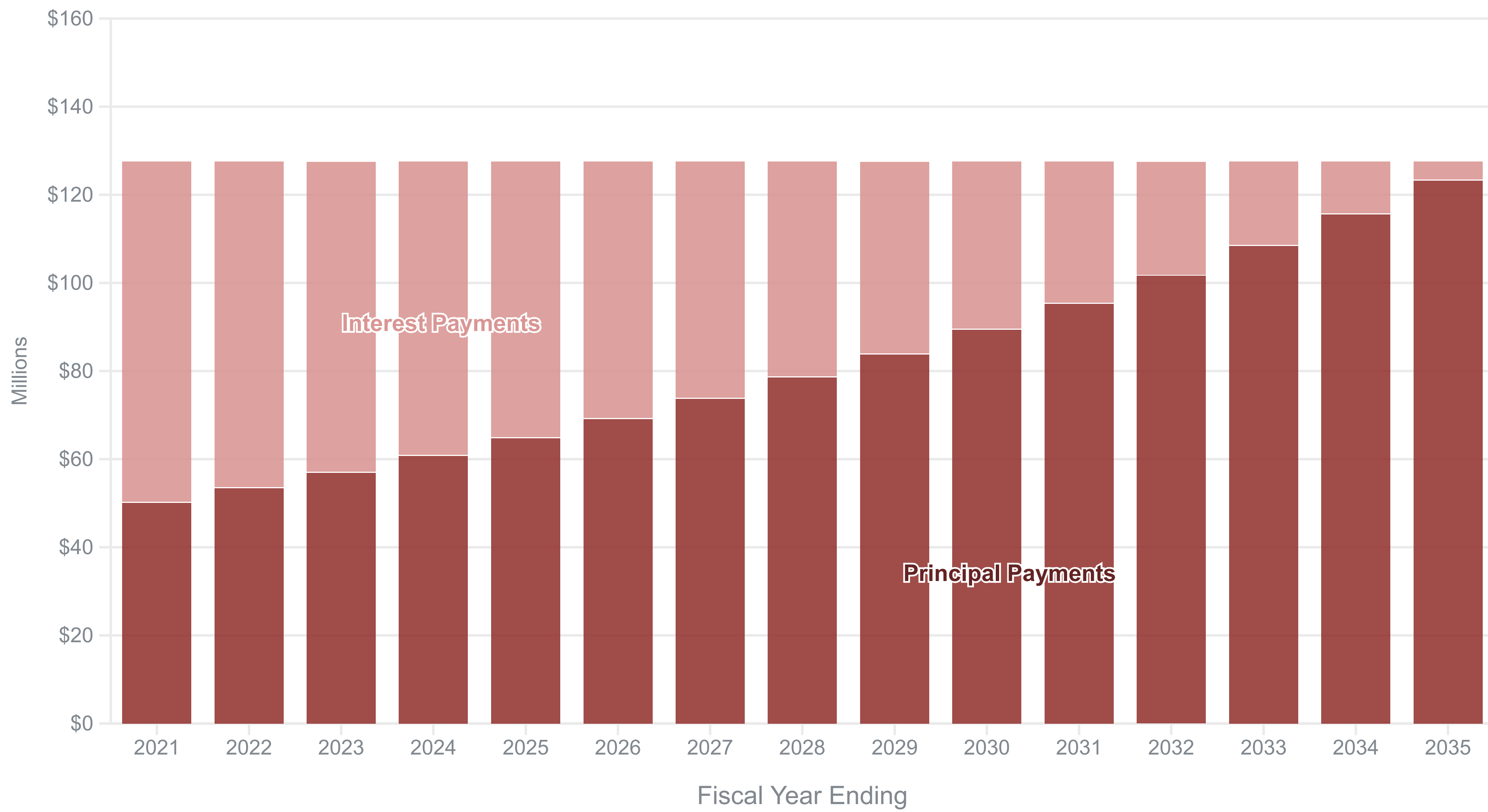
The objective is to return the plan assets to the funding target. Immediately returning to the funding target would require unaffordable and extremely volatile contributions from the City, so we establish an amortization policy to balance stability and affordability for the City with reaching the funding target within a reasonably short period of time.

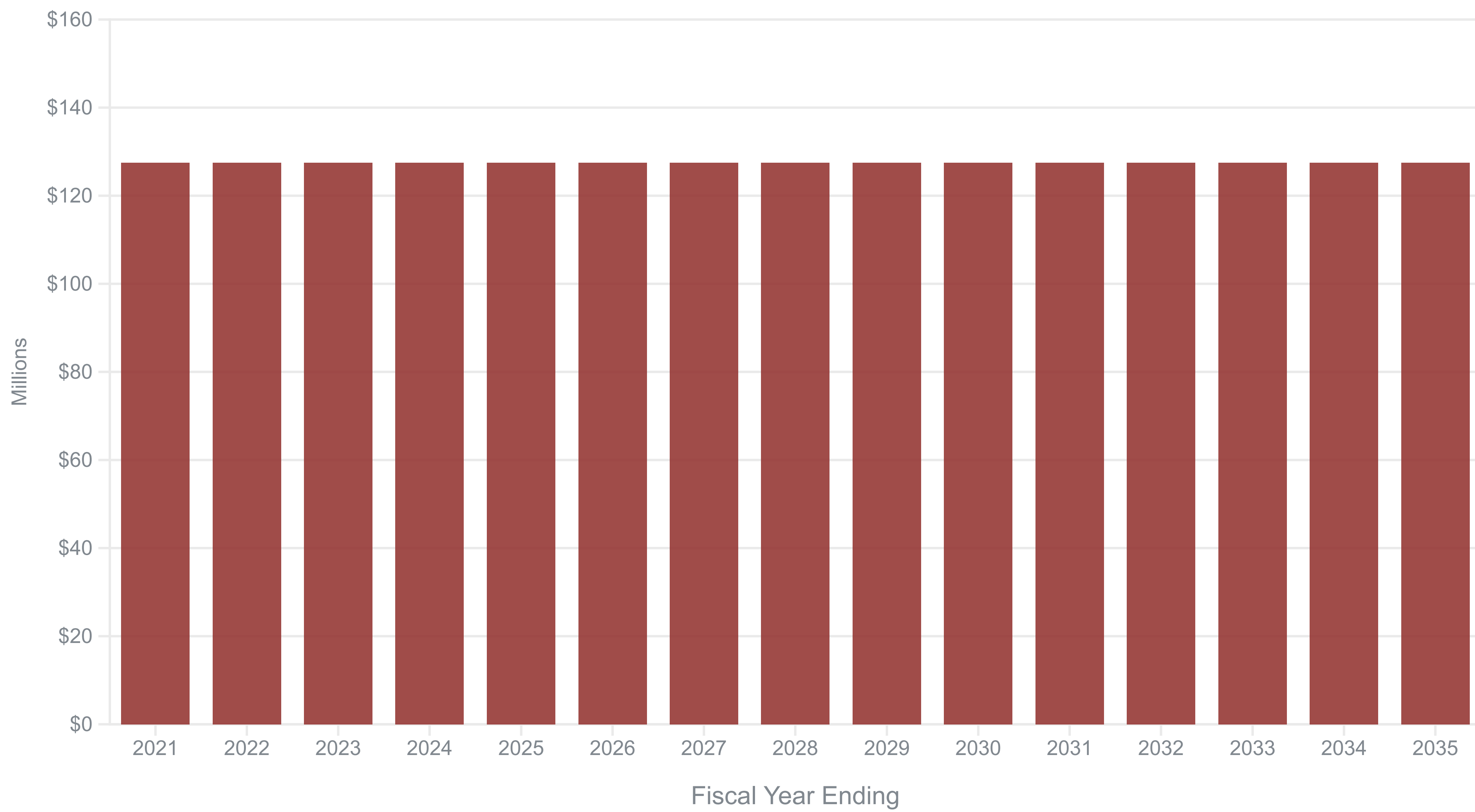
If, for example, the Board wanted to require the same dollar amount of contribution each year to increase assets to the funding target in 15 years, we would set up a 15-year amortization payment schedule for the entire UAL. Note, however, that the interest payments here are really the expected earnings on the assets the plan didn't have.

Amortization Payments



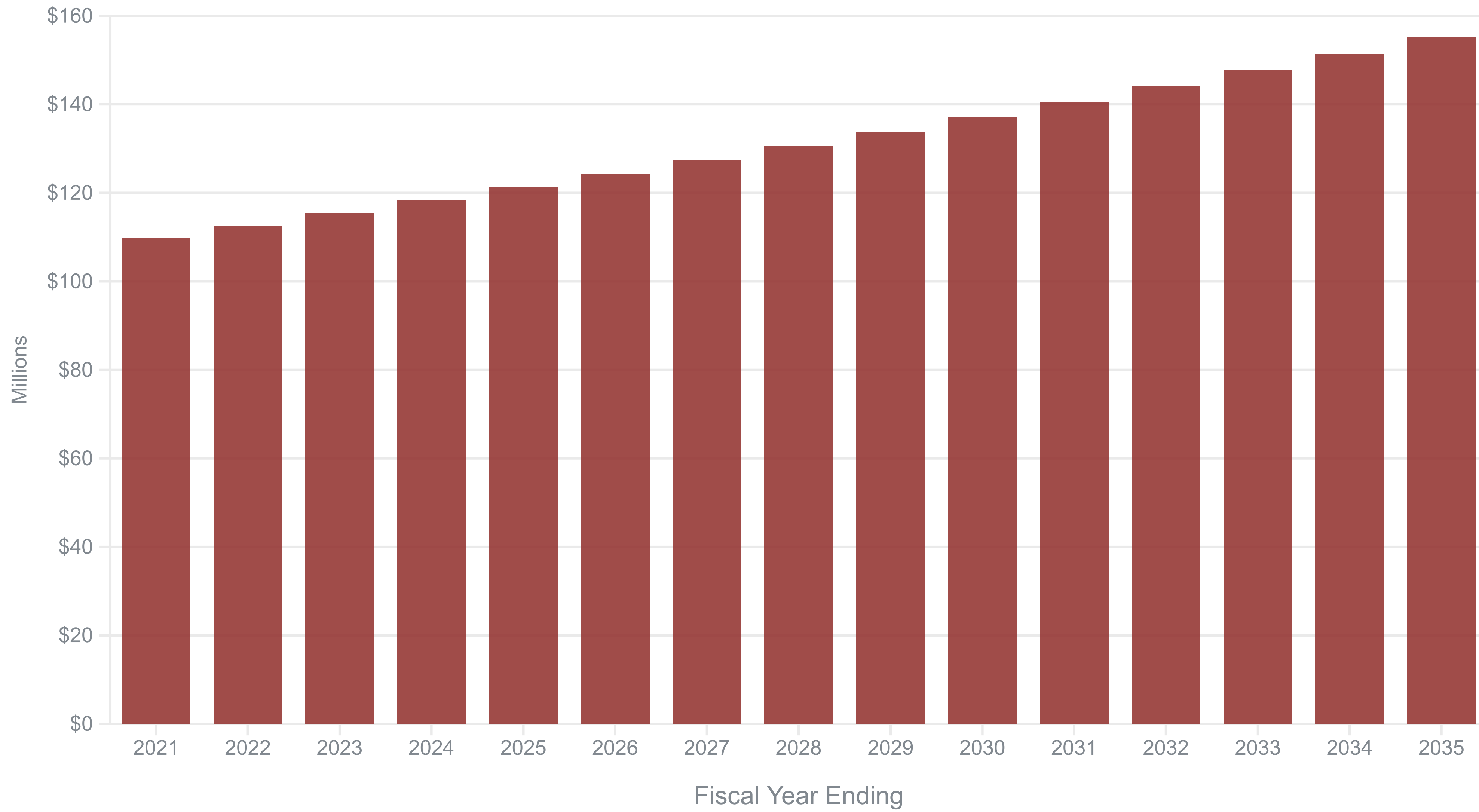
A 15-year level amortization is simple and straightforward, but isn't how public pensions are normally funded

Amortization Payments



First, instead of a level amortization, there is normally an increase to each year's payments to reflect inflation or payroll/revenue growth so that each year's contribution is a similar burden on the City. Our plan uses a 2.5% rate of growth, matching assumed inflation.

Amortization Payments



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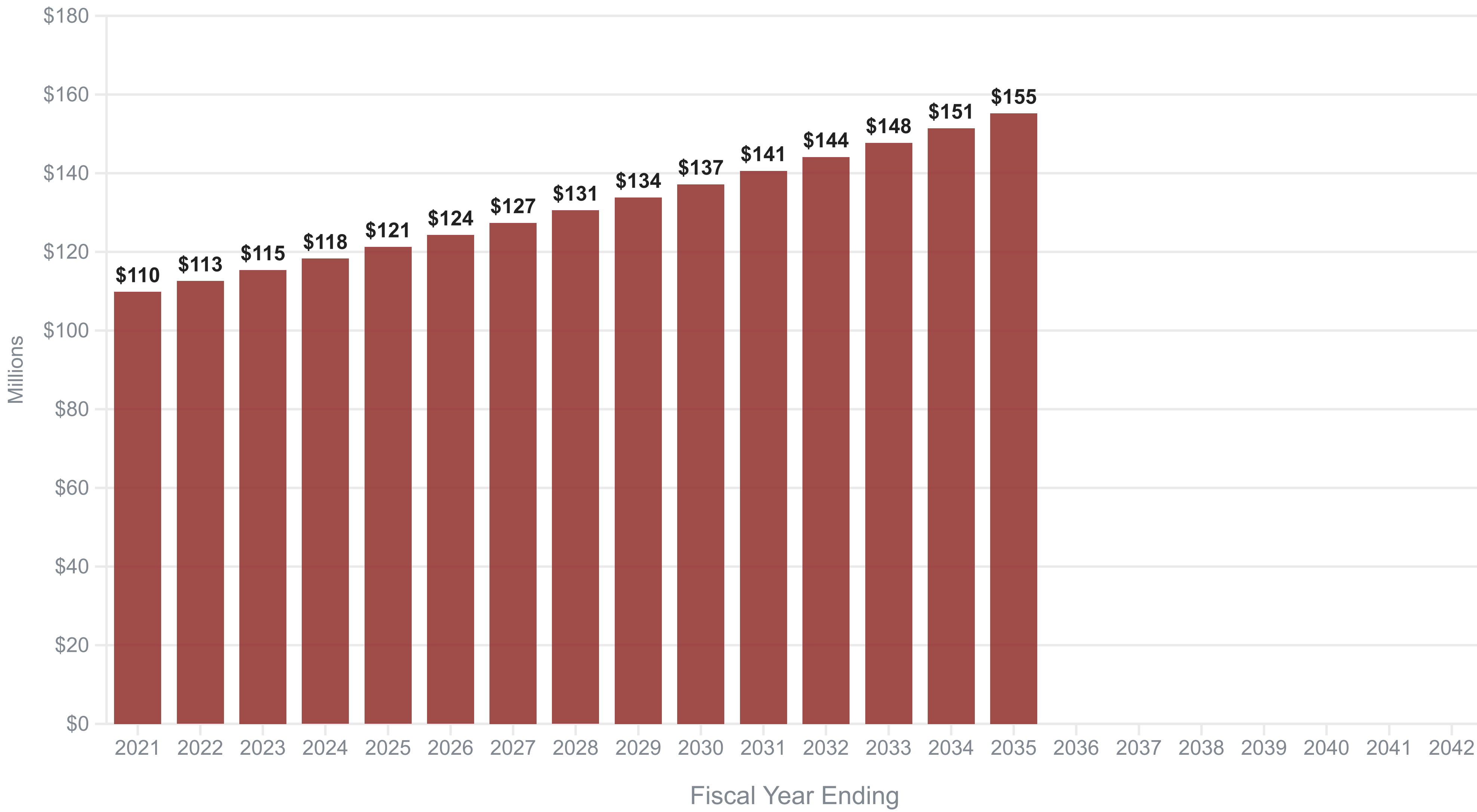
In addition, the UAL changes each year when actual experience deviates from the assumptions, so the amortization schedule needs to change with the UAL changes.

Amortization Payments



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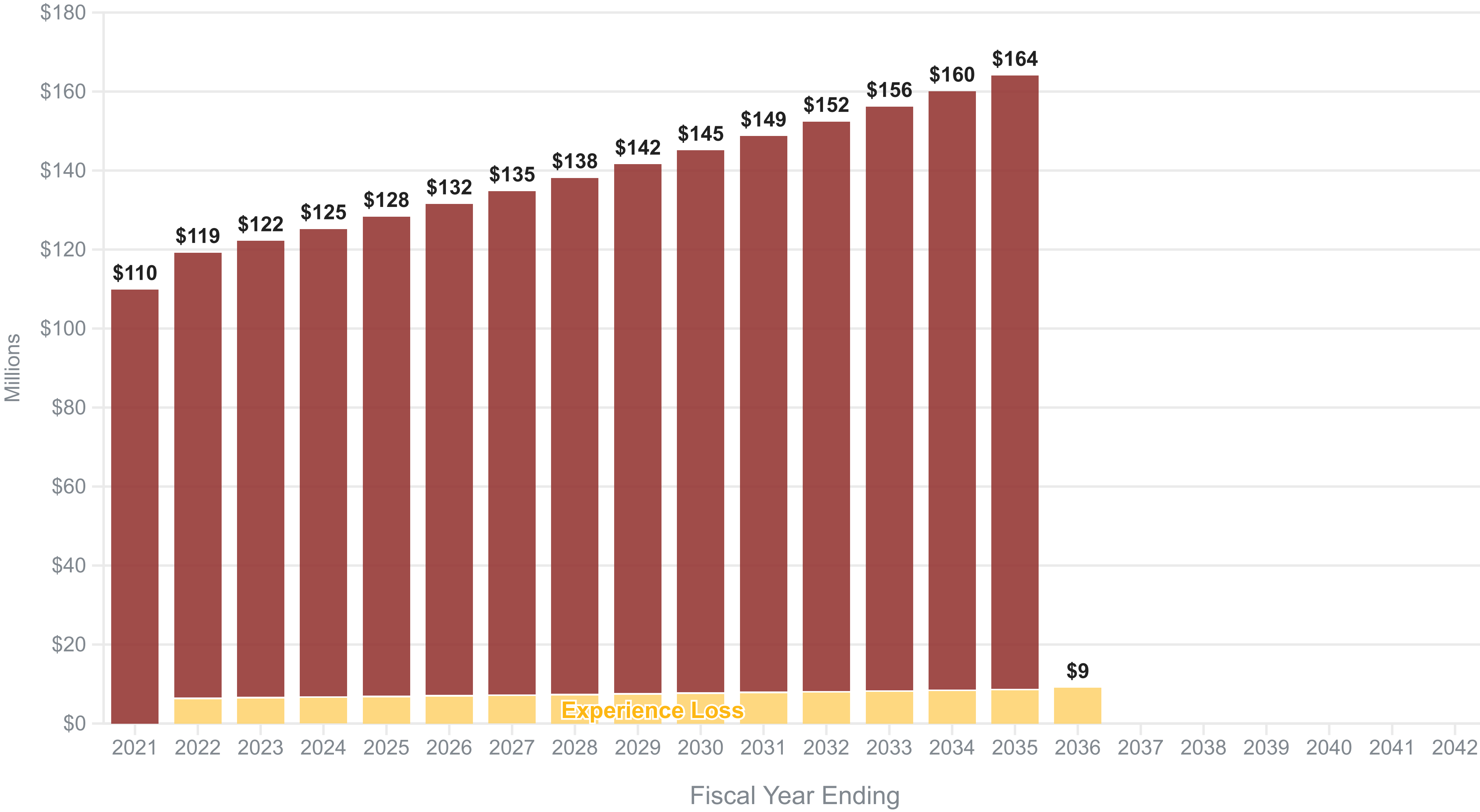
We use amortization layers. Each year as the UAL changes, a new layer is added for the change.

Amortization Payments



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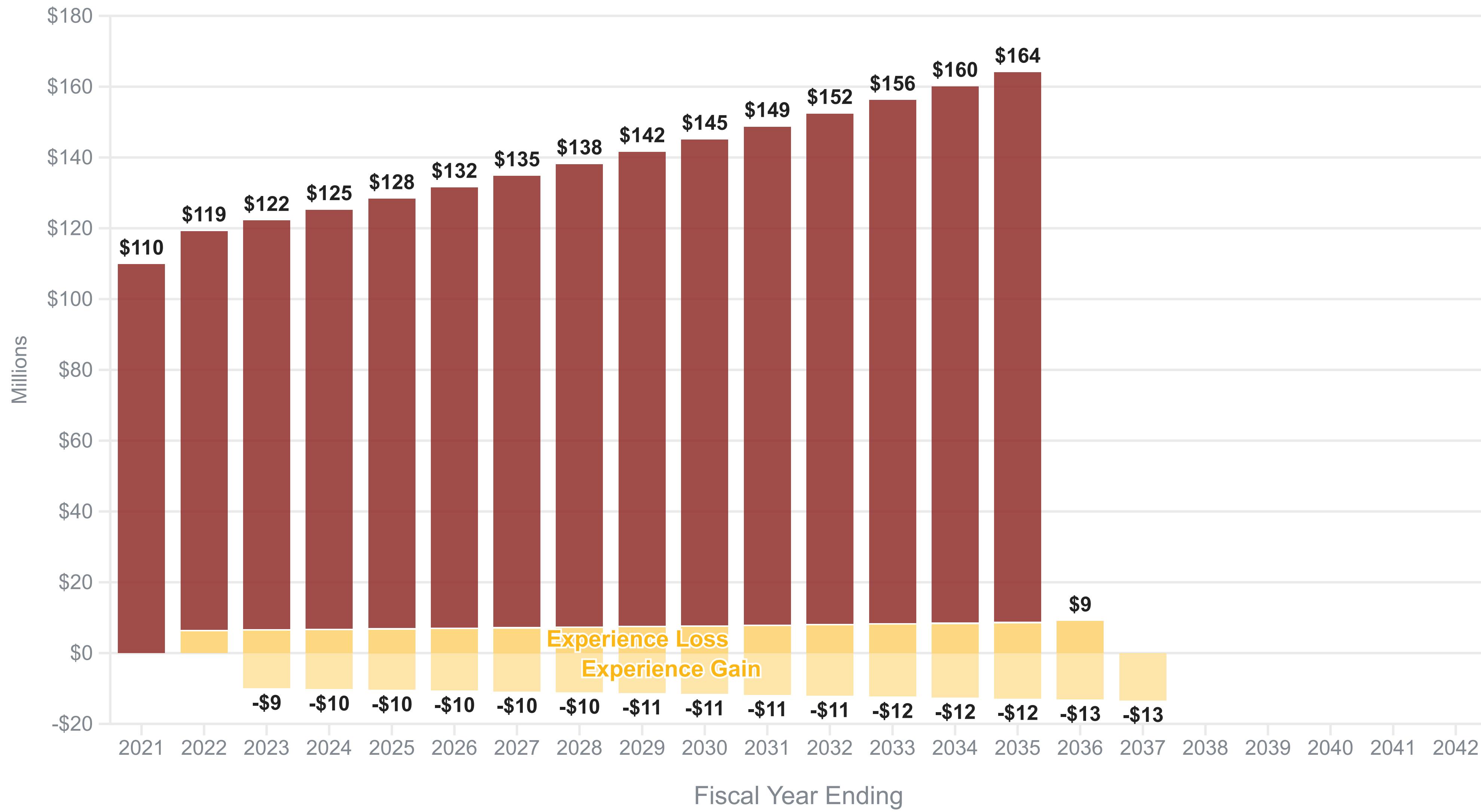
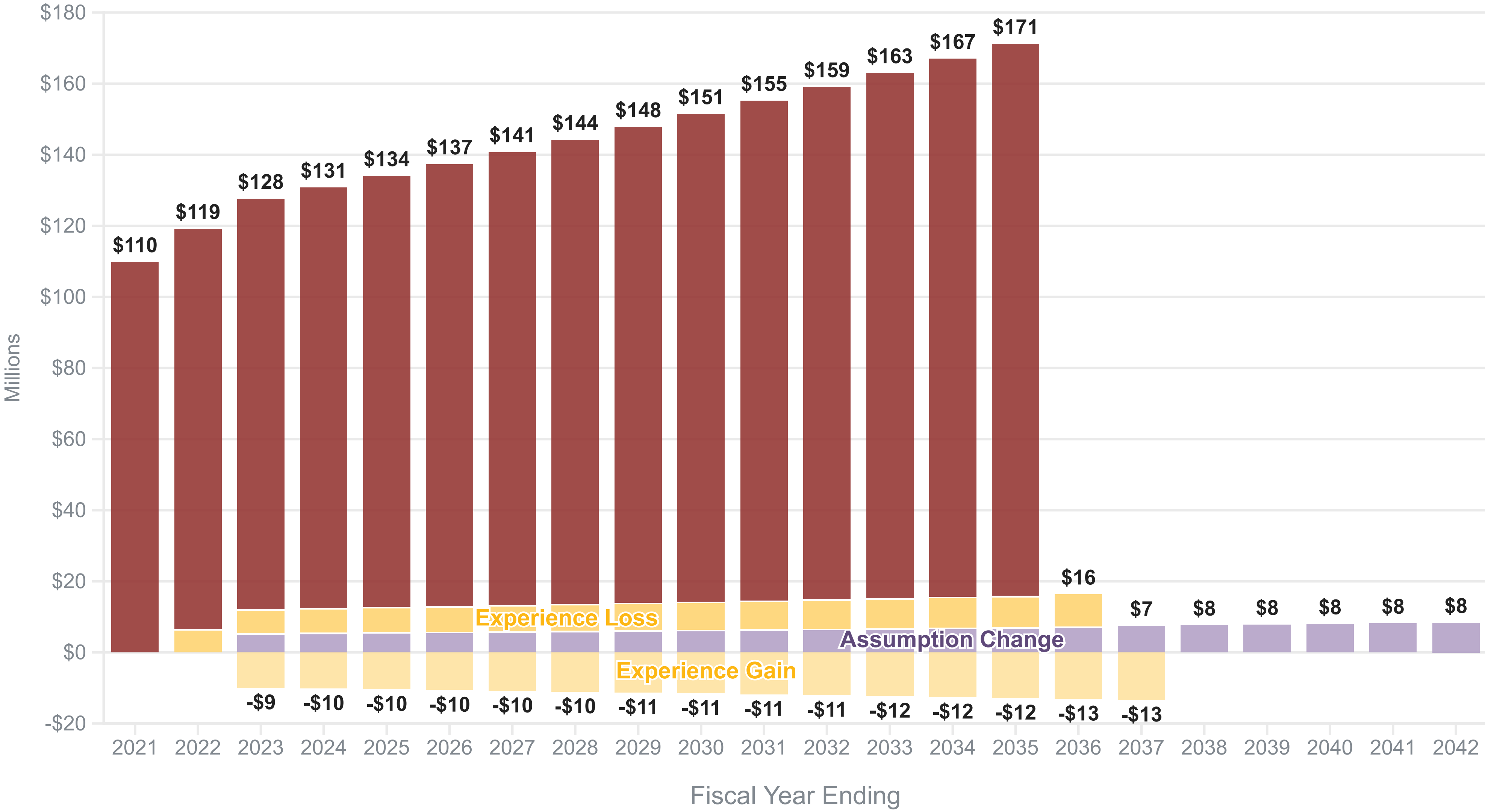
If the UAL goes down, instead of an amortization payment, we establish an amortization credit that offsets the other amortization payments.

Amortization Payments



Periodically, the Board changes assumptions, which also changes the UAL, so we set up a new amortization layer

Amortization Payments



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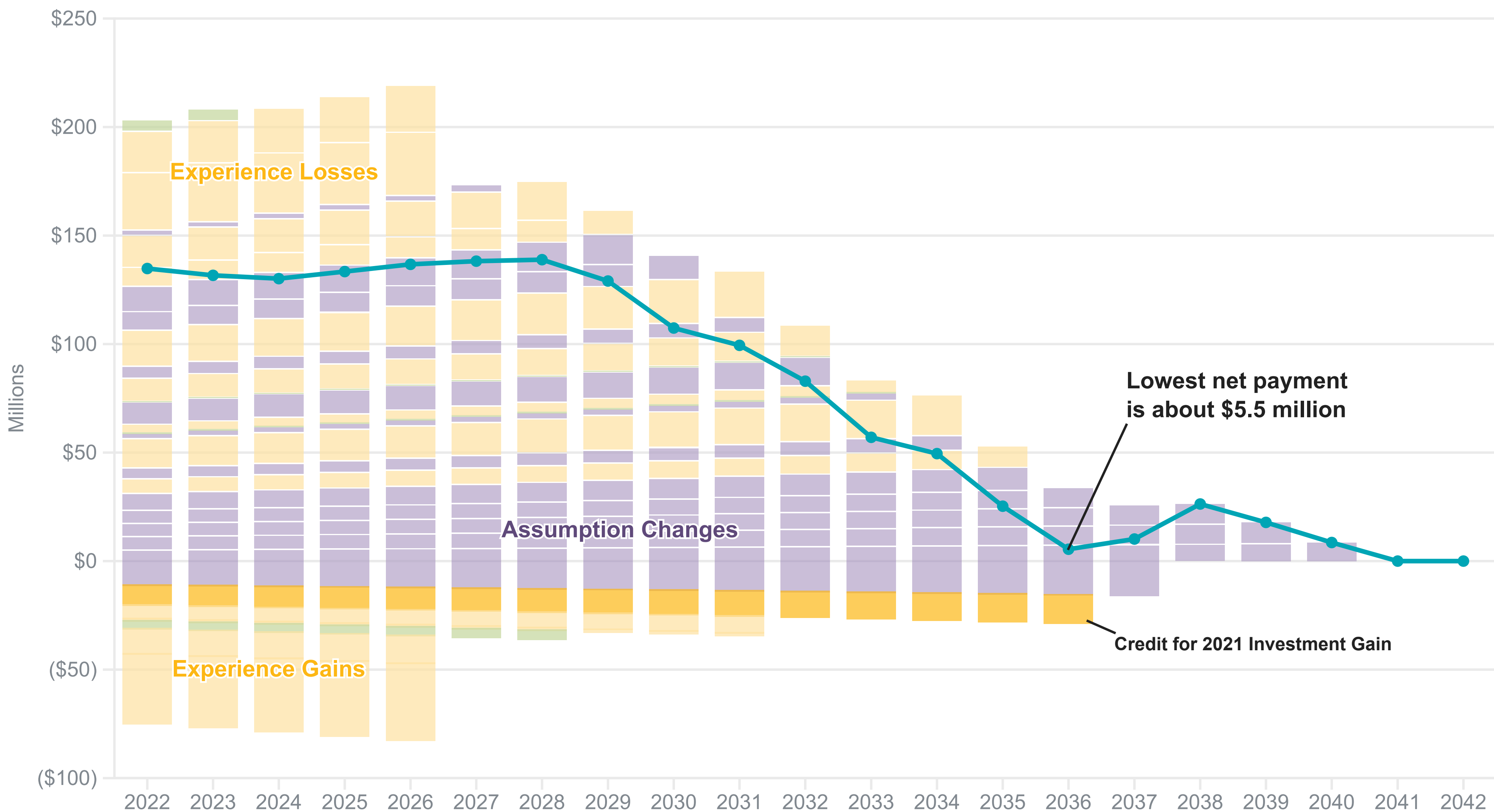
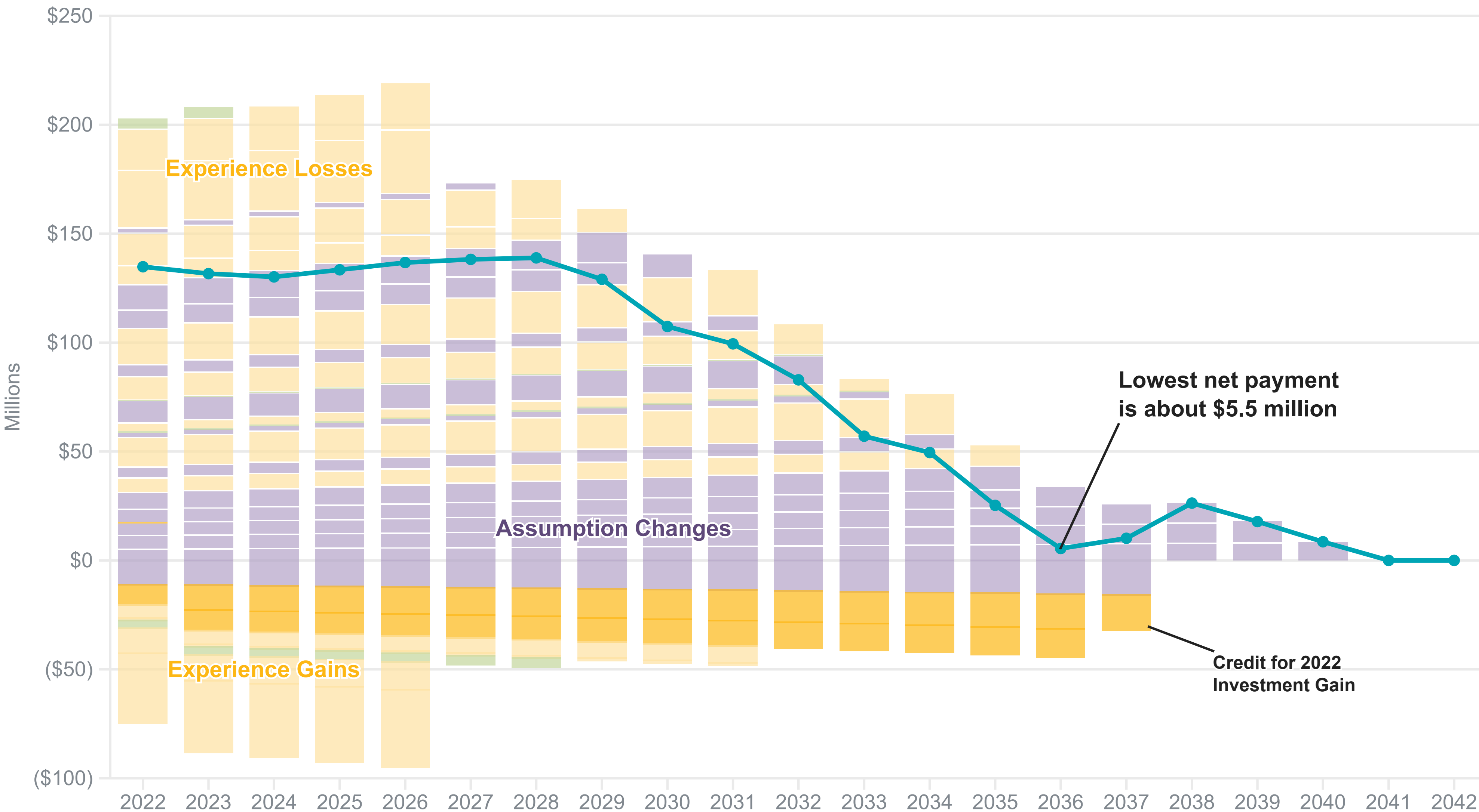
After several years, the plan develops an array of amortization bases. This chart shows the amortization schedule based on the Board's policies from the 2020 valuation plus the expected investment gain for 2021. Since we smooth assets over 5 years, only 20% of the gain from 2021 investment experience is recognized. In addition to the amortization payment, contributions also include the normal cost and administrative expenses.

Tier 1 Amortization Schedule



In our projections, we recognize the remainder of the investment gains from 2021 as they are recognized in the actuarial value of assets

Tier 1 Amortization Schedule



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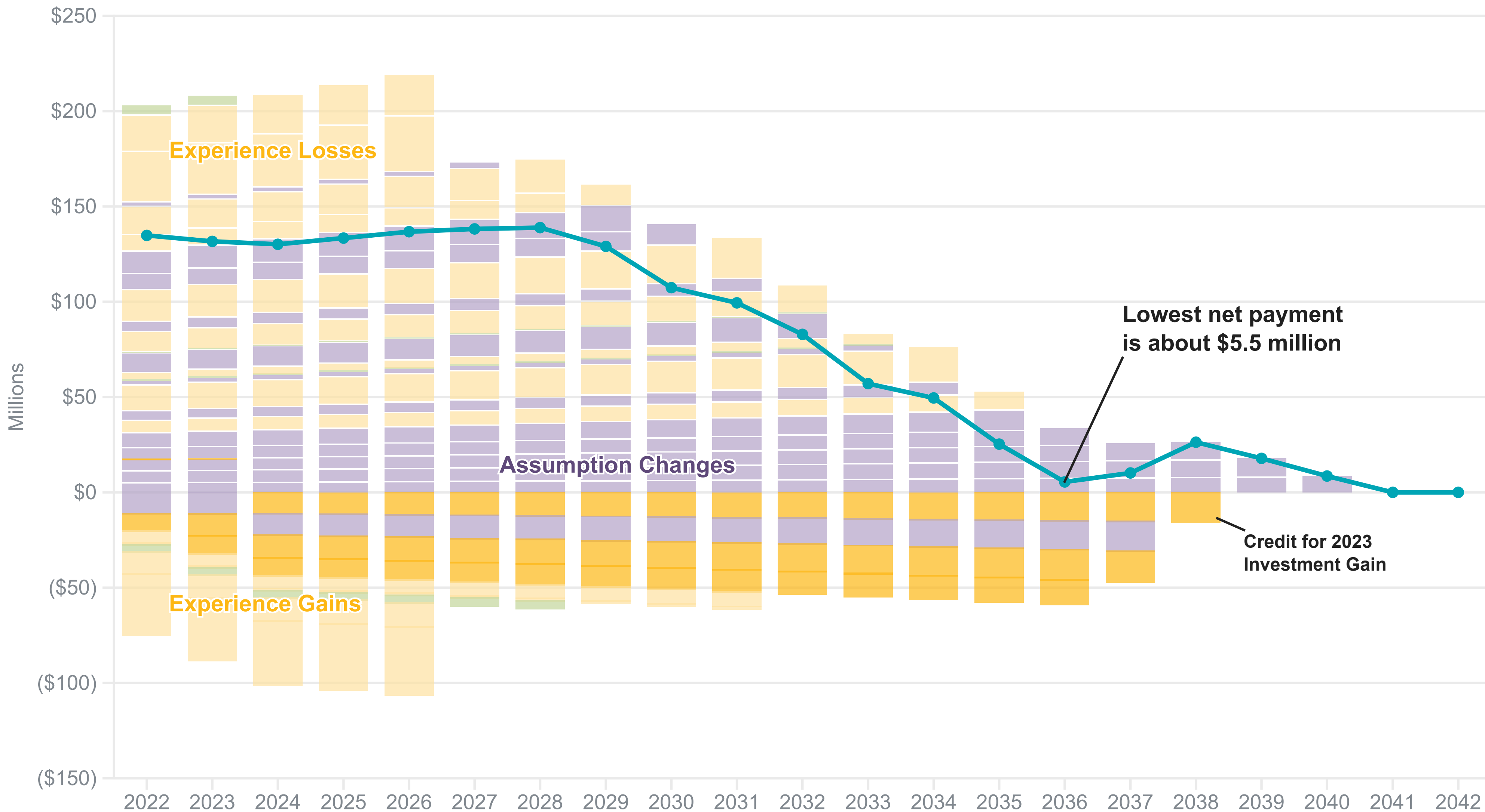

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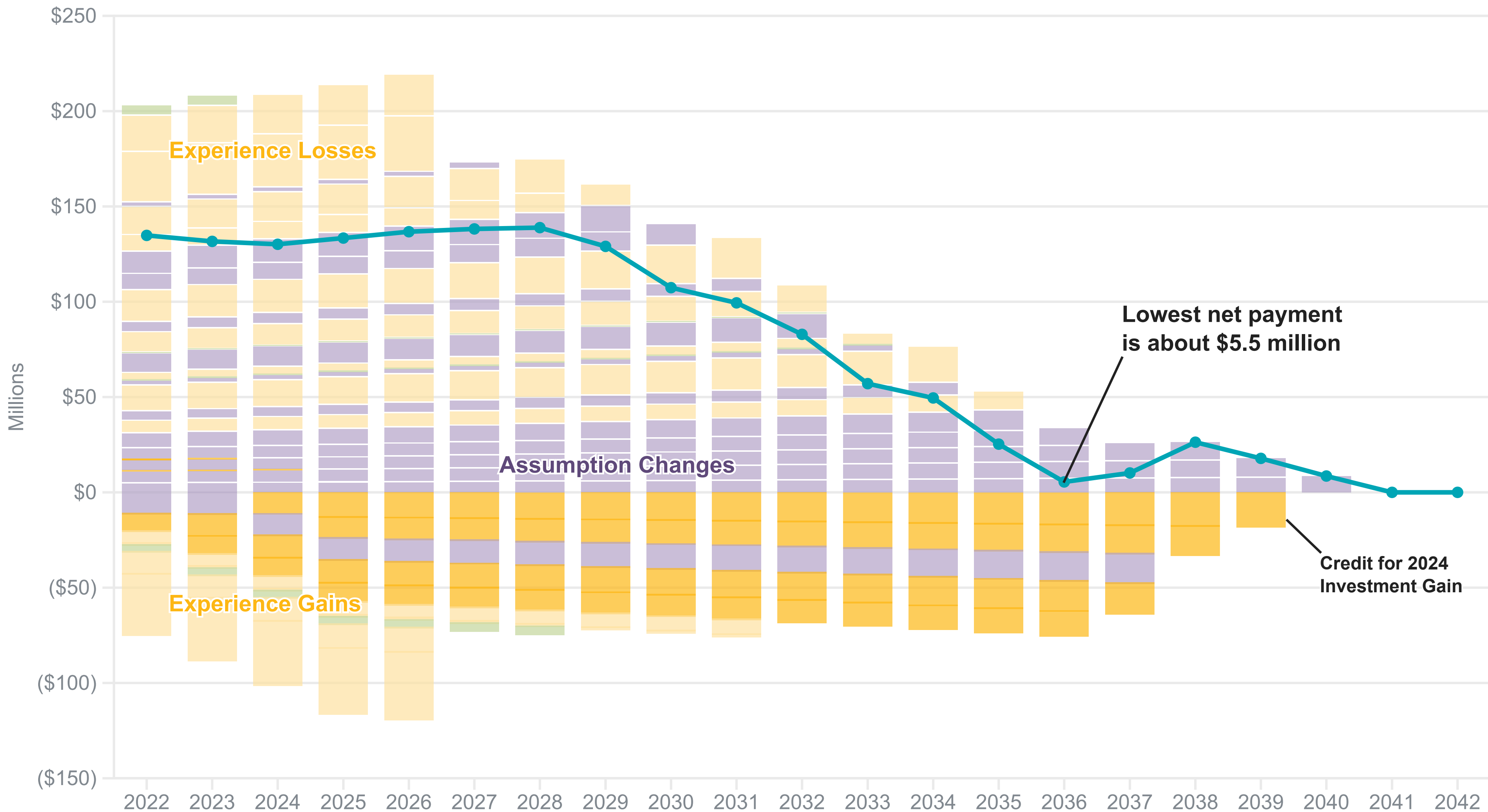

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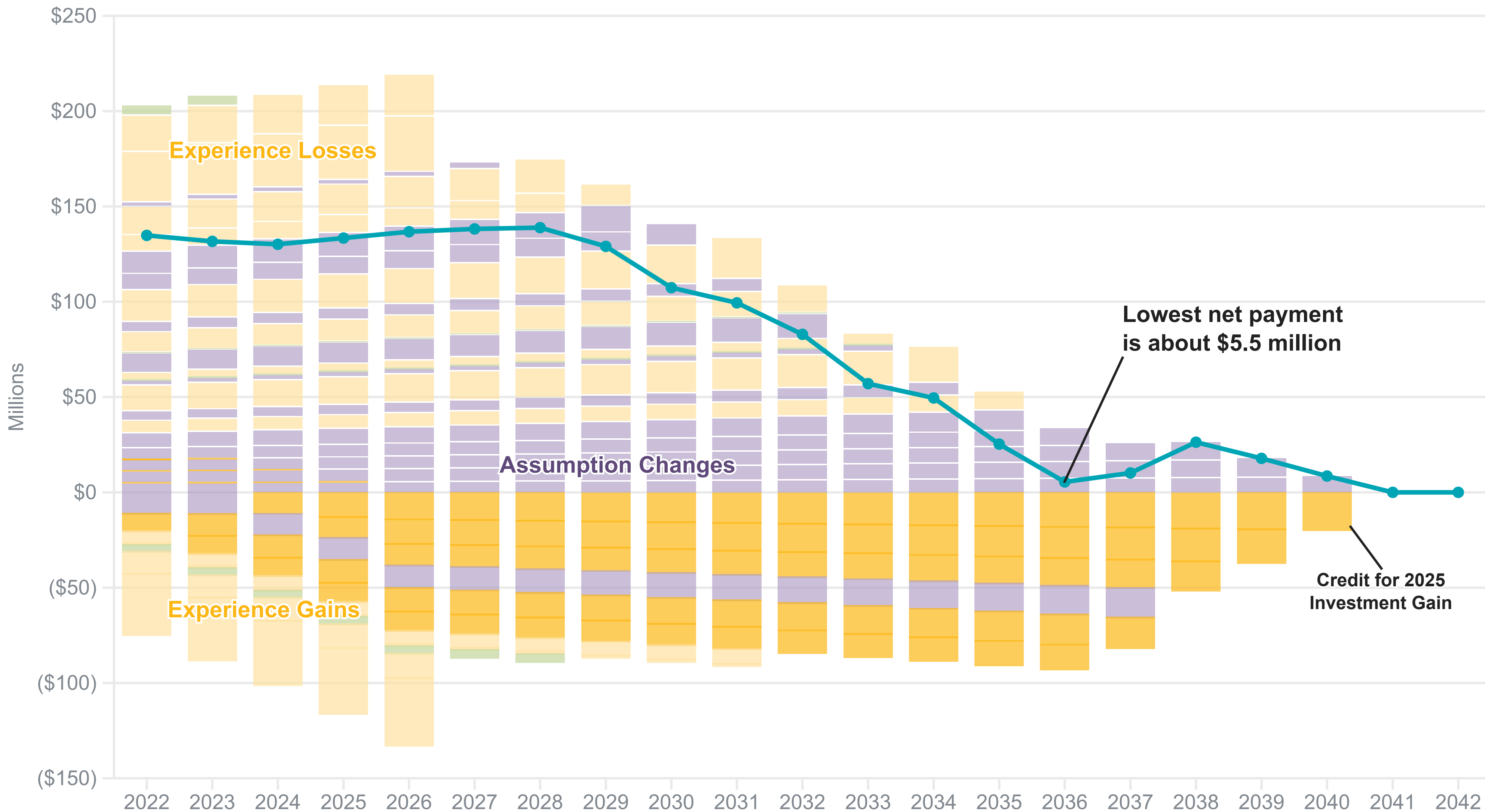
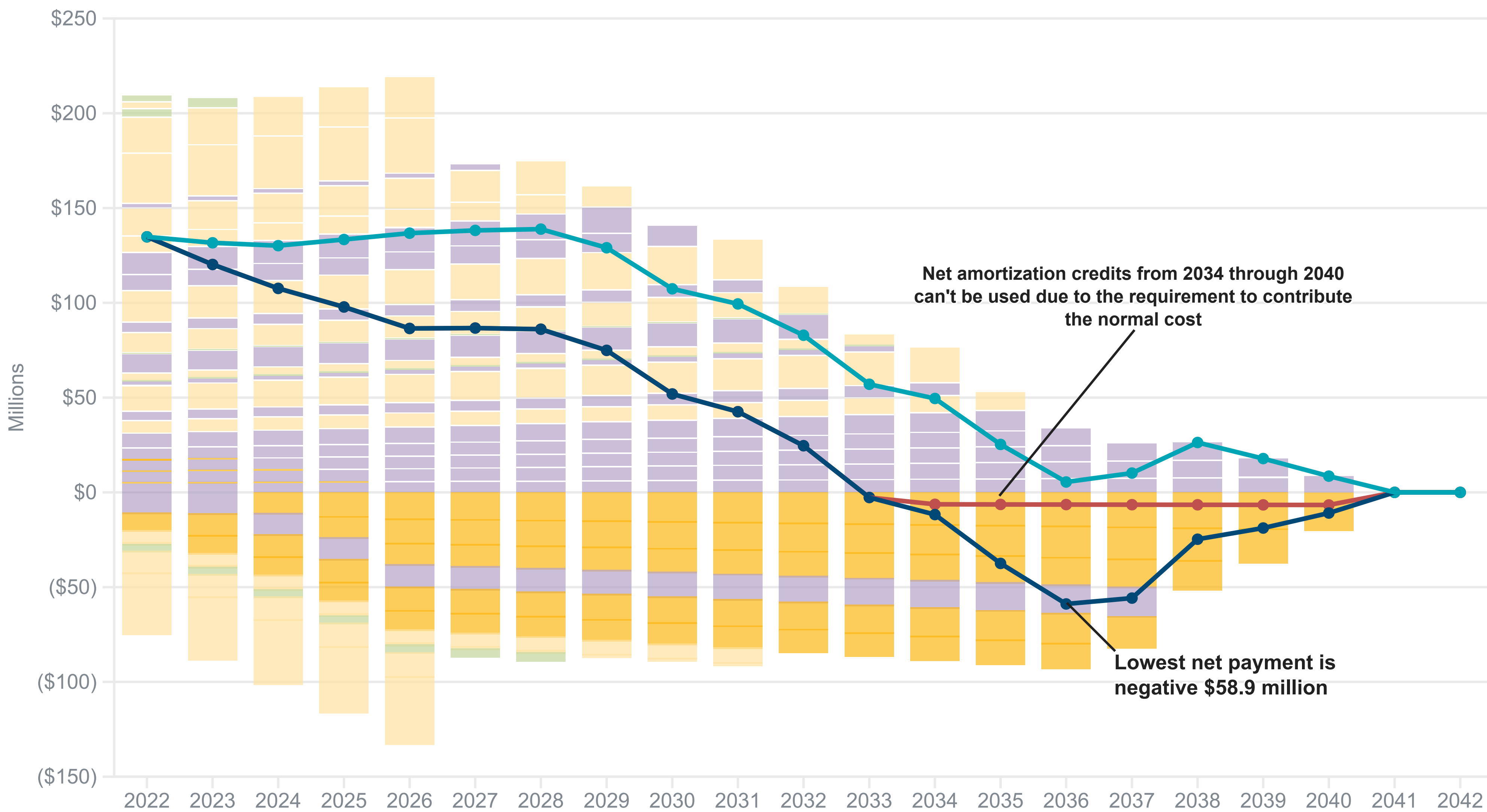


The baseline projected amortization payments are much lower. By statute, contributions cannot be lower than the normal cost, so amortization credits can offset administrative expenses, but can't be used to lower the contribution further. The credit limit is reache in 2034. Because there is a significant net credit projected that cannot be used directly, the Board may want to consider some adjustments to the amortization schedule independent of a POB

Tier 1 Amortization Schedule



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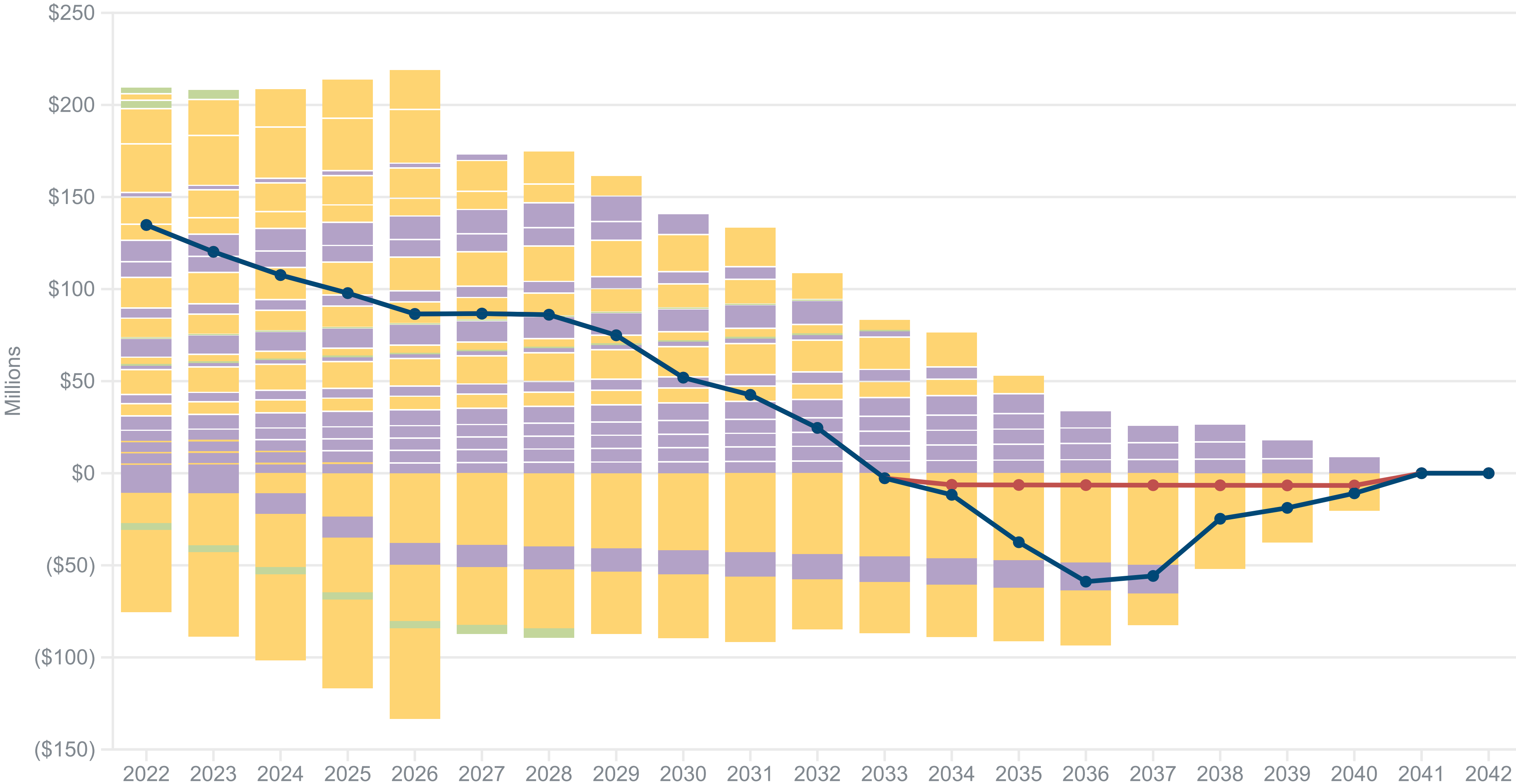
Adding a POB Under Current Amortization Policies

Before the City deposits the proceeds of a POB, the scheduled amortization payments start around $135 million and decline to the minimum in 2034

Tier 1 Amortization Schedule
15-Year $250M POB



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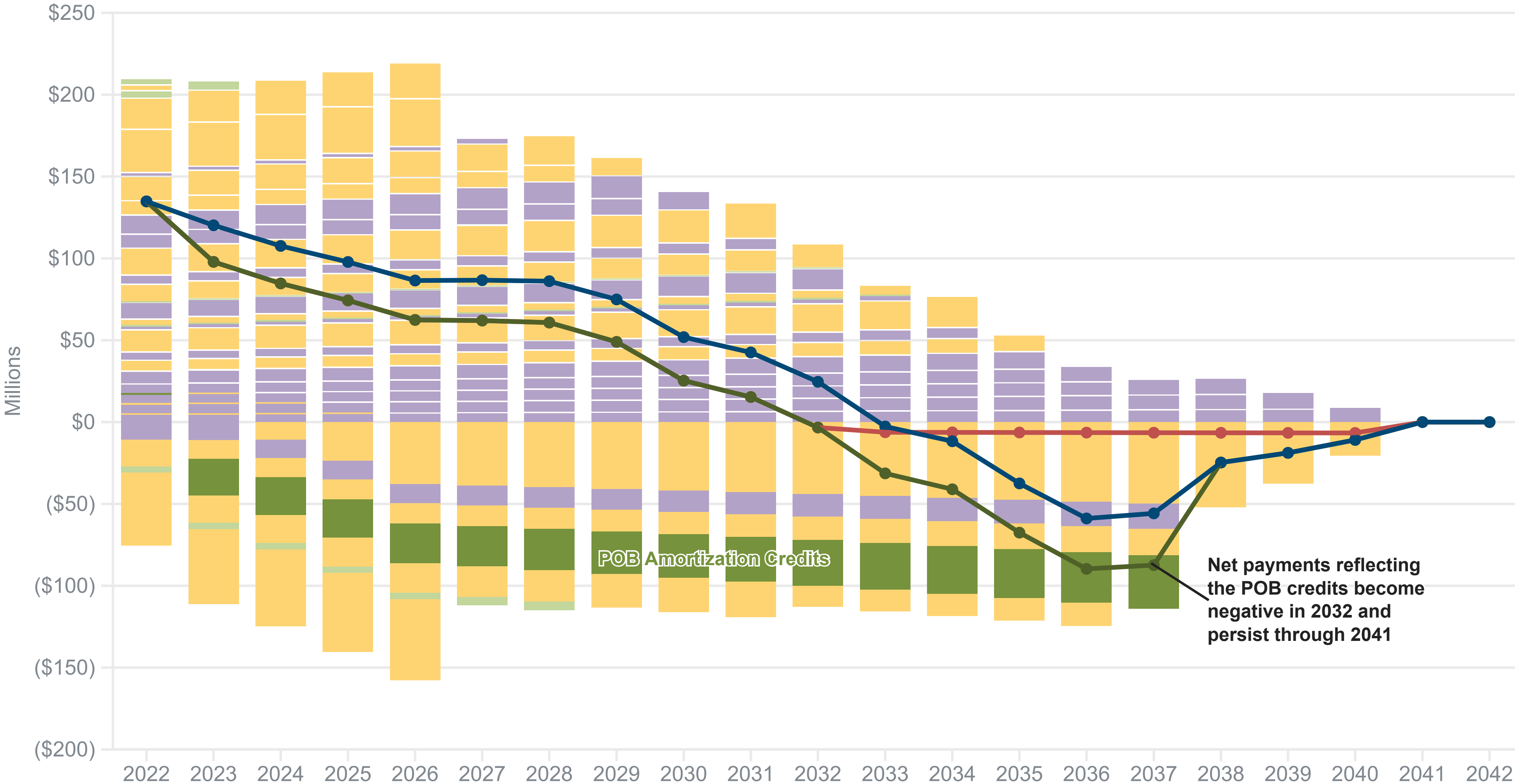
If the City deposits $250 million into the plan, it would reduce the UAL by $250 million and under our current amortization policies, we would set up a 15-year amortization credit causing the net payment to reach the minimum in 2032

Tier 1 Amortization Schedule

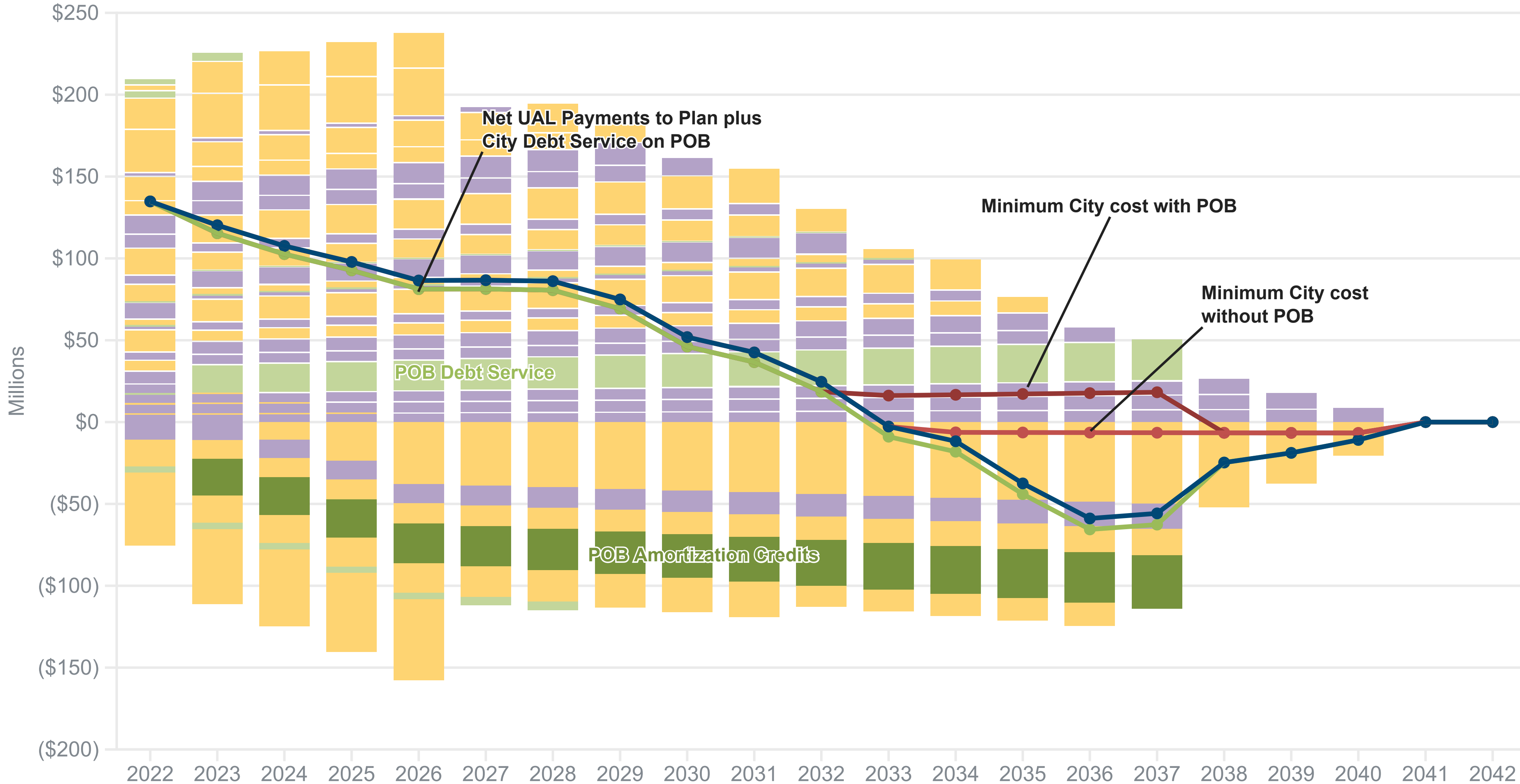
15-Year $250M POB



From the City's perspective, in addition to the contributions to the plan, the City would also need to pay the debt service on the POB. Because of the difference in interest rates, the debt service on the POB would be smaller than the amortization credit as long as the POB is at least 15 years

Tier 1 Amortization Schedule

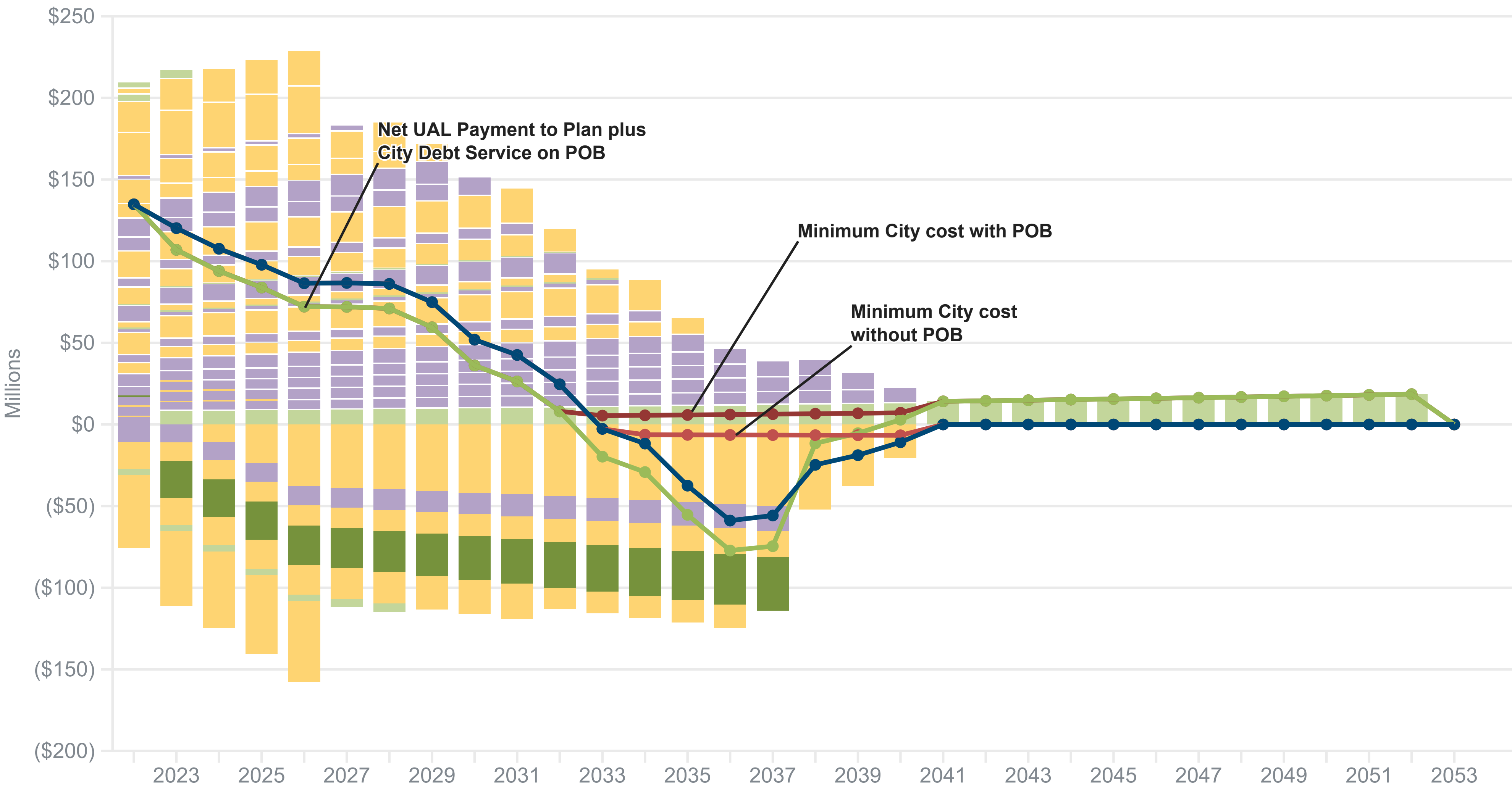
15-Year $250M POB



If the City issues a 30-year POB, the initial savings are greater, but the City's net payment is expected to be higher from 2033 through 2053 when the amortization payments are expected to be below the minimum

Tier 1 Amortization Schedule

30-Year $250M POB



Retirement Board sets the contribution policy

Current amortization policy starts high and grades down

With 2021 investment returns, it is projected to generate amortization credits in about 10 years that have to be deferred to the future

Board may want to consider adjustments to amortization schedule to use credits earlier

A POB would be projected to generate additional amortization credits that have to be deferred

Certification

The purpose of this presentation is to provide the Board of Administration for the San Jos« Police and Fire Department Retirement Plan background on the planÕs amortization policies in preparation for a potential Pension Obligation Bond.

In preparing our presentation, we relied on information (some oral and some written) supplied by the San Jos« 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.

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