1455 SW Broadway, Suite 1600
Portland, OR 97201
Tel 503 227 0634

1301 Fifth Ave, Suite 3800
Seattle, WA 98101
Tel 206 504 5695

milliman.com

March 1, 2021

Via Email

Mr. David DiSalvo
State Retirement Director
Florida Department of Management Services, Division of Retirement

Re: Actuarial analysis of Senate Concepts 1 & 2 – Close FRS Pension Plan to certain new enrollees, mandate participation in FRS Investment Plan

Director DiSalvo:

This letter analyzes Senate Concepts 1 – 2 described in our project scope letter dated December 16, 2020, as further clarified by correspondence with DMS. The effective date of the concepts modeled would be July 1, 2022.

Executive Summary

- Only projected benefits for some future employees would be changed by the concepts. Future hires will not be the majority of FRS payroll for over a decade. The concepts' financial effects on employer costs would be small initially and take decades to be fully reflected.

- The analysis focuses primarily on the projected employer costs of benefits for future hires, since those are the only benefits affected by the concepts. The projected employer costs for benefits of employees enrolled in FRS prior to the effective date would be unaffected by the concept and thus are not covered extensively in the analysis.

- The concepts would narrow the level of employer cost uncertainty associated with variance in actual future Pension Plan investment returns. This effect would develop slowly over decades since the concepts would affect only a subset of future enrollees.

- For affected members, the concepts would transfer investment return and longevity risks from employers to the members. Currently, those risks for members enrolling in the Pension Plan are borne by employers. Modeling FRS Investment Plan member benefits was outside the requested scope of this analysis. Investment and longevity risks are both two-sided, as actual investment returns and a specific retiree's actual retirement-period lifespan could be above or below the modeled assumptions.

- Pension Plan contribution rates are based on the 2020 FRS Actuarial Assumption Conference's 7.00% investment return assumption. A lower future return assumption would result in higher contribution rates than the contributions shown in this study and could change the study results materially.

Introduction

This letter analyzes concepts that would end the plan choice opportunity for certain future hires to enroll in the FRS Pension Plan and would mandate enrollment in the FRS Investment Plan for those members.

This letter, in combination with the attached exhibits, analyzes two different policy concepts:

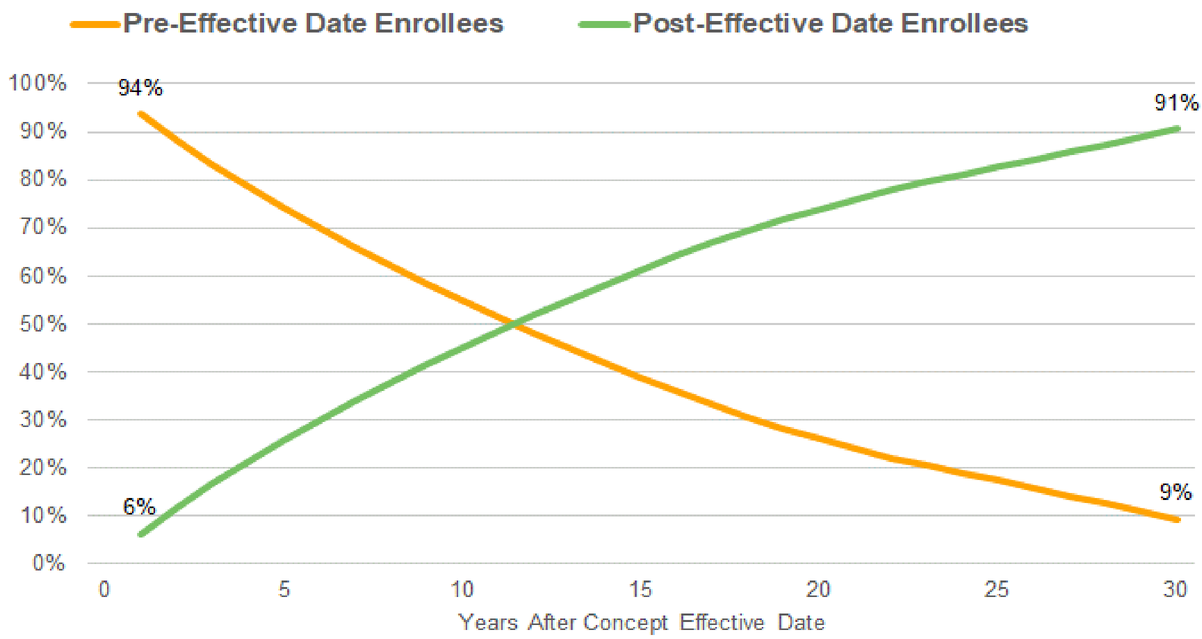
- Concept 1 – Impacts all members initially enrolled on or after July 1, 2022, regardless of membership class.
- Concept 2 – Impacts all members other than those initially enrolled in positions covered by the Special Risk Class. Special Risk Class members could still enroll in the FRS Pension Plan.

Concepts Only Affect a Subset of Future FRS-Eligible New Hires

The concepts only affect a subset of future FRS-eligible new hires. Under current policy, new hires have a choice in enrollment between the defined benefit FRS Pension Plan (PP) and the defined contribution FRS Investment Plan (IP). In this study's baseline, it is assumed that future employees in membership classes other than Special Risk will select the two plans in equal numbers (i.e., a 50% / 50% projected enrollment assumption). In contrast, 80% of future Special Risk employees are assumed to select the FRS Pension Plan under current policy in this study's baseline analysis. Since the concepts mandate participation in the FRS Investment Plan, the concepts affect a subset of FRS-eligible new hires --- the employees who would have been projected to enroll in the FRS Pension Plan.

From the perspective of projected employer cost, this means that the financial effects of concept enactment would occur gradually over an extended period, and only be fully reflected after several decades. The percentage of FRS payroll projected to be attributable to future enrollees after concept effective date is illustrated by the following graph. The graph illustrates projections for composite (all membership classes) payroll. The graph would vary modestly if shown by membership class. For example, future hires are projected to take several years longer to become the majority of payroll in the Special Risk Class, which has lower annual turnover, than the Regular Class.

Percentage Composition of Composite FRS Payroll

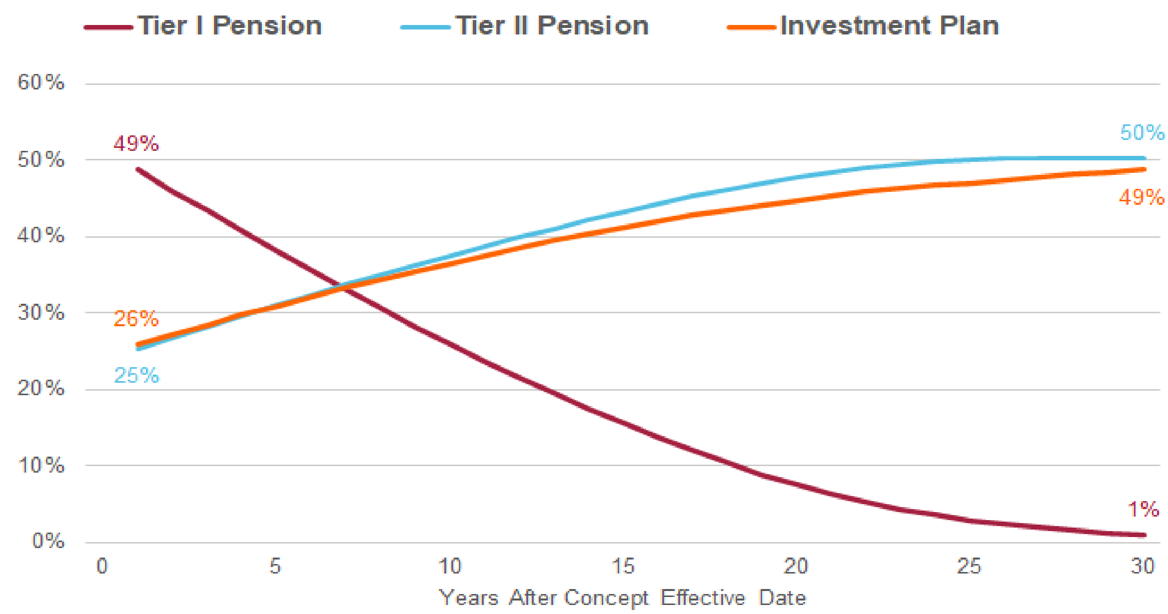


As shown above, future hires are not projected to be the majority of FRS payroll for more than a decade after concept effective date and will not constitute more than 90% of FRS payroll until 30 years after concept effective date.

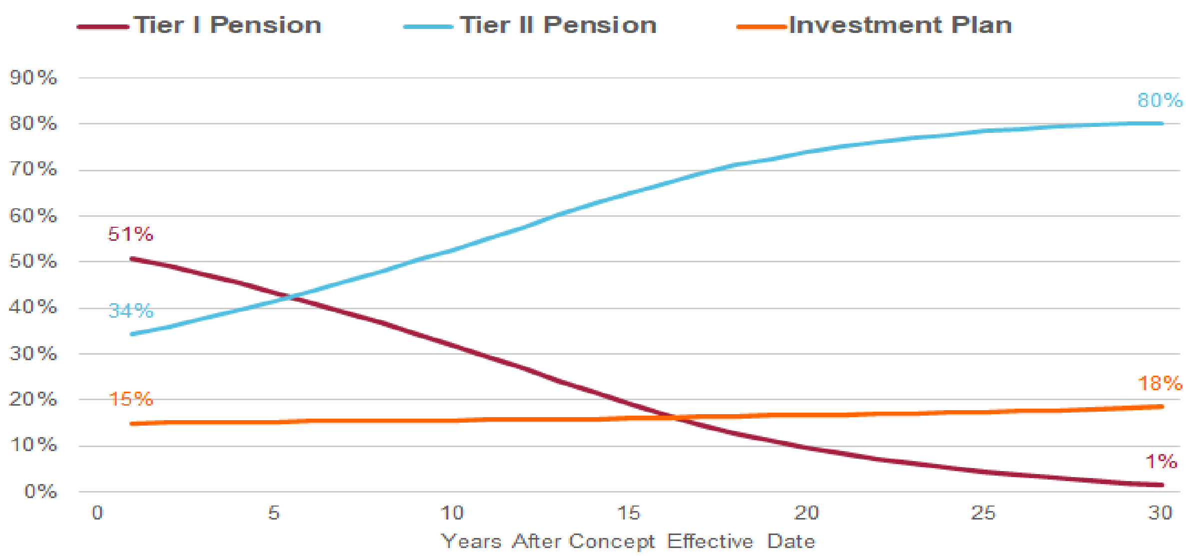
Projected Plan Enrollment Levels Over Time and the Effect of the Concepts

Enrollment levels in various FRS-provided benefits will change over time and vary by membership class. Tier I of the FRS Pension Plan currently has the largest proportion of employee membership on a payroll-weighted basis. However, Tier I participation is unavailable to future hires and thus its share of total FRS payroll will continue to decrease over time. Under current policy, new hires can participate in either the FRS Investment Plan or Tier II of the FRS Pension Plan. The following graphs show the projected composition of FRS payroll by plan/tier under current policy. Some of the values shown on certain graphs may appear sum to less than 100% due to either the rounding convention (nearest 1% of payroll) used in the graph or the omission of a label for a small percentage of payroll (i.e., 1% of payroll) due to space constraints.

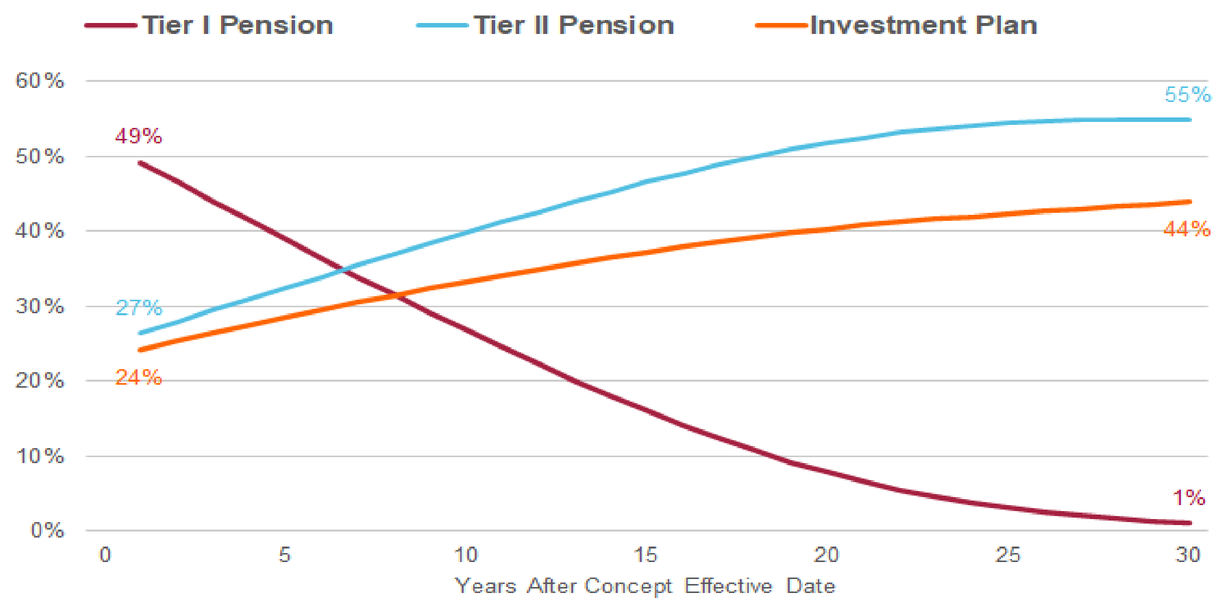
Percentage Composition of Regular Class Payroll – Current Policy



Percentage Composition of Special Risk Class Payroll – Current Policy or Concept 2



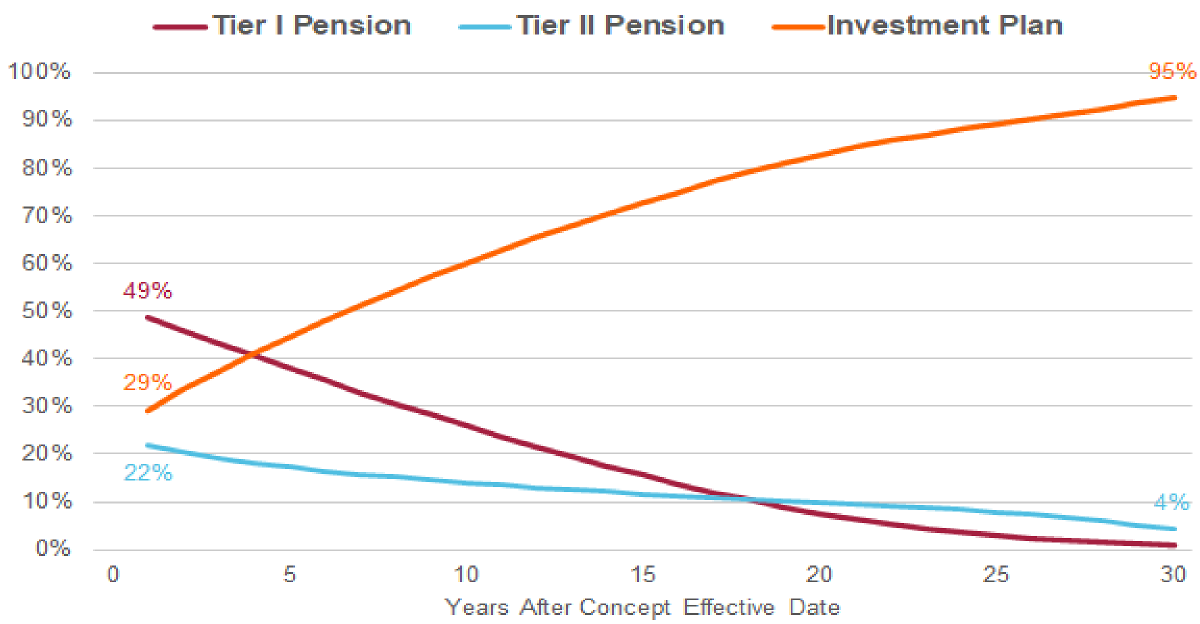
Percentage Composition of Composite FRS Payroll – Current Policy



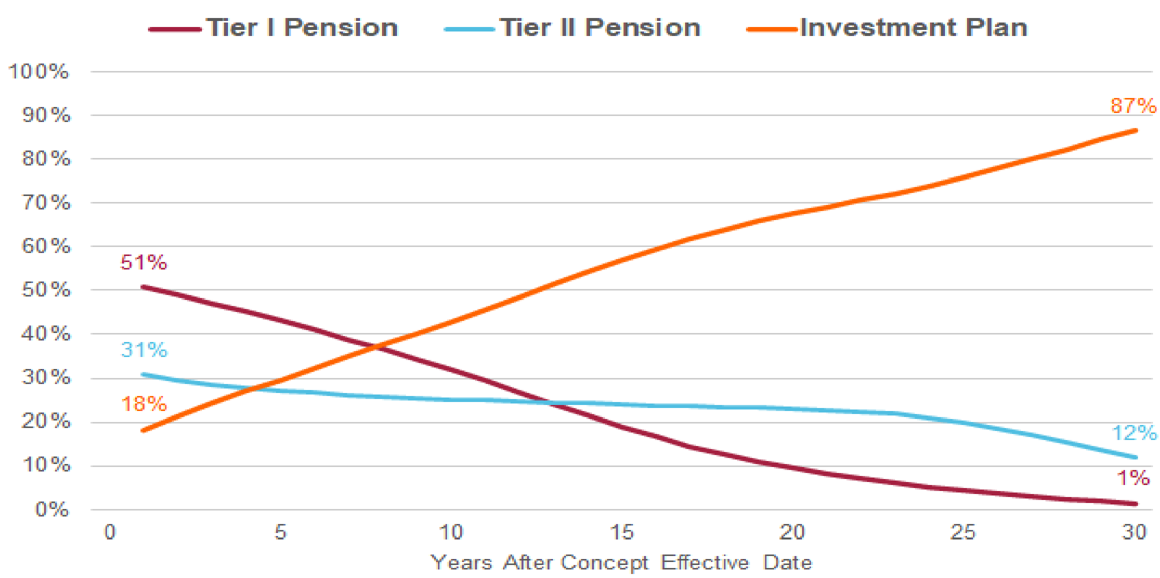
Under current policy, for membership classes other than Special Risk, payroll is projected to gradually shift over 30 years to an equal mix of Tier II Pension Plan and Investment Plan under this study's assumptions. Special Risk is projected to remain predominantly composed of Pension Plan payroll. Special Risk is the only membership class where the Pension Plan is the default enrollment assumption under current policy.

Under this study's analyzed concepts, Pension Plan enrollment would not be permitted for future hires in most (Concept 2) or all (Concept 1) membership classes. The concepts would thus change the projected composition of FRS payroll by plan and tier gradually over a 30-year period compared to what would occur under current policy. If Concept 2 is enacted, plan elections of future Special Risk Class members are assumed to be unchanged from the modeling assumption under current policy (i.e., 80% enrolling in the Pension Plan), which is based on recent observed enrollment patterns for Special Risk members. The following graphs illustrate the effect of the concepts on the projected payroll composition over time.

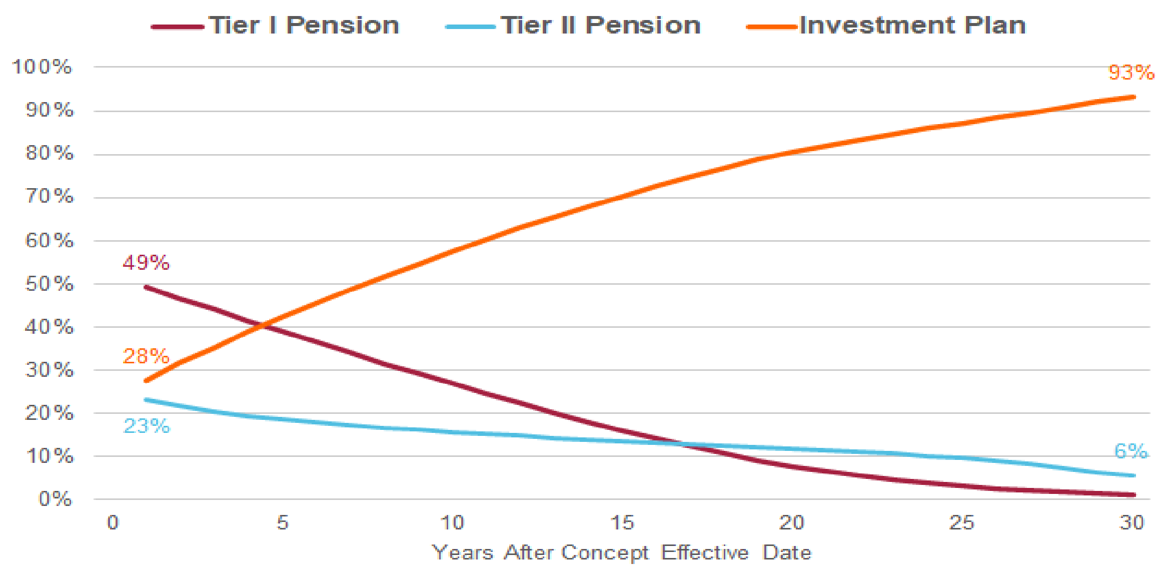
Percentage Composition of Regular Class Payroll – Concepts 1 or 2



Percentage Composition of Special Risk Payroll – Concept 1



Percentage Composition of Composite FRS Payroll – Concept 1

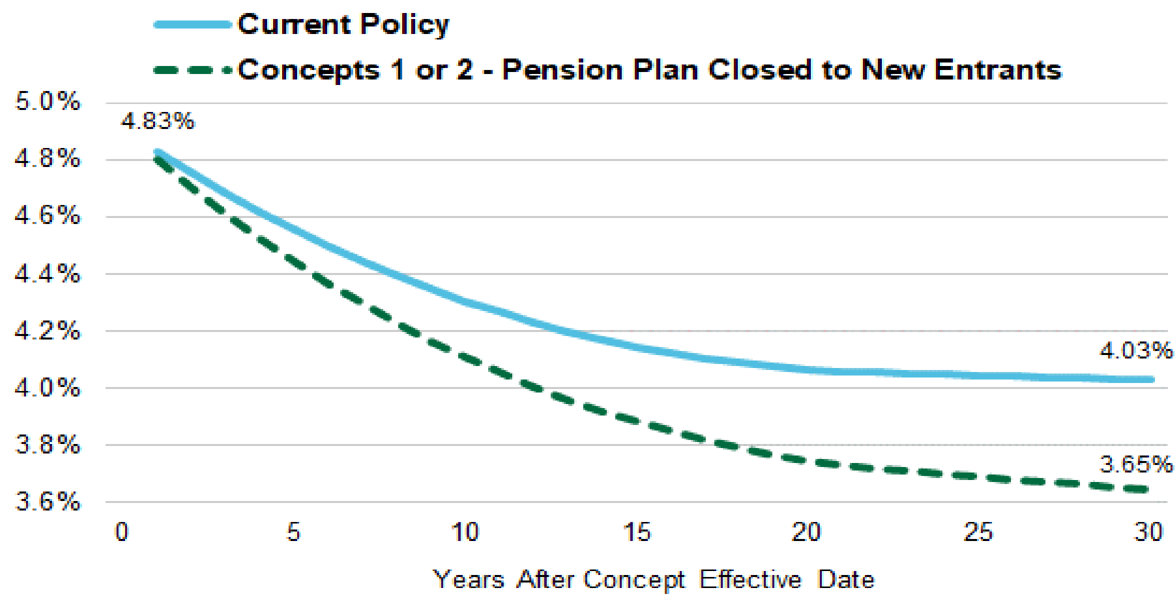


Projected Proposed Blended Statutory Employer Normal Cost Rate

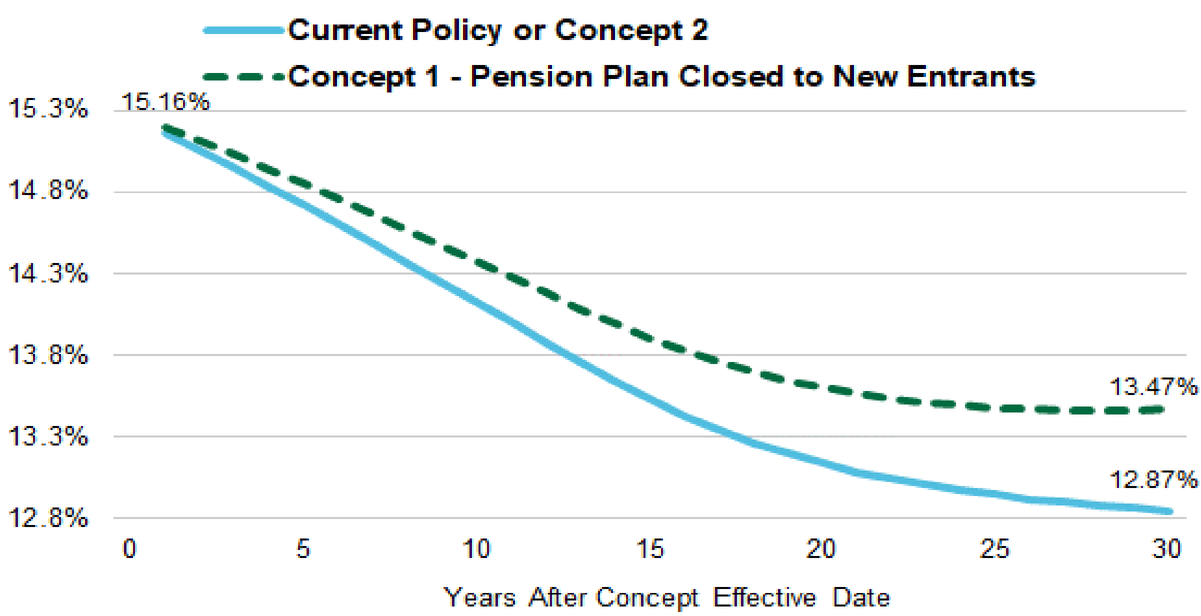
Under FRS's statutory funding structure, a uniform employer normal cost contribution rate is charged on the payroll of each membership class. Normal cost, which is an actuarial term of art, indicates the economic contribution cost of projected retirement benefits allocated to the current year of service for an employee. The statutory normal cost rate is the same regardless of the plan and tier in which the member participates and is set by blending the underlying cost rates of the plans and tiers on a payroll-weighted basis.

As illustrated in the prior section of this analysis, the payroll weightings of the plan and tiers will change over time, with changes differing under current policy compared to the studied concepts. In all illustrated policy scenarios, the projected blended statutory employer normal cost rate will decrease. This decrease is driven by Tier I Pension Plan members (who have the highest underlying cost rates) leaving FRS covered employment and being replaced by future hires that participate in either Tier II of the FRS Pension Plan or the FRS Investment Plan. The projected changes in the proposed blended statutory employer normal cost rate over time for both current policy and under the analyzed concepts are shown in the following graphs.

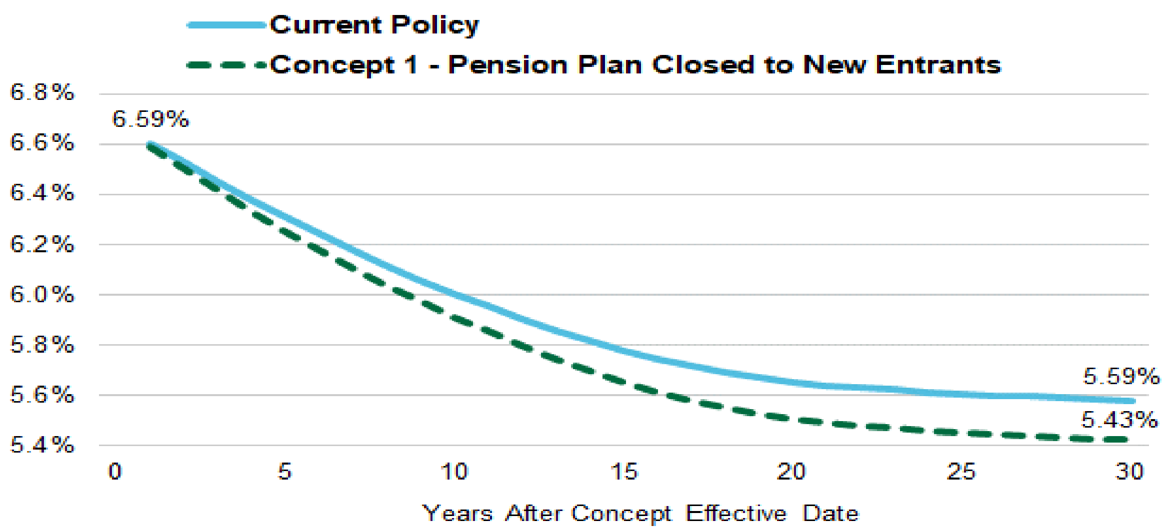
Regular Class Proposed Blended Statutory Employer Normal Cost Rate



Special Risk Class Proposed Blended Statutory Employer Normal Cost Rate



Composite FRS Payroll Proposed Blended Statutory Employer Normal Cost Rate



As seen in the graphs above, the studied concepts would have differing effects on the blended statutory employer normal cost rate for the two largest membership classes. Over a 30-year period, enactment of one of the concepts would lead to a lower Regular Class blended normal cost rate compared to current policy based on current assumptions. In contrast, enactment of Concept 1 would lead to the opposite result for Special Risk Class, with a projected increase in the employer normal cost rate compared to current policy. This difference arises from the differing relationships between the underlying cost rates for Tier II Pension Plan and Investment Plan members in these two classes.

Based on the assumptions and methods used in the 2020 actuarial valuation of the FRS Pension Plan, the cost rate for Regular Class Tier II Pension Plan members is *higher* than the cost rate for Regular Class Investment Plan members. Because of this, closure of the Pension Plan would lead to a *lower* blended normal cost rate over time for the Regular Class.

For the Special Risk Class, the relationship of the two cost rates is the opposite of that seen for Regular Class. The cost rate for Special Risk Tier II Pension Plan members is *lower* than the cost rate for Special Risk Investment Plan members. Because of this, closure of the Pension Plan would lead to a *higher* blended normal cost rate over time for the Special Risk Class.

Portion of Blended Statutory UAL Cost Rate associated with Benefits for Future Hires

Under FRS's statutory funding structure, a uniform employer UAL cost contribution rate is charged on the payroll of each membership class. UAL cost is calculated to fully amortize existing unfunded actuarial liability (UAL) over a specified period if actual future experience matches the assumptions used in the amortization calculations and UAL cost contributions are made in full each year. The assumptions and methods used for this study are based on the 2020 actuarial valuation of the FRS Pension Plan for funding purposes, which were adopted by the 2020 FRS Actuarial Assumption Estimating Conference.

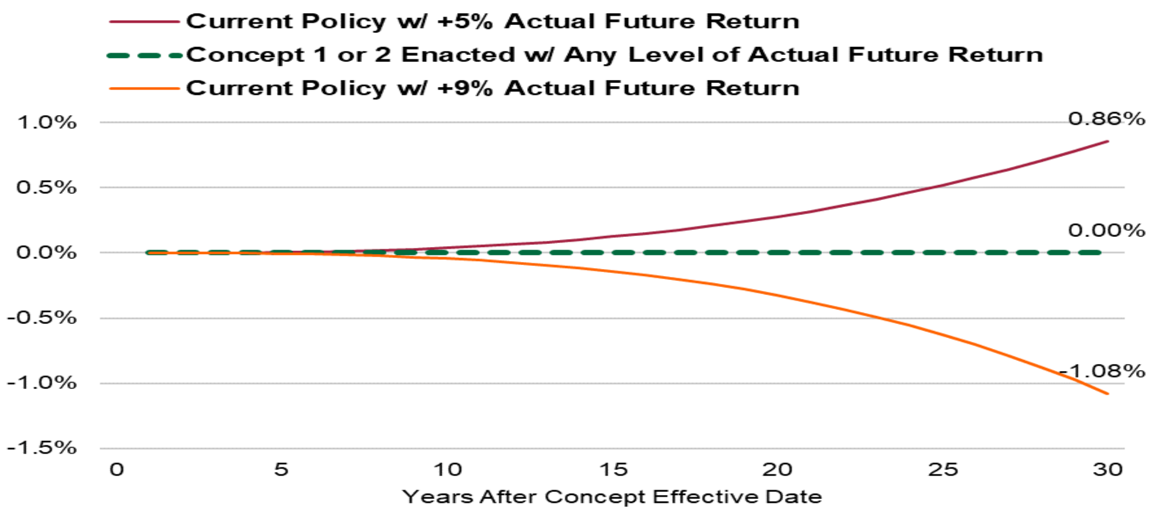
In analyzing the concepts, it is important to understand that over the next 30 years the largest portion of current and projected future statutory UAL Cost rates would **not** be modified by enactment of either of the proposed concepts. The concepts neither change the projected future benefits for Pension Plan members enrolled prior to concept effective date nor modify the blended statutory UAL Cost rate funding mechanism. As such, **UAL Cost for Pension Plan members enrolled prior to concept effective date would be unaffected by the concept and is thus excluded from the analysis.** For reference and example, the 2021-2022 proposed blended statutory UAL Cost rates for the existing members in the Regular and Special Risk membership classes are 4.19% and 8.90%, respectively, when stated as a rate of combined FRS Pension Plan and FRS Investment Plan payroll.

The analyzed concepts do affect the provided benefits and projected employer costs of future hires affected by this proposal. Unfunded actuarial liability (UAL) associated with the benefits of future participants in the defined benefit FRS Pension Plan will arise as actual experience differs from assumption. Commonly UAL is generated from actual future investment returns differing from the actuarial valuation's investment return assumption. UAL can either be a deficit (if actual returns are below assumption) or a surplus (if actual returns are above assumption). **Since the analyzed concepts only affect the benefits of future hires, the analysis shows the portion of the blended statutory UAL Cost Rate associated with benefits for future hires.** In other words, the analysis illustrates the differences in the projected UAL Cost Rate due to implementing one of the concepts, as compared to current policy.

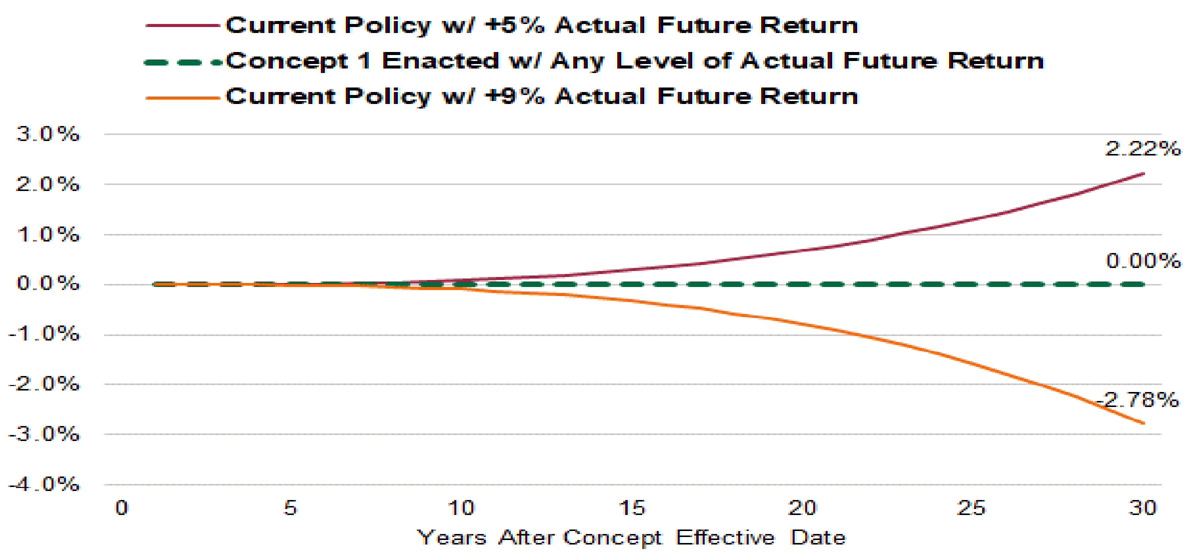
The following graphs show the projected effect on the portion of the blended statutory employer UAL Cost Rate associated with the benefits of future hires under above-assumption (+9%) and below-assumption (+5%) scenarios for actual future annual investment returns in the FRS Pension Plan. Under current policy, above-assumption returns would lead to an associated decrease in employer UAL Cost while below-assumption returns would lead to an associated increase in employer UAL Cost. This is consistent with the sponsoring employers retaining the investment risk, be it positive or negative, in a defined benefit program like the FRS Pension Plan. Under the studied concepts, affected members would participate in the FRS Investment Plan. The Investment Plan is a defined contribution program where investment risk is borne by the employees. As such, no Employer UAL Cost (either positive or negative) can arise from the

Investment Plan retirement and withdrawal benefits of affected employees and the Employer UAL Cost line is 0.00% of payroll as illustrated in the graph.

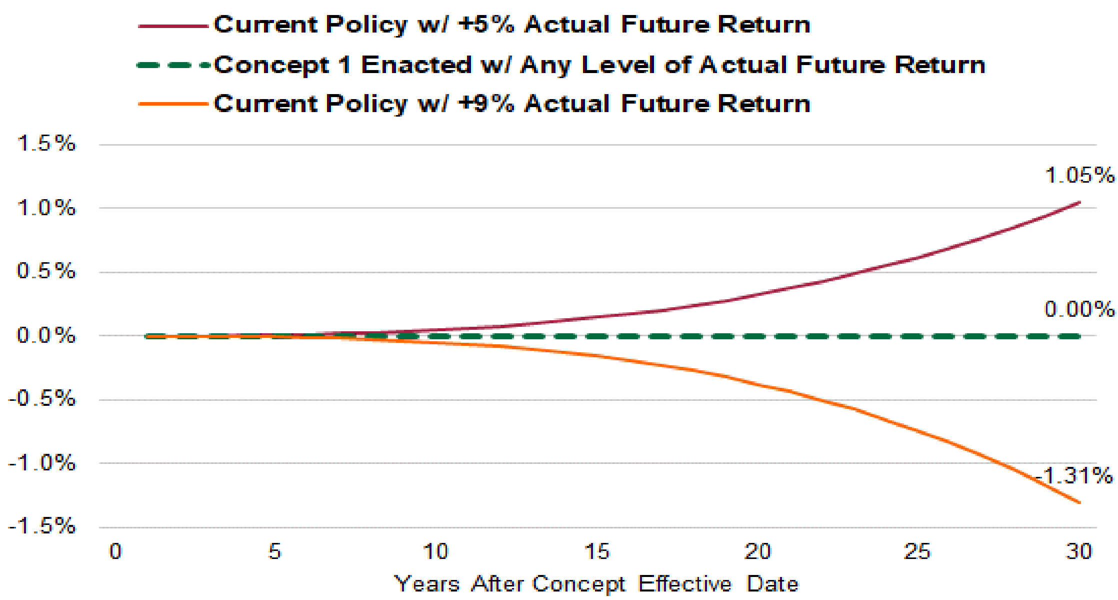
Effect of Investment Return Variation on the Portion of Blended Statutory Employer UAL Cost Rate Associated with Benefits of Future Hires – Regular Class
(Does not include UAL Cost for enrollees prior to effective date, as they are not affected by the change)



Effect of Investment Return Variation on the Portion of Blended Statutory Employer UAL Cost Rate Associated with Benefits of Future Hires – Special Risk Class
(Does not include UAL Cost for enrollees prior to effective date, as they are not affected by the change)



Effect of Investment Return Variation on the Portion of Proposed Blended Statutory Employer UAL Cost Rate Associated with Benefits of Future Hires - FRS Composite Payroll
(Does not include UAL Cost for enrollees prior to effective date, as they are not affected by the change)



As is illustrated in the above graphs, if either concept is enacted, in the first decade after concept effective date the UAL Cost effects of concept enactment would be minor. Only gradually and over an extended period would enactment of the concepts reduce the volatility of the Employer UAL Cost rate associated with benefits of future hires.

Projected Employer Contribution Costs Associated with Benefits of Future Hires

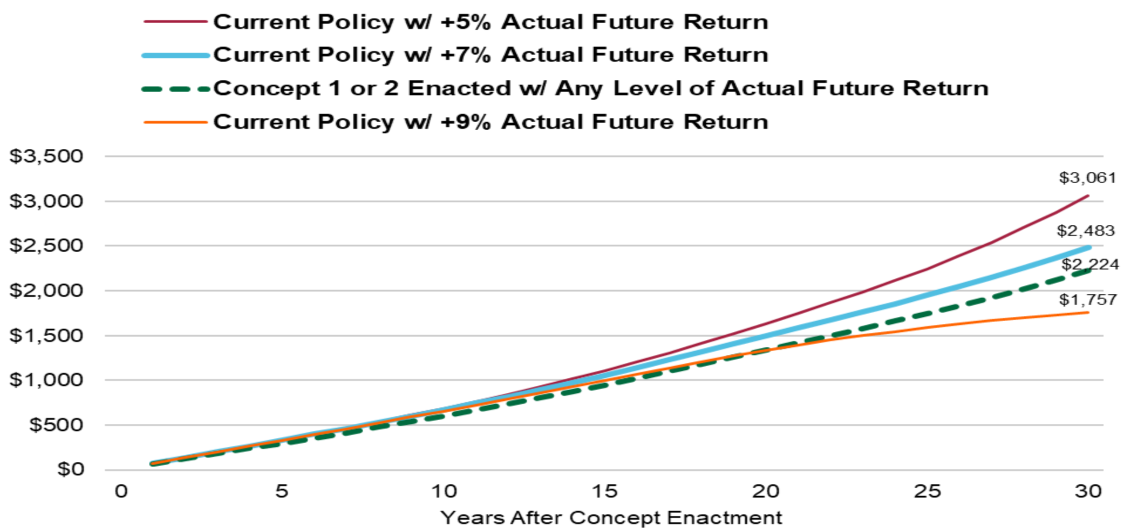
In the same manner, differences in employer contribution costs associated with benefits of future hires affected by concept enactment would be minimal for the first fifteen years following concept enactment. The following graphs compare the projected employer contribution costs associated with the benefits of future hires under the current policy and under the analyzed concepts. Projected employer costs reflect the combination of the normal cost attributable to future hire Pension Plan members, the employer contribution attributable to future Investment Plan members, and the portion of the UAL Cost associated with the Pension Plan benefits of future hires in scenarios where the Pension Plan remains open to new enrollment and actual Pension Plan investment experience differs from the +7.00% actuarial valuation assumption for annual return.

The graphs on the following pages show projected employer contribution costs in non-inflation adjusted dollars, and as a percentage of applicable payroll. Note that these graphs reflect the employer contribution costs associated with benefits of future hires only. Thus, the contribution rates depicted by the blue (current policy) and dotted green (enacted concept) lines differ from those shown in the blended employer normal cost section in that the blended employer normal cost graphs include costs associated with currently enrolled members as well as future hires.

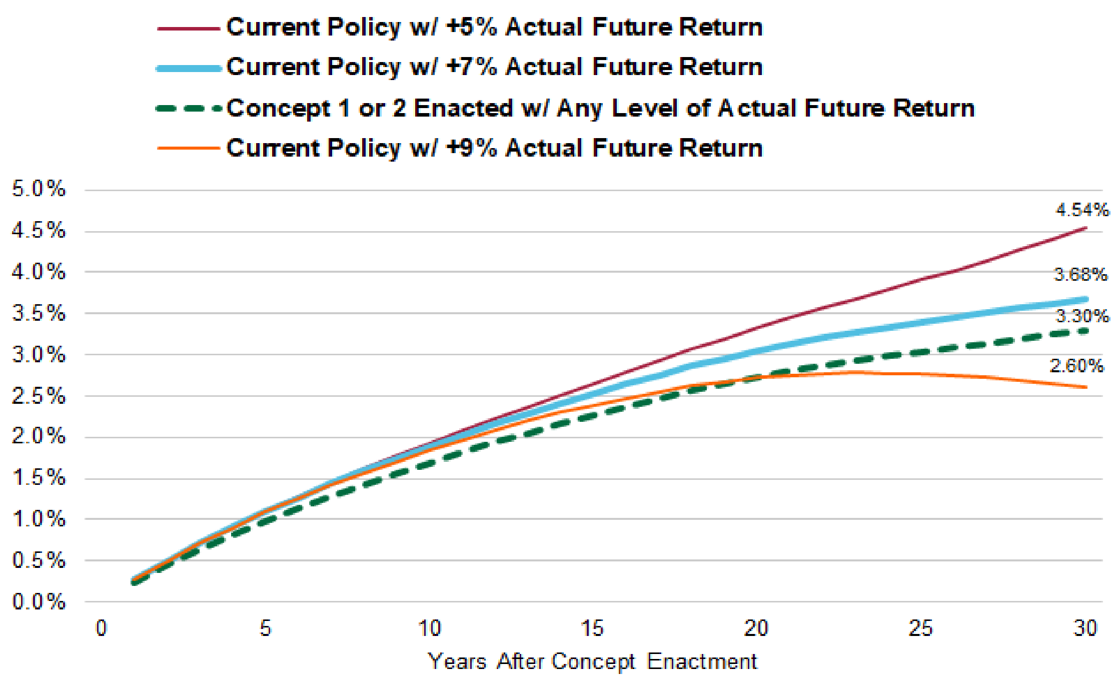
As discussed in a previous section, based on the assumptions and methods used in the 2020 actuarial valuation of the FRS Pension Plan, the normal cost rate for Regular Class Tier II Pension Plan members is *higher* than the normal cost rate for Regular Class Investment Plan members. Because of this, closure of the Pension Plan under Concepts 1 or 2 would lead to a *lower* employer cost over time for Regular Class if actual future Pension Plan investment returns match the +7.00% assumption in the actuarial valuation.

In contrast, for the Special Risk Class the relationship of the two normal cost rates is the opposite of that seen for Regular Class. The normal cost rate for Special Risk Tier II Pension Plan members is *lower* than the cost rate for Special Risk Investment Plan members. Because of this, closure of the Pension Plan under Concept 1 would lead to a *higher* employer cost over time for the Special Risk Class if actual future Pension Plan investment returns match the +7.00% assumption in the actuarial valuation.

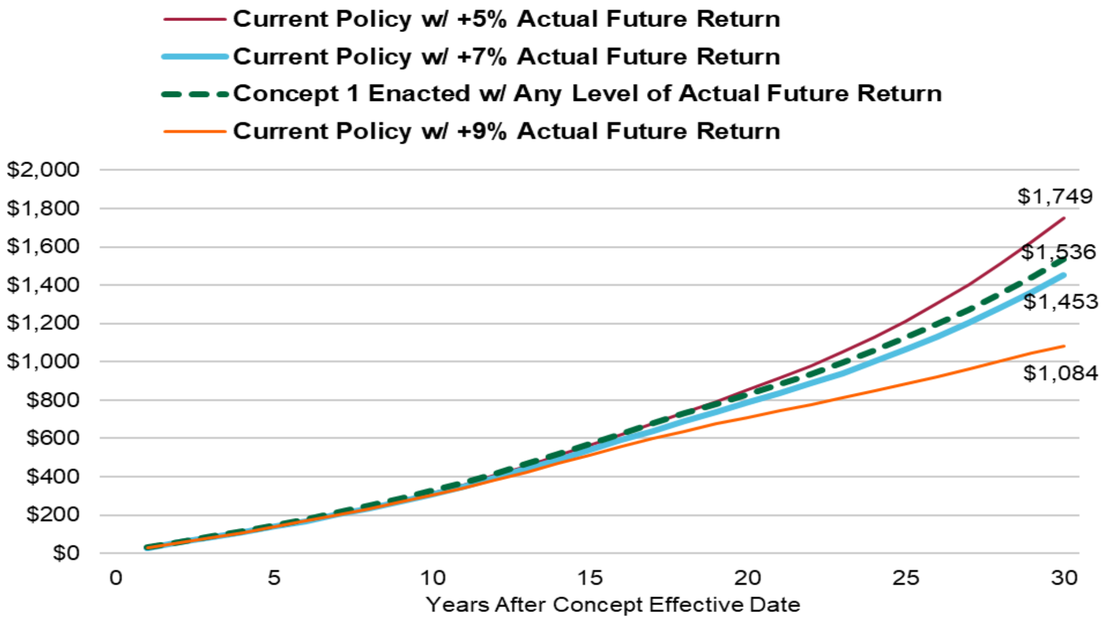
Regular Class Year-by-Year Employer Contribution Costs for Future Enrollees' Benefits (Non-inflation-adjusted $ amounts in millions)



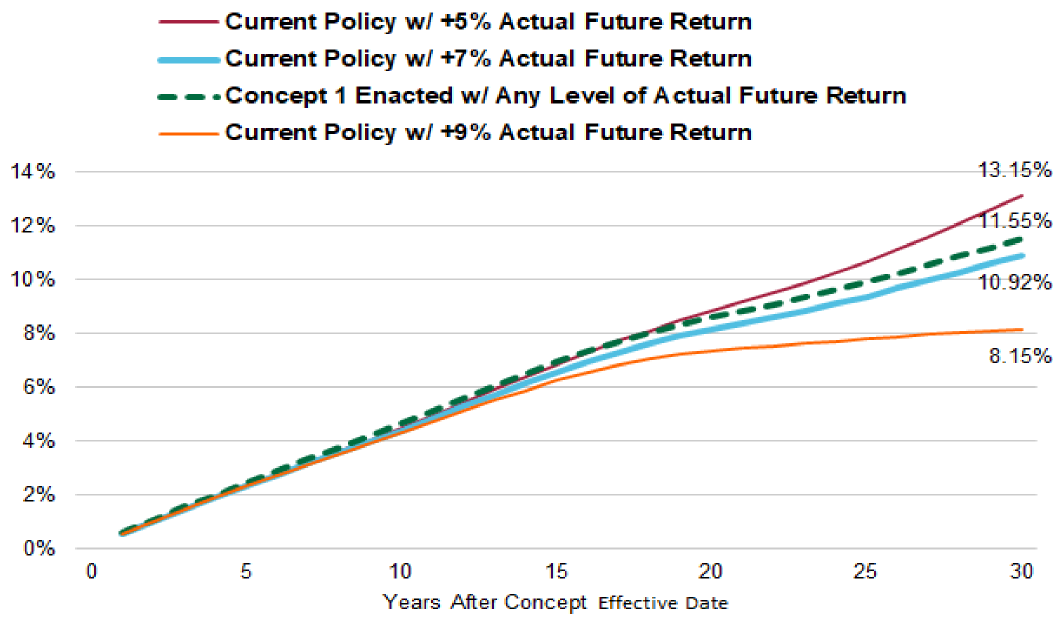
Regular Class Year-by-Year Employer Contribution Cost for Future Enrollees' Benefits (Percentage of Total Pension Plan & Investment Plan Regular Class Payroll)



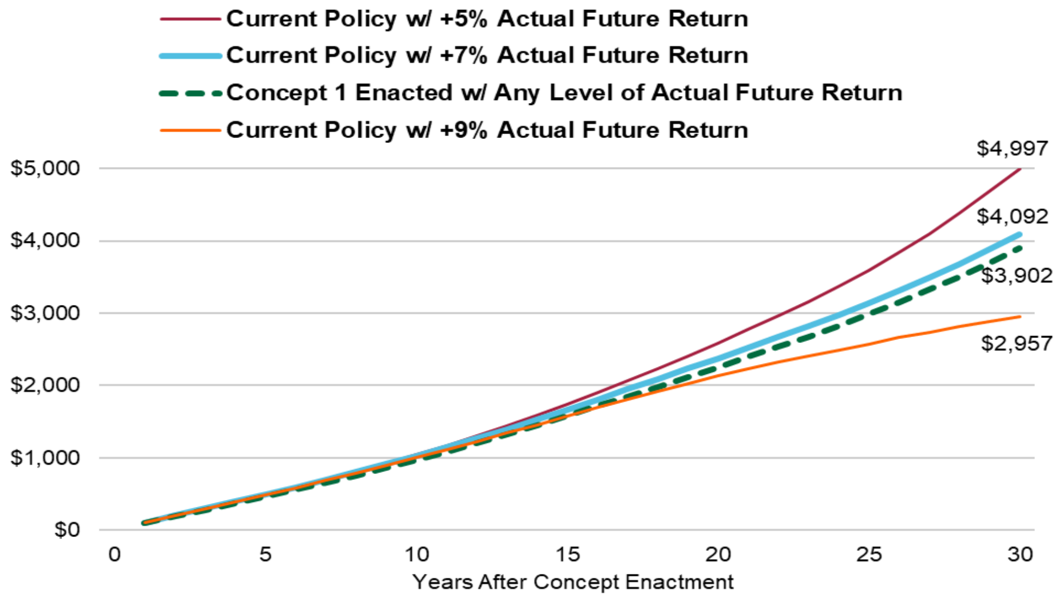
Special Risk Class Year-by-Year Employer Contribution Cost for Future Enrollees' Benefits
(Non-inflation-adjusted $ amounts in millions)



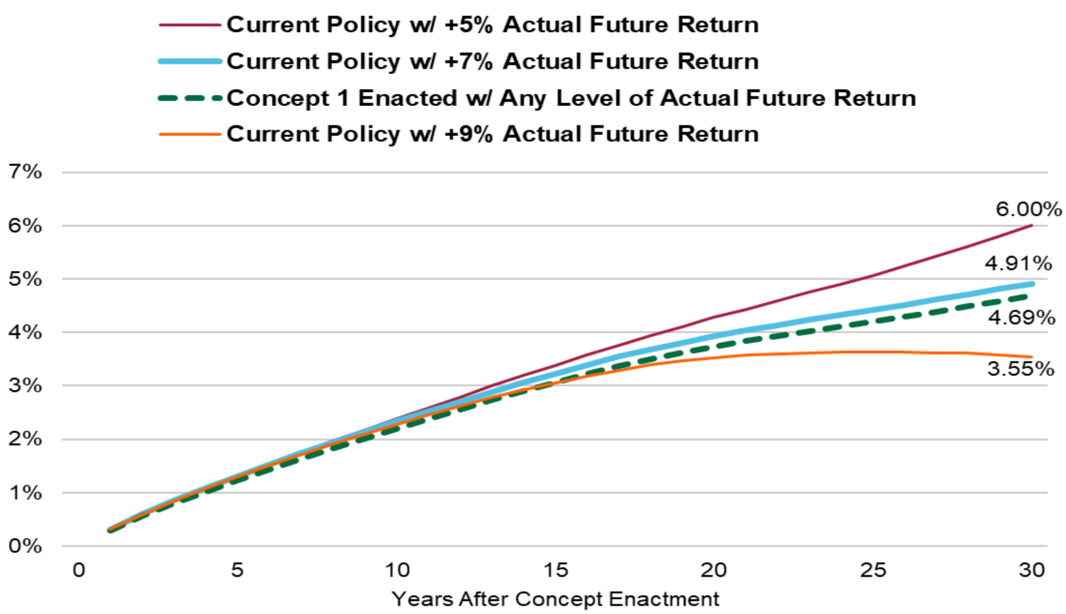
Special Risk Class Year-by-Year Employer Contribution Cost for Future Enrollees' Benefits
(Percentage of Total Pension Plan & Investment Plan Special Risk Class Payroll)



FRS Composite Year-by-Year Employer Contribution Cost for Future Enrollees' Benefits (Non-inflation-adjusted $ amounts in millions)

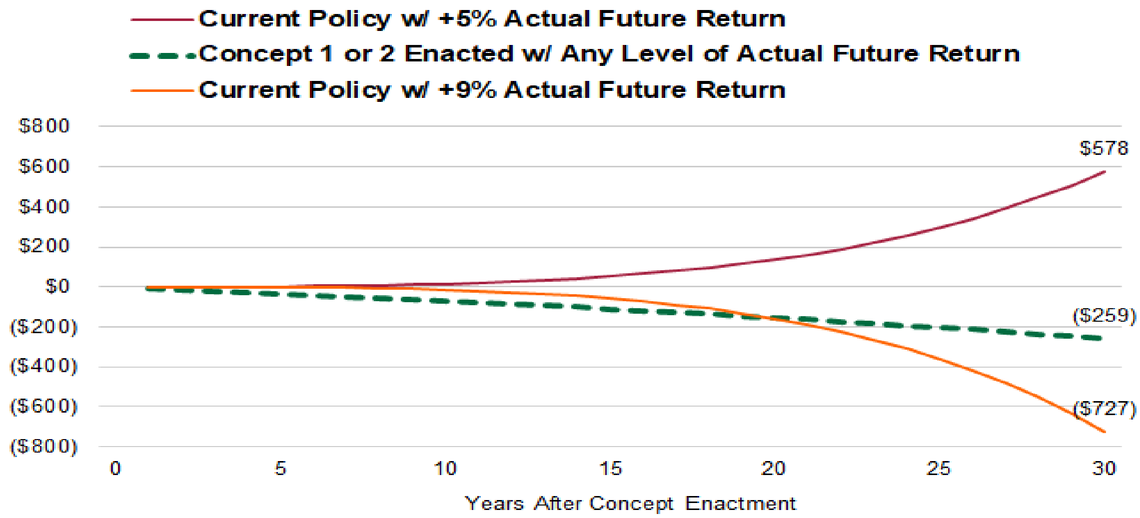


FRS Composite Year-by-Year Employer Contribution Cost for Future Enrollees' Benefits (Percentage of Total Pension Plan & Investment Plan FRS Composite Payroll)

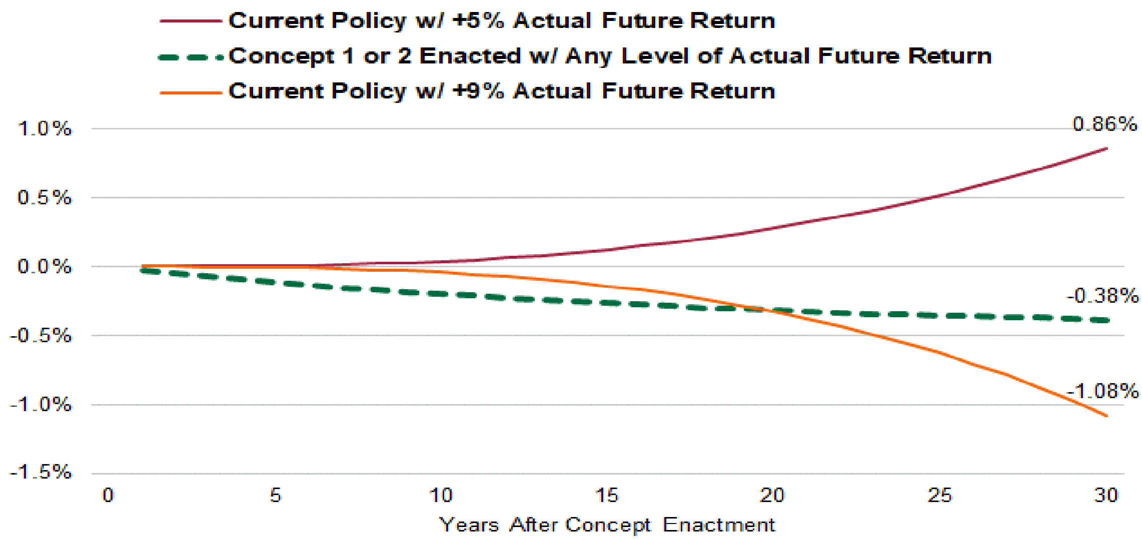


The graphs above displayed the projected year-by-year employer cost associated with the benefits of future hires under several scenarios. The graphs below show how those costs **vary** from the baseline of current policy and actual future Pension Plan return of +7.00% annually.

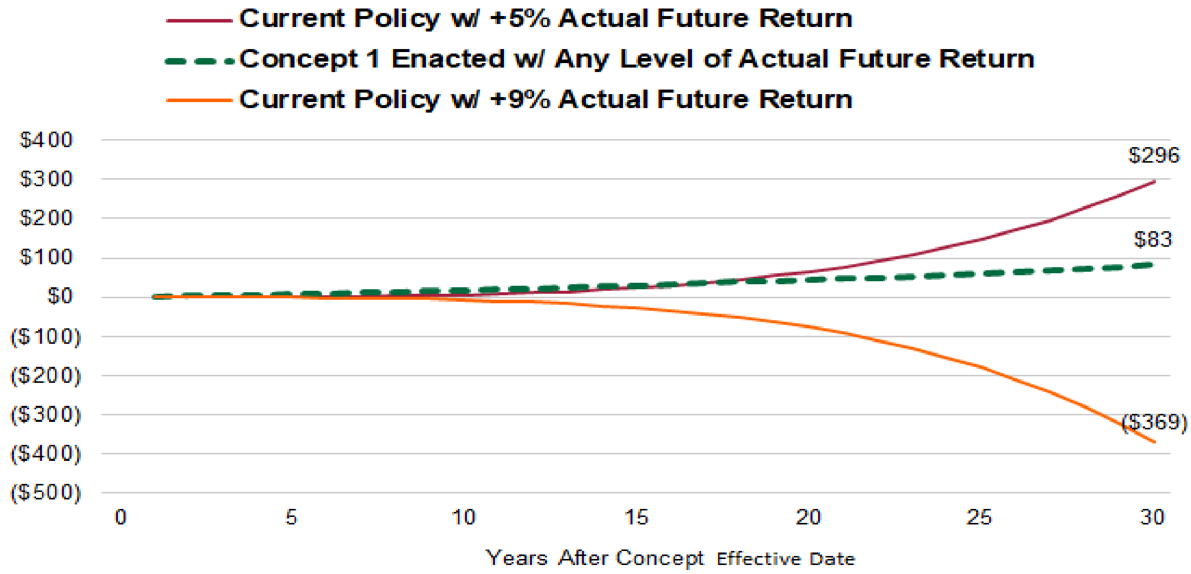
Regular Class Variance in Contribution Costs for Future Enrollees' Benefits Compared to Current Policy with 7% Actual Future Return (Non-inflation-adjusted $ amounts in millions)



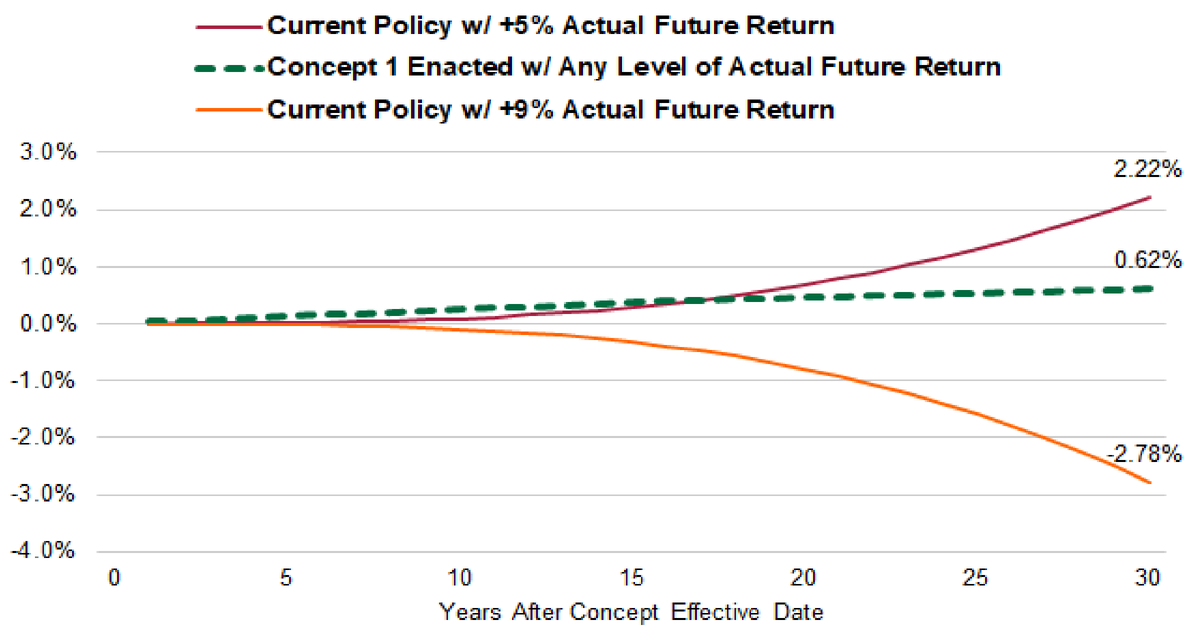
Regular Class Variance in Contribution Costs for Future Enrollees' Benefits Compared to Current Policy with 7% Actual Future Return (Percentage of Total Pension Plan & Investment Plan Regular Class Payroll)



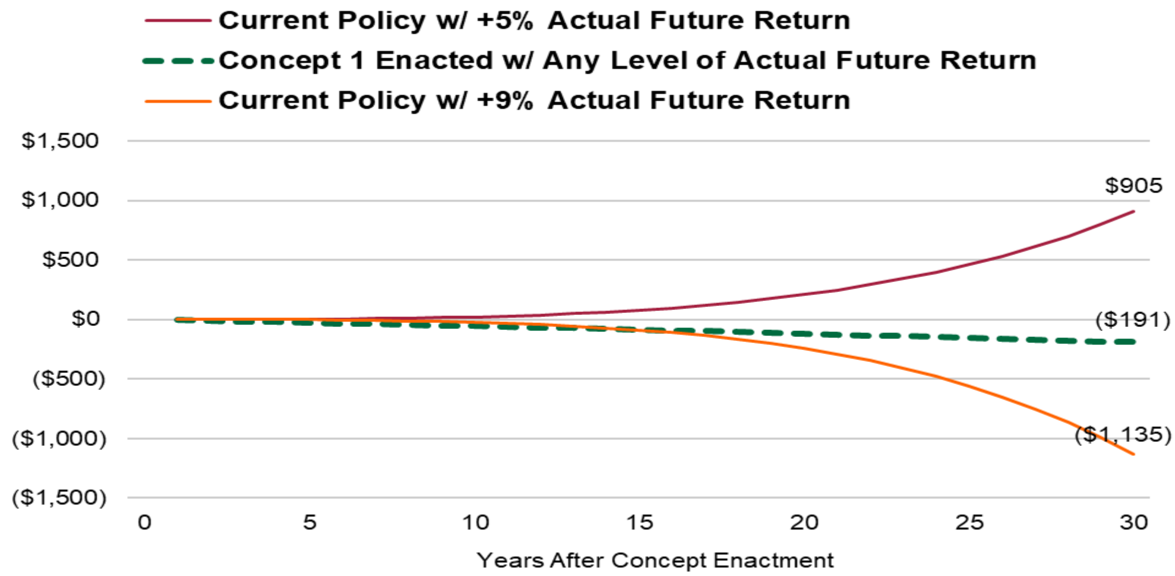
Special Risk Class Variance in Contribution Costs for Future Enrollees' Benefits Compared to Current Policy with 7% Actual Future Return (Non-inflation-adjusted $ amounts in millions)



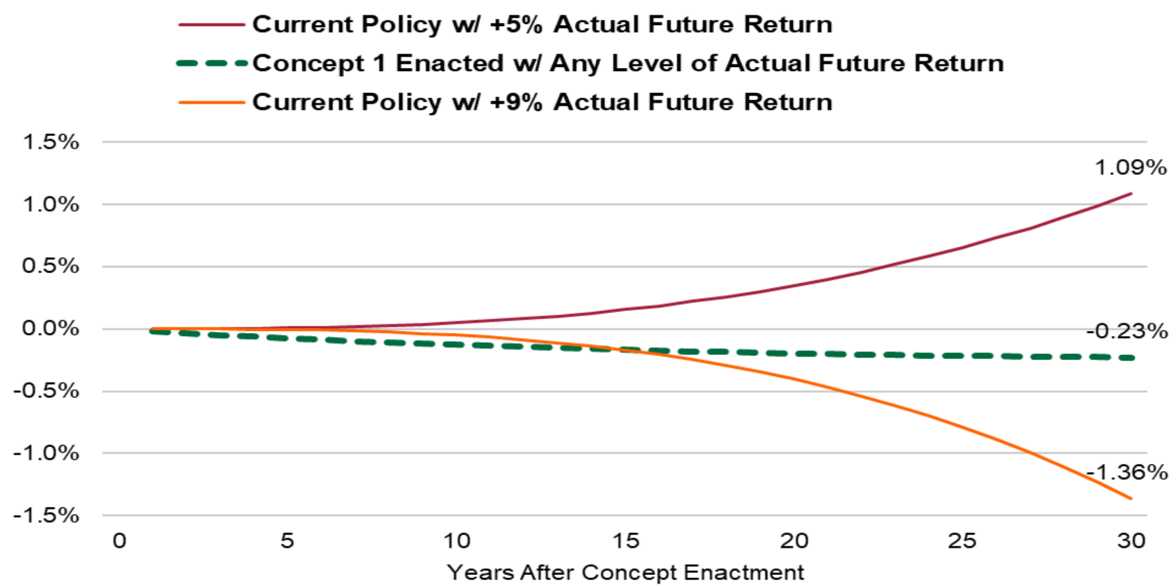
Special Risk Class Variance in Contribution Costs for Future Enrollees' Benefits Compared to Current Policy with 7% Actual Future Return
(Percentage of Total Pension Plan & Investment Plan Special Risk Class Payroll)



FRS Composite Variance in Contribution Costs for Future Enrollees' Benefits Compared to Current Policy with 7% Actual Future Return (Non-inflation-adjusted $ amounts in millions)



FRS Composite Variance in Contribution Costs for Future Enrollees' Benefits Compared to Current Policy with 7% Actual Future Return
(Percentage of Total Pension Plan & Investment Plan FRS Composite Payroll)



Calculation of Proposed Blended Statutory Cost Rates

The proposed blended statutory normal cost rate for the economic value of benefits earned in the current year is calculated annually in the blended rate study and is a payroll-weighted blend of the two rates listed below. If the FRS Pension Plan is closed to new entrants, the proposed blended statutory normal cost rate's level would gradually migrate in the direction of the FRS Investment Plan rate in sync with the migration in payroll composition described in this analysis.

- The FRS Pension Plan's Employer Normal Cost rate is variable and is calculated annually in the FRS Actuarial Valuation as a percentage of FRS Pension Plan-only payroll. As examples, in the most recent valuation, these rates were 5.34% and 15.57% of class-specific FRS Pension Plan payroll for the Regular Class and Special Risk Class, respectively. These rates are dependent upon all the assumptions in the 2020 FRS Actuarial Valuation, including the 7.00% assumption for future investment return, as adopted by the 2020 FRS Actuarial Assumption Conference.

- The FRS Investment Plan's employer contribution rate is fixed and specified in Florida Statute. As examples, the rates currently in effect are 3.60% and 13.54% for the Regular Class and Special Risk Class, respectively. Those rates are after adjustment of the statutory total contribution level to subtract the 3.00% member contribution rate and add the contribution rates dedicated to funding disability benefits, Special Risk Class ILOD (in-line-of-duty) death benefits, and administrative costs.

The proposed blended statutory UAL (unfunded actuarial liability) cost calculated annually in the blended rate study is a weighting of the variable UAL Rate developed annually in the FRS Actuarial Valuation on applicable projected payroll (excluding FRS Investment Plan payroll) and a 0% rate on projected FRS Investment Plan payroll. The 2021-2022 proposed <u>blended</u> statutory UAL Cost rate for the Regular and Special Risk membership classes are 4.19% and 8.90%, respectively, when stated as a rate of combined FRS Pension Plan and FRS Investment Plan payroll. All calculations are based on a 7.00% investment return assumption, as adopted by the 2020 FRS Actuarial Assumption Conference.

Migration of Proposed Blended Statutory UAL Cost and Employer Cost over Time

The FRS Pension Plan UAL cost is developed annually in the actuarial valuation. It is based on an assessment of the UAL, which is the difference, as of the actuarial valuation date, between the actuarial liability and the smoothed actuarial value of assets. The UAL cost calculation is done at a membership class level. The proposed blended statutory UAL Cost Rate is developed annually in the blended rate study and contemplates FRS Pension Plan payroll, FRS Investment Plan payroll, and other employer payroll upon which the statutory UAL cost is charged. The proposed blended statutory UAL cost is calculated in a manner to amortize the UAL over a specified time period if future experience follows assumptions, including the assumption that the combined payroll on which the UAL cost is charged will grow at 3.25% annually. The UAL cost can either be a positive number (a charge) or a negative number (a credit to partially offset the normal cost rate). In the event of a negative UAL, the surplus rate stabilization mechanism identified in statute would apply.

The current proposed blended statutory UAL cost is based on the combined effects of past policy for funding and benefits and past investment and demographic experience. The UAL projected to be amortized by UAL cost contributions is for the existing liability of members already participating in the FRS Pension Plan. As such, the enactment of either of the concepts studied herein would have no effect on the portion of the calculated UAL cost attributable to the UAL that already exists at the time the concept becomes effective, for two reasons: First, the magnitude of the existing UAL is based on FRS Pension Plan members enrolled prior to the concept's effective date and would be unchanged by a policy decision that would direct a higher percentage of future enrollees to the FRS Investment Plan. Second, the amortization schedule of the existing UAL via the proposed blended statutory UAL cost is calculated using an assumption of 3.25% future annual growth in the combined payrolls (FRS Pension Plan plus FRS Investment Plan) noted above. Enactment of the concept would not modify the assumed growth of that combined payroll amount.

As can be observed, the estimated costs for new enrollees are comparatively minor at the start of the modeled period. This is because it takes approximately twelve years before new enrollees constitute one-half of total payroll.

Graphs in the section of this report labeled "Projected Employer Contribution Costs Associated with Benefits of Future Hires" show contribution costs for new enrollees as a percentage of the combined FRS Pension Plan and FRS Investment Plan payroll. They also show the increase or (decrease) in contribution costs as compared to current policy. As can be seen from the graphs, even 30 years after the proposed change, the projected contribution costs specific to post-effective date new enrollees would be comparatively modest as a percentage of payroll when compared to the current contribution costs for the members who have already entered the plans.

Data, Assumptions, Methods, and Provisions Used in Analysis

Other than the exceptions and additions noted in this letter, the data, methods, assumptions, and plan provisions used in our analysis are the same as those used in our July 1, 2020 FRS Actuarial Valuation Report issued on December 1, 2020.

Additional assumptions and methods used to develop our estimates are described below:

- For purposes of calculating projected liabilities, UAL and UAL amortization amounts for the new entrant member group, liabilities are rolled forward using standard actuarial techniques under the assumption that FRS Tier II Pension Plan normal cost rates remain constant in each membership class.

- Two simplifying assumptions were used in modeling UAL and UAL amortization for the liability of the new enrollee group: First, UAL was calculated using a fair-market assets measure. Second, the annual amortization was calculated using an open 25-year amortization factor based on the prevailing economic assumptions used to develop amortization factors for newly created UAL in the July 1, 2020 actuarial valuation report. These simplifications have small and offsetting effects and do not materially impact the level of employer contribution over the modeled period.

- Current FRS Pension Plan and FRS Investment Plan members were assumed to terminate employment in accordance with the July 1, 2020 actuarial valuation's assumptions. New entrant replacements for those departing members were assumed to have salary levels such that total FRS payroll increases at 3.25% annually during the modeling period.

- We did not attempt to model the effects of actual investment experience between the most recent actuarial valuation date (July 1, 2020) and the publication date of this analysis letter in our work.

Actuarial Basis and Qualifications

In preparing this analysis, we relied, without audit, on information (some oral and some in writing) supplied by Florida Department of Management Services ("Florida DMS"). This information includes, but is not limited to, statutory provisions, employee data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The estimates depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be differ and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined using actuarial assumptions and methods which in my professional opinion are individually reasonable.

Future actuarial measurements may differ significantly from the current measurements presented in this estimate due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in plan provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The FRS Actuarial Assumption Conference has the final decision regarding the appropriateness of the assumptions and methods and adopted the current valuation assumptions and methods in October 2020.

Actuarial estimates presented in this analysis are for purposes of informing policy makers regarding possible future contribution rates under different benefit policy scenarios, and three future investment return scenarios. As such, they cannot be relied upon for financial reporting or other purposes, and calculations for purposes other than this use may be significantly different from the estimates contained in this letter. Accordingly, additional determinations may be needed for other purposes.

Milliman's work is prepared solely for the use of Florida DMS. To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third-party recipient of its work product.

No third-party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are retirement actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

Milliman consultants are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board and the *Code of Professional Conduct* and *Qualifications Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States* published by the American Academy of Actuaries. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

If you have any questions about our response or need any additional information, please let us know.

Sincerely,

Matt Larrabee, FSA, EA, MAAA
Principal & Consulting Actuary

Enclosure

cc: Garry Green (Division of Retirement), Daniel Wade (Milliman), Kathryn Hunter (Milliman)

FLORIDA RETIREMENT SYSTEM
FISCAL IMPACT ANALYSIS

Effect of Concept 1 Enactment on Employer Contribution Costs for Future Enrollees' Benefits
Compared to Current Policy with 7.00% Actual Future Investment Return
As Determined in July 1, 2020 Actuarial Valuation for Development of Plan Year End 2022 Contribution Rates
(Dollars in Thousands)

				------Elected Officers' Class----				
	Regular	Special Risk	Special Risk Administrative	Judicial	Leg-Atty-Cab	Local	Senior Management	Composite
A. Plan-Specific Employer Normal Cost Rates								
1. Tier 1-Specific FRS Pension Plan [1]	5.75%	17.39%	11.49%	13.83%	9.21%	11.02%	7.42%	7.73%
2. Tier 2-Specific FRS Pension Plan [1]	4.44%	12.63%	5.43%	13.74%	9.07%	10.75%	5.85%	6.19%
3. FRS Investment Plan [2]	3.60%	13.54%	5.43%	11.05%	6.94%	8.95%	4.98%	4.70%
4. 2021-2022 Proposed Blended Statutory [3]	4.91%	15.27%	9.73%	13.38%	8.49%	10.28%	6.49%	6.65%
B. Percentage of Class-Specific Payroll Representing Post-Enactment Enrollees								
1. Year 1 After Concept Enactment	7%	4%	6%	5%	9%	11%	6%	6%
2. Year 30 After Concept Enactment	92%	85%	98%	95%	96%	98%	92%	91%
C. Single-Year Increase/(Decrease) in Employer Contribution Costs for Future Enrollees' Benefits								
1. Year 1 After Concept Enactment	($7,509)	$1,607	$0	($84)	($8)	($61)	($220)	($6,274)
2. Year 30 After Concept Enactment	($259,467)	$82,574	$0	($4,248)	($216)	($1,437)	($7,910)	($190,703)
D. Single-Year Increase/(Decrease) in Employer Contribution Costs for Future Enrollees' Benefits, as a Percentage of Total Class-Specific Payroll								
1. Year 1 After Concept Enactment	-0.03%	0.03%	0.00%	-0.06%	-0.10%	-0.09%	-0.03%	-0.02%
2. Year 30 After Concept Enactment	-0.38%	0.62%	0.00%	-1.28%	-1.03%	-0.88%	-0.40%	-0.23%

[1] Based on July 1, 2020 actuarial valuation report. Tier-specific rates developed in Actuarial Analysis of Senate Concepts 3 through 6 report, dated February 16, 2021.
[2] Employer Rates for the Investment Plan are effective since July 1, 2012 (Sec 121.72-73; 121.735) and exclude member contributions.
[3] As reported in the 2021-2022 Blended Rate Study, dated December 1, 2020.