



# Local Governmental Employees' Retirement System of North Carolina

Actuarially Determined Employer Contributions (ADEC) Projections for the State System

January 26, 2023, Board of Trustees Meeting

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# Projections

- Projections of contribution requirements and funded status into the future can be helpful planning tools for stakeholders. This presentation provides such projections. The projections of the actuarial valuation are known as deterministic projections. Deterministic projections are based on one scenario in the future. The baseline deterministic projection is based on December 31, 2021 valuation results and assumptions.
- Key Projection Assumptions
  - Valuation interest rate of 6.50% for all years in conjunction with direct rate smoothing of the employer contribution rate through the fiscal year ending 2027.
  - 6.50% investment return on market value of assets
  - Actuarial assumptions and methods as described in Appendix D of the December 31, 2021 valuation report. All future demographic experience is assumed to be exactly realized.
  - The contribution rate under the Employer Contribution Rate Stabilization Policy (ECRSP) is contributed until fiscal year ending 2027. This policy is described on the next page.
  - The actuarially determined employer contribution rate is contributed for fiscal years ending 2028 and beyond.
  - The employer contribution shall not be less than the employee contribution, which is currently 6%.
  - 0% increase in the total active member population.
  - No cost-of-living adjustments granted.
  - Future pay increases based on long-term salary increase assumptions.
- In addition, we have provided one other alternate deterministic projection. This alternate deterministic projection is based on the same assumptions as the baseline deterministic projection except that it assumes a -10.4% asset return for calendar year 2022.

# Projections – ECRSP Policy Contribution Rate

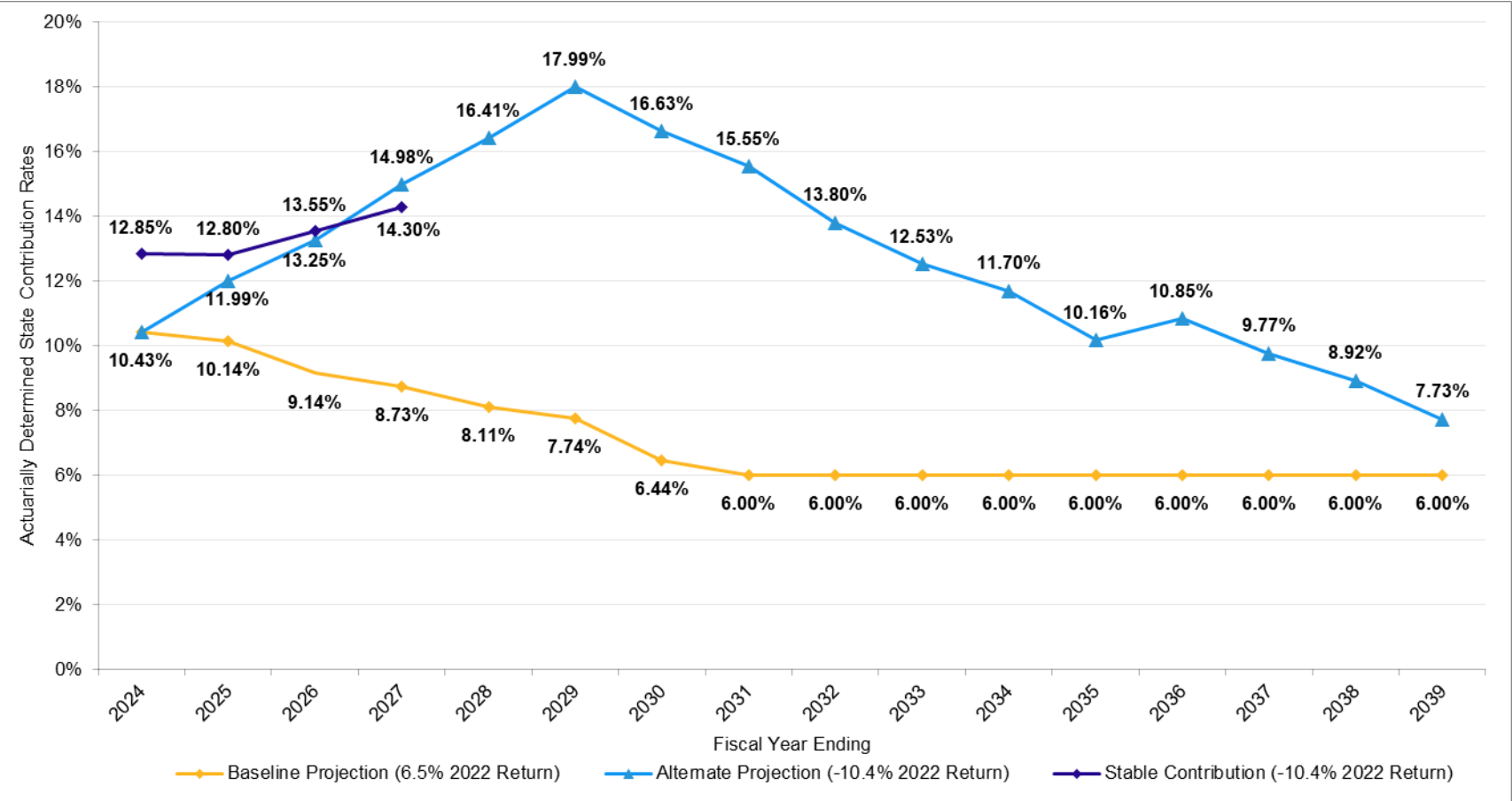
The Employer Contribution Rate Stabilization Policy (ECRSP) adopted by the Board of Trustees on April 29, 2021, and amended on January 27, 2022, requires that recommended contributions for general employees be set at 11.35% of payroll for fiscal year ending 2022 and will increase each fiscal year by 0.75% per year, with adjustments for the impact of any benefit or assumption changes that were made and not incorporated in the previous scheduled rate (other than the one-time supplement authorized by the Board under G.S. 128-27(k1) for the fiscal year ending in 2023), with the following additional adjustments, if applicable:

- 1) If the underlying actuarially determined employer contribution rate (ADEC) for a given fiscal year exceeds the adjusted scheduled employer contribution rate for that fiscal year by more than 1.00% of compensation, an increase equal to 50% of the difference is added to the adjusted scheduled employer contribution rate for the current and future fiscal years.
- 2) Beginning July 1, 2024, if the adjusted scheduled employer contribution rate for that fiscal year exceeds the underlying actuarially determined employer contribution rate (ADEC) for a given fiscal year by more than 1.00% of compensation, a decrease equal to 50% of the difference, but not greater than 1.50% of compensation, is subtracted from the adjusted scheduled employer contribution rate for the current and future fiscal years.

The ECRSP contribution rates for law enforcement officers will be 1.00% higher than contribution rates for general employees for fiscal year 2023. The 1.00% difference will increase by 0.25% each year until fiscal year 2027, when the contribution rates for law enforcement officers will be 2.00% higher than the contribution rates for general employees.

# Projections

## Projected Contribution Rates – Non-LEO (-10.4% in 2022, 6.5% Thereafter)



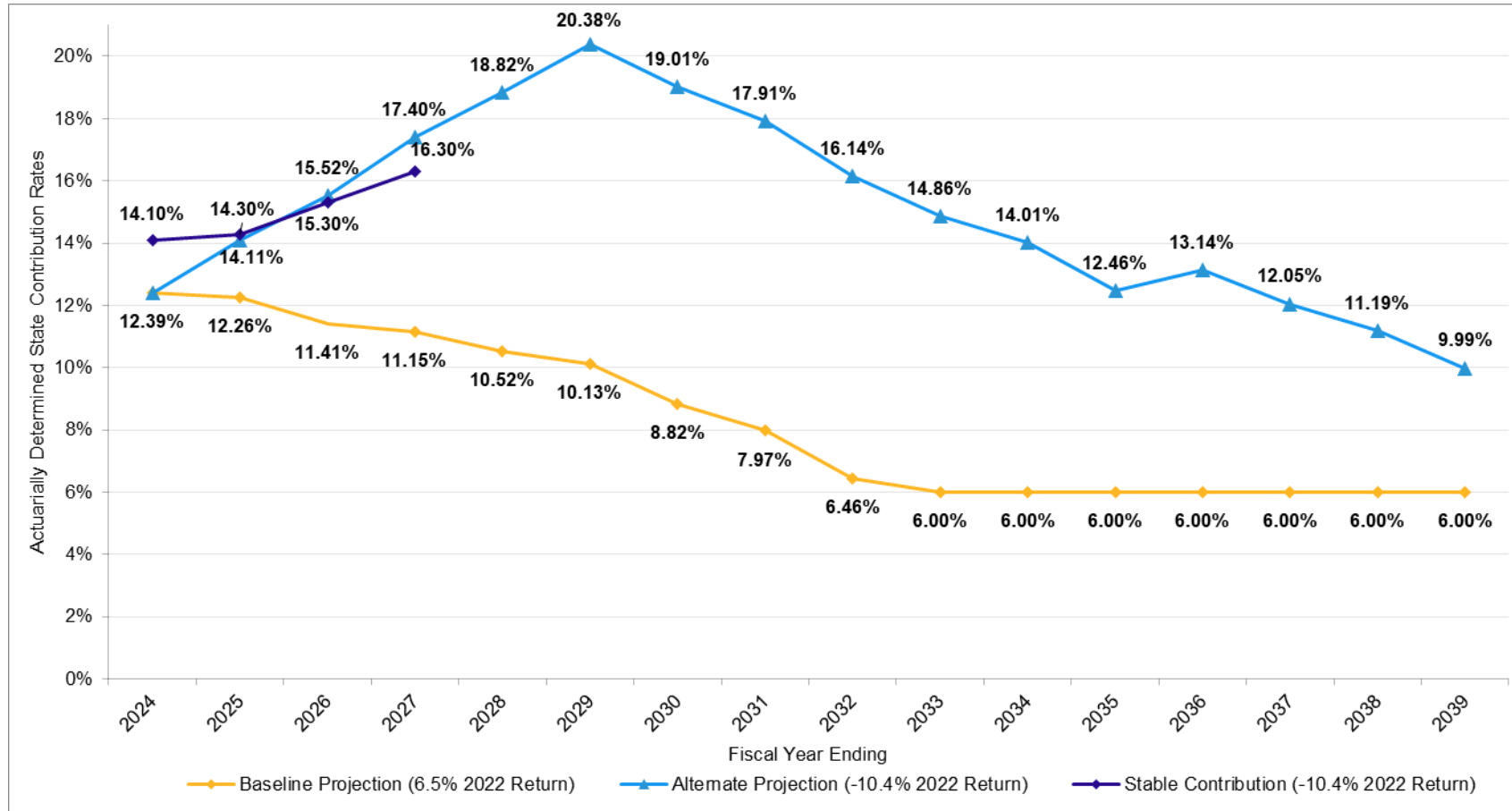
Alternate Projection utilizes estimated return of -10.4% for calendar year 2022 compared to Baseline Projection assumption of 6.5%.

The estimated return for the 2022 calendar year is -16.9% lower than expected, resulting in a market value of assets \$5.6 billion lower than expected.

The unfunded actuarial accrued liability is projected to be higher than previously expected given this loss, resulting in higher employer contribution rates over the projection period.

# Projections

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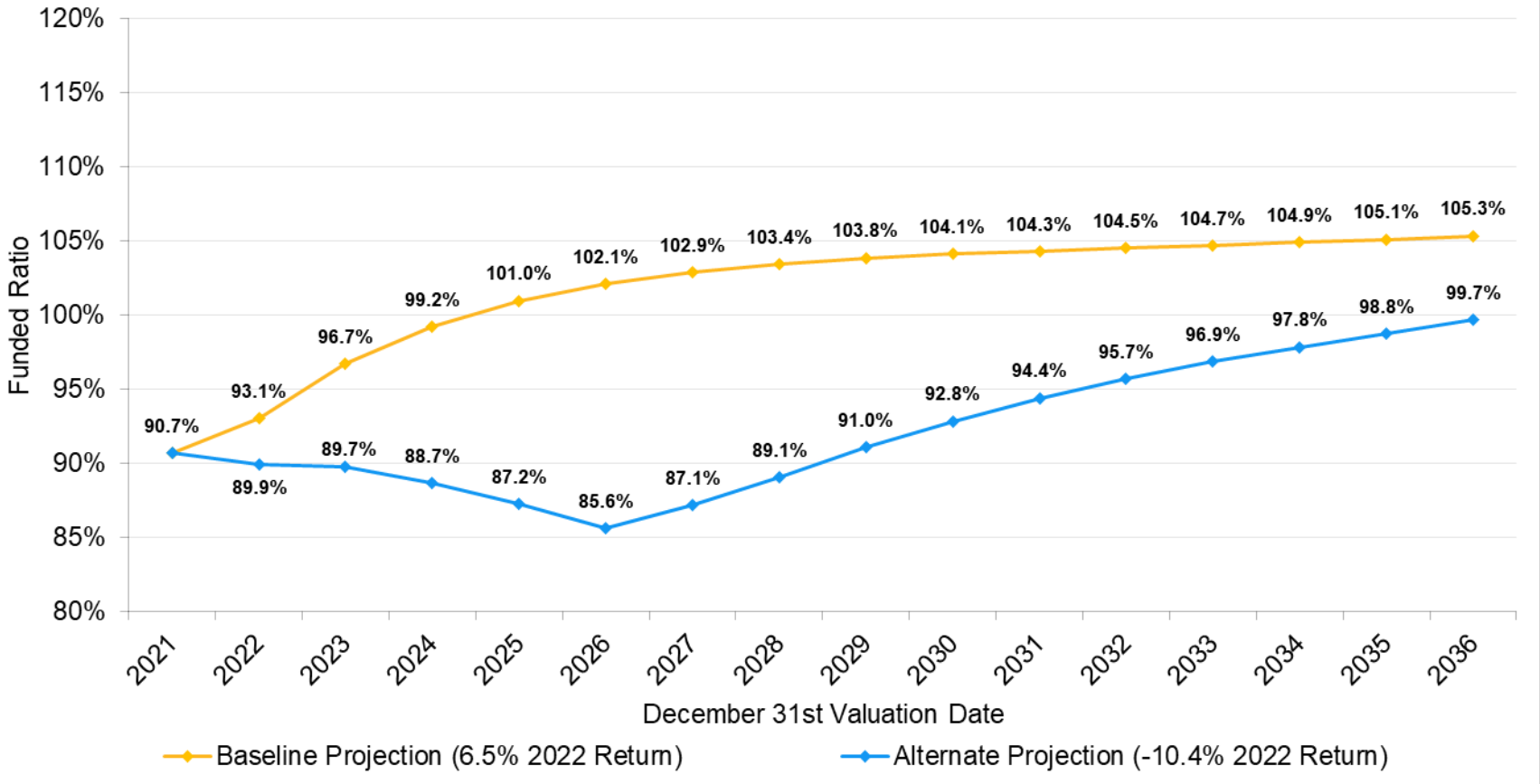
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The unfunded actuarial accrued liability is projected to be higher than previously expected given this loss, resulting in higher employer contribution rates over the projection period.

A detailed summary of the deterministic projections is provided in Section 9.

# Projections

## Projected Funded Ratio



Given the lower than expected return for 2022, estimated market value of assets were \$5.6 billion lower than anticipated. This asset loss will be phased into the funded status of the plan over a five-year period from December 31, 2022 to December 31, 2026, causing a decline in the funded status until the loss is fully recognized. Thereafter, the funded status of the plan begins to climb upward.

# Certification

The purpose of this presentation is to provide the Board of Trustees (“Board”) of the North Carolina Local Governmental Employees’ Retirement System estimated future projections based on the December 31, 2021 valuation results for discussion during the January 26, 2023 Board meeting attended by the actuaries. This presentation is provided for informational purposes and should not be used as actual future funding contribution rates for the System.

Use of these presentation results for any other purpose or by anyone other than the Board, the State of North Carolina, or their respective staffs may not be appropriate and may result in mistaken conclusions due to failure to understand applicable assumptions, methodologies, or inapplicability of the presentation results for that purpose. Because of the risk of misinterpretation of actuarial results, Buck recommends requesting its advance review of any statement, document, or filing to be based on the results contained in this presentation. Buck will accept no liability for any such statement, document, or filing to be made without its prior review.

Unless otherwise noted, the data, assumptions, methods, plan provisions, and model associated with the development of these results are the same as those described in the December 31, 2021 valuation report prepared October 2022. Risks inherent in the measurements herein are also the same as those described in that report.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. Because of limited scope, Buck performed no analysis of the potential range of such future differences, except for some limited analysis in financial projections.

This report was prepared under our supervision and in accordance with all applicable Actuarial Standards of Practice. We are Fellows of the Society of Actuaries, Enrolled Actuaries, Members of the American Academy of Actuaries, and Fellows of the Conference of Consulting Actuaries. We meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. We are available to discuss this report with you at your convenience.

Michael A. Ribble, FSA, EA, MAAA, FCA

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# Appendix



# Fiscal Year Contribution Projection

Alternate Projection (-10.4% Return in 2022, 6.50% Return Thereafter)

Fiscal Year Ending	Employer Policy Contribution Rate		Year Ending	Employer Contribution	Member Contribution	Benefit Payments
	(Non-LEO)	(LEO)				
6/30/2024	12.85%	14.10%	12/31/2022	\$ 914,397,031	\$ 460,601,823	\$ 2,146,764,984
6/30/2025	12.80%	14.30%	12/31/2023	\$ 992,668,542	\$ 468,818,186	\$ 1,897,347,581
6/30/2026	13.55%	15.30%	12/31/2024	\$ 1,041,992,979	\$ 477,566,131	\$ 2,002,141,508
6/30/2027	14.30%	16.30%	12/31/2025	\$ 1,093,663,473	\$ 486,964,911	\$ 2,111,092,113
6/30/2028	16.41%	18.82%	12/31/2026	\$ 1,180,977,153	\$ 496,905,228	\$ 2,221,171,265
6/30/2029	17.99%	20.38%	12/31/2027	\$ 1,330,884,028	\$ 507,322,813	\$ 2,333,338,490
6/30/2030	16.63%	19.01%	12/31/2028	\$ 1,521,509,709	\$ 518,134,007	\$ 2,447,478,165
6/30/2031	15.55%	17.91%	12/31/2029	\$ 1,564,720,633	\$ 529,648,367	\$ 2,562,158,438
6/30/2032	13.80%	16.14%	12/31/2030	\$ 1,490,498,292	\$ 541,898,319	\$ 2,675,936,026
6/30/2033	12.53%	14.86%	12/31/2031	\$ 1,395,123,817	\$ 554,942,299	\$ 2,788,112,623
6/30/2034	11.70%	14.01%	12/31/2032	\$ 1,286,495,170	\$ 568,782,057	\$ 2,895,594,971
6/30/2035	10.16%	12.46%	12/31/2033	\$ 1,216,557,971	\$ 583,106,318	\$ 3,001,884,170
6/30/2036	10.85%	13.14%	12/31/2034	\$ 1,129,017,268	\$ 597,911,244	\$ 3,109,014,826
6/30/2037	9.77%	12.05%	12/31/2035	\$ 1,114,746,621	\$ 613,472,286	\$ 3,216,166,772
6/30/2038	8.92%	11.19%	12/31/2036	\$ 1,123,555,182	\$ 629,699,535	\$ 3,321,725,443
6/30/2039	7.73%	9.99%	12/31/2037	\$ 1,049,321,547	\$ 646,496,734	\$ 3,426,499,752

# Asset and Liability Projection

Alternate Projection (-10.4% Return in 2022, 6.50% Return Thereafter)

Valuation Year	Market Value of Assets	Actuarial Value of Assets	Accrued Liability	Unfunded Accrued Liability	Funded Ratio
12/31/2021	\$ 33,459,926,149	\$ 31,643,208,176	\$ 34,884,123,410	\$ 3,240,915,234	90.7%
12/31/2022	\$ 29,242,528,657	\$ 32,278,676,623	\$ 35,887,852,422	\$ 3,609,175,799	89.9%
12/31/2023	\$ 30,685,692,451	\$ 33,418,408,870	\$ 37,240,408,782	\$ 3,821,999,912	89.7%
12/31/2024	\$ 32,174,303,820	\$ 34,215,503,015	\$ 38,588,416,361	\$ 4,372,913,346	88.7%
12/31/2025	\$ 33,710,107,817	\$ 34,827,742,231	\$ 39,928,782,235	\$ 5,101,040,004	87.2%
12/31/2026	\$ 35,332,340,732	\$ 35,332,340,732	\$ 41,260,565,135	\$ 5,928,224,403	85.6%
12/31/2027	\$ 37,109,545,833	\$ 37,109,545,833	\$ 42,581,848,143	\$ 5,472,302,310	87.1%
12/31/2028	\$ 39,092,181,691	\$ 39,092,181,691	\$ 43,890,557,898	\$ 4,798,376,207	89.1%
12/31/2029	\$ 41,141,630,786	\$ 41,141,630,786	\$ 45,186,502,987	\$ 4,044,872,201	91.0%
12/31/2030	\$ 43,142,726,420	\$ 43,142,726,420	\$ 46,471,317,267	\$ 3,328,590,847	92.8%
12/31/2031	\$ 45,072,956,155	\$ 45,072,956,155	\$ 47,747,744,155	\$ 2,674,788,000	94.4%
12/31/2032	\$ 46,919,689,035	\$ 46,919,689,035	\$ 49,021,342,464	\$ 2,101,653,429	95.7%
12/31/2033	\$ 48,719,147,699	\$ 48,719,147,699	\$ 50,294,493,484	\$ 1,575,345,785	96.9%
12/31/2034	\$ 50,449,710,138	\$ 50,449,710,138	\$ 51,566,948,771	\$ 1,117,238,633	97.8%
12/31/2035	\$ 52,183,258,775	\$ 52,183,258,775	\$ 52,840,065,892	\$ 656,807,117	98.8%
12/31/2036	\$ 53,946,126,642	\$ 53,946,126,642	\$ 54,116,766,961	\$ 170,640,319	99.7%

