

NDPERS BOARD MEETING

Agenda

Due to public health considerations, and in accordance with Executive Order 2020-16, a meeting room will not be available to the public.

Conference Call #: 701.328.7850
Connect to this meeting: 1415001#

Tuesday, September 8, 2020

Time: 8:30 AM

I. MINUTES

- A. August 18, 2020

II. PRESENTATIONS

- A. (15 minutes) RHIC Primer – MaryJo
- B. (45 minutes) Callan – Asset Liability Study Results

III. RETIREMENT

- A. Asset Liability Study – Bryan (Board Action)
- B. Investment Consultant RFP Update – Bryan (Information)
- C. Quarter 2 Investment Report – Bryan (Information)
- D. 457 and 401(a) Renewal Discussion – Rebecca (Board Action)
- E. De Minimis & Internal Review Policies – Derrick & Rebecca (Board Action)

IV. GROUP INSURANCE

- A. Deloitte Pharmacy Carve Out Study – Rebecca (Information)
- B. Health Plan RFP ***Executive Session** – Bryan (Board Action)
- C. FlexComp Voluntary Insurance Products – Rebecca (Board Action)
- D. Life Insurance Plan Renewal – Rebecca (Board Action)
- E. Sanford Health Plan Update on COVID-19 and Virtual ID Card -- Rebecca (Information)

V. MISCELLANEOUS

- A. Audit Committee May Meeting Minutes – Shawna (Information)
- B. Actuarial Primer – Scott (Information)
- C. Legislation – Scott (Information)

*Executive Session pursuant to NDCC §44-04-19.1(9) and §44-04-19.2 to discuss negotiating strategy or provide negotiating instructions to its attorney or other negotiator. Motion required.

Any individual requiring an auxiliary aid or service must contact the NDPERS ADA Coordinator at 328-3900, at least 5 business days before the scheduled meeting.



**North Dakota
Public Employees Retirement System**
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Memorandum

TO: NDPERS Board

FROM: MaryJo

DATE: September 8, 2020

SUBJECT: Retiree Health Insurance Credit (RHIC)

An overview of the NDPERS Retiree Health Insurance Credit (RHIC) programs and services will be provided at the meeting. The presentation is attached.

Retiree
Health
Insurance
Credit

What is the RHIC Program?

- Established under NDCC 54-52.1-03.2
- Funded by your employer during working years
- Reduces cost of eligible insurance premiums paid during retirement years

Who is eligible for RHIC?

- Public Safety
- Judges
- Highway Patrol
- Job Service
- Main Plan – *only if hired before Jan 1, 2020*
- Defined Contribution – *only if hired before Jan 1, 2020*
- NDPERS members currently receiving an ongoing retirement check at least annually
- Surviving spouses receiving an ongoing retirement benefit or RHIC joint and survivor benefit

Calculation

- NDPERS calculates monthly RHIC benefit for each member upon retirement
- Based upon each year employed and receiving eligible service credit
- Calculation: $\$5.00 \times \text{Years of Service}$
 - Actuarially reduced with early retirement
- Retiree Benefit Amount
 - Annual summary statement
 - Online: Member Self Service (MSS) account

Eligible Premiums

- ANY Health Insurance Premiums (including Medicare Part B & Medicare Supplements Plans)
- ANY Prescription Drug Plans (Medicare Part D)

Effective August 1, 2019

- ANY Dental Premiums
- ANY Vision Premiums
- ANY Long-Term Care Premiums
- Applies to premiums incurred as contract holder or covered dependent

Premiums Not Eligible

- Insurance plans subsidized through the federal health care exchange or tax credit
- Life Insurance
- Supplemental Insurance Plans
 - Accident
 - Disability
 - Cancer
- Pre-tax insurance premiums

ASIFlex

- Specialized in benefit administration for large public sector entities since 1987
- Located in Columbia, Missouri
- Services Provided:
 - RHIC Record-keeping
 - RHIC Claims Review and Payment
 - RHIC Customer Service

How do retirees receive RHIC reimbursement?

- If you have NDPERS insurance premiums
 - NDPERS automatic reimbursement with ASIFlex
 - No action required unless RHIC amount is higher than NDPERS premium expenses
- If you have non-NDPERS insurance premiums
 - RHIC became “portable” **July 1, 2015**
 - Submit a claim to ASIFlex for reimbursement

Claim Submission

1. RHIC Claim Form
2. Provide Documentation
 - Dates of coverage period
 - Type of insurance
 - Premium amount
3. Proof of Payment
 - Pay stub
 - Bank statement
 - Cancelled check
 - Credit card receipt
 - Electronic payment

Claim Processing

- May claim up to available RHIC benefit amount each month
- May submit premium expenses at any frequency throughout the plan year
 - July 1, 2019 – June 30, 2020
 - July 1, 2020 – Dec 31, 2020 (6-month interim)
 - Jan 1, 2021 – Dec 31, 2021 New Plan Year!
- Processed daily
- Payment issued 2-3 business days
- Recurring Claims
 - Social Security Annual Statement - Medicare Part B and Prescription Drug (Part D) deductions

Reimbursement Deadline

September 30th

following the close of the plan year
on June 30th



NEW Reimbursement Deadline

March 31st

following the close of the plan year
on Dec 31st



Communication to Membership


May 2019, Oct 2019, and Feb 2021

We have exciting updates regarding **the deadlines you use when claiming your RHIC**. Currently, this benefit is paid on a *fiscal year* – July 1, 2019 to June 30, 2020. Many of our retirees let us know that the *fiscal year* approach is hard to remember and does not align with their eligible insurance premiums. **To make claiming your RHIC benefit more convenient, we are switching to a calendar year (Jan – Dec) in 2021.** |

This is how it will work:

1. Help us during a 6 month transition period

Before the switch in 2021, a one-time 6 month period starting on July 1, 2020 and ending on December 31, 2020 needs to take place. You must submit your claims for the transition period by March 31, 2021.

 Cut out this handy chart and place it on your fridge to remember important dates.

| | Current <i>Fiscal Year</i> | Transition Period | <i>NEW Calendar Year</i> |
|--|------------------------------------|--|---|
| Beginning & End Date per Period | July 1, 2019 through June 30, 2020 | July 1, 2020 through December 31, 2020 | January 1, 2021 through December 31, 2021 |
| Deadline to Submit Claims | September 30, 2020 | March 31, 2021 | March 31, 2022 |

Combining RHIC (August 1, 2007)

- Spouses must both be receiving a NDPERS monthly retirement benefit and may combine their respective RHIC benefit
- Must enroll in one NDPERS family health insurance plan
- Only one RHIC account is setup at ASIFlex
- Surviving spouses receiving retirement benefits may be eligible to use the credit of a deceased spouse



Questions?



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Memorandum

TO: NDPERS Board

FROM: Bryan

DATE: September 8, 2020

SUBJECT: Asset Liability Study – Callan Presentation

Julia Moriarty and Paul Erlendson from Callan will present the findings of the Asset Liability Study for the NDPERS Main plan and Retiree Health Insurance Credit (RHIC) plan.



August 27, 2020

North Dakota PERS

2020 Asset -Liability Study

Alex Browning

Fund Sponsor Consulting

Paul Erlendson

Fund Sponsor Consulting

Julia Moriarty, CFA

Capital Market Research

Agenda

Introduction and Process Overview

Asset Allocation

Asset-Liability Modeling

Liquidity and Stress Testing

Recommendation

Next Steps and Timeline

Appendix

Callan

Introduction and Process Overview

Introduction

The goal of the asset-liability study is to determine an appropriate long-term mix between return-seeking assets (e.g., equities, real assets, alternatives) and risk-mitigating assets (cash, fixed income)

- 80-90% of funded status volatility is driven by the broad asset allocation decision

Asset allocation will vary by the unique circumstances of the plan

- No “one-size-fits-all” solution exists

The asset-liability study helps NDPERS quantify the impact that different strategies might have on relevant metrics

Factors to consider:

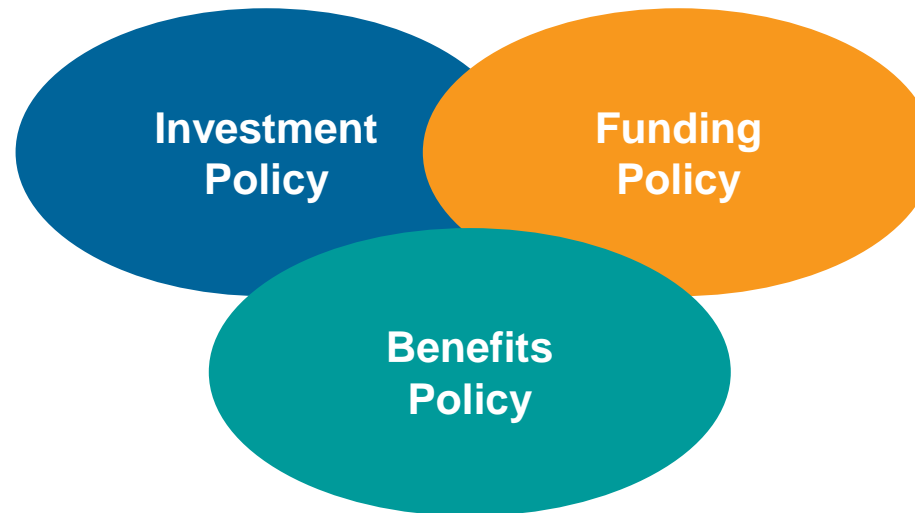
- Liability characteristics
- Funded status
- Contribution policy
- Time horizon
- Liquidity needs

Where Does Asset Allocation Fit In?

Evaluate the interaction of three key policies to identify the optimal investment policy

Investment Policy

- How will the assets supporting the benefits be invested?
- What risk and return objectives?
- How to manage cash flows?



Funding Policy

- How will the benefits/deficits be paid for (funded)?
- What are the actuarial assumptions to use?

Benefits Policy

- What type/kind of benefits?
- What level of benefit?
- When and to whom are they payable?

Callan Asset-Liability Modeling Process

Asset Modeling

Define Capital Market Assumptions

Create Asset Mix Alternatives

Liability Modeling

Define Liability Assumptions

Build Actuarial Liability Model

Simulate Financial Conditions

Define Risk Tolerance

Select Appropriate Target Mix

Callan

Asset Allocation

Callan Capital Market Process and Philosophy

Underlying beliefs guide the development of the projections

- An initial bias toward long-run averages
- An awareness of risk premiums
- A presumption that markets ultimately clear and are rational

Reflect our belief that long-term equilibrium relationships between the capital markets and lasting trends in global economic growth are key drivers to setting capital market expectations

Long-term compensated risk premiums represent “beta”—exposure to each broad market, whether traditional or “exotic,” with limited dependence on successful realization of alpha

The projection process is built around several key building blocks

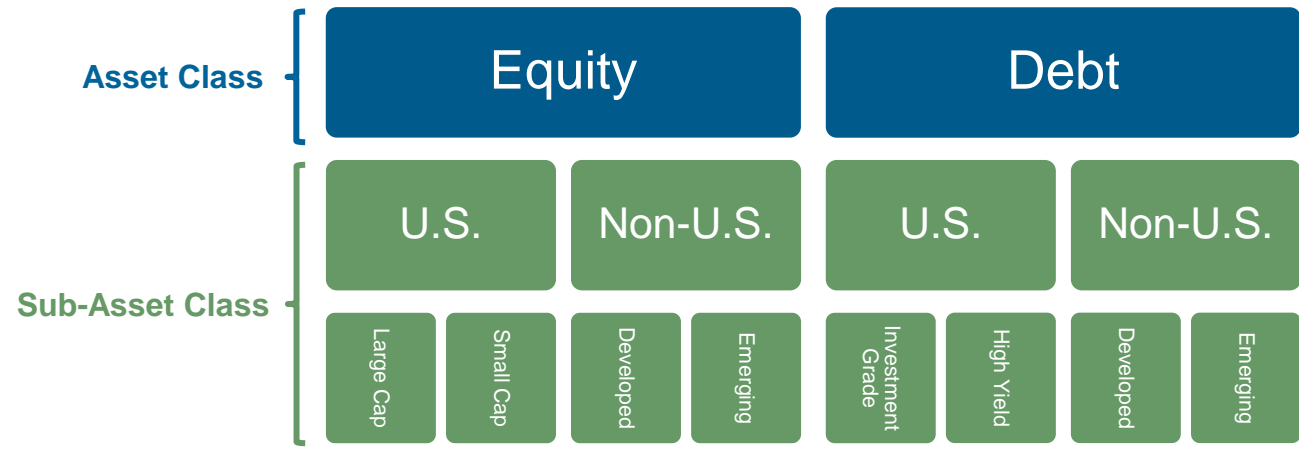
- Advanced modeling at the individual asset class level (e.g., a detailed bond model, an equity model)
- Pathways for both interest rates and inflation
- A cohesive economic outlook
- A framework that encompasses Callan’s beliefs about the long-term operation and efficiencies of the capital markets

The Focus is on Broad Asset Classes

Breakdowns between investment styles within asset classes (growth vs. value, large cap vs. small cap) are best addressed in a manager structure analysis

Primary asset classes and important sub-asset classes include:

- U.S. Stocks
- U.S. Bonds
- Non-U.S. Stocks
- Non-U.S. Bonds
- Real Estate
- Private Equity
- Absolute Return
- Cash



Callan Capital Market Assumptions

Risk and return: 2020–2029

| Asset Class | Index | Projected Return* | Projected Risk |
|--------------------------------|--|-------------------|----------------|
| Equities | | | |
| Broad U.S. Equity | Russell 3000 | 7.15% | 18.10% |
| Large Cap U.S. Equity | S&P 500 | 7.00% | 17.70% |
| Small/Mid Cap U.S. Equity | Russell 2500 | 7.25% | 21.20% |
| Global ex-U.S. Equity | MSCI ACWI ex USA | 7.25% | 20.50% |
| Developed ex-U.S. Equity | MSCI World ex USA | 7.00% | 19.70% |
| Emerging Market Equity | MSCI Emerging Markets | 7.25% | 25.70% |
| Fixed Income | | | |
| Short Duration Govt/Credit | Bloomberg Barclays 1-3 Yr G/C | 2.70% | 2.10% |
| Core U.S. Fixed | Bloomberg Barclays Aggregate | 2.75% | 3.75% |
| Long Government/Credit | Bloomberg Barclays Long G/C | 2.75% | 10.60% |
| TIPS | Bloomberg Barclays TIPS | 2.40% | 5.05% |
| High Yield | Bloomberg Barclays High Yield | 4.65% | 10.25% |
| Global ex-U.S. Fixed | Bloomberg Barclays Gbl Agg xUSD | 0.90% | 9.20% |
| Emerging Market Sovereign Debt | EMBI Global Diversified | 4.35% | 9.50% |
| Other | | | |
| Core Real Estate | NCREIF ODCE | 6.25% | 14.00% |
| Timberland | NCREIF Timberland | 6.05% | 14.60% |
| Farmland | NCREIF Farmland | 6.10% | 15.00% |
| Private Infrastructure | DJB Glob Infr / FTSE Dev Core Infr 50/50 | 6.60% | 15.20% |
| Private Equity | Cambridge Private Equity | 8.50% | 27.80% |
| Hedge Funds | Callan Hedge FoF Database | 5.00% | 8.70% |
| Commodities | Bloomberg Commodity | 2.75% | 18.00% |
| Cash Equivalents | 90-Day T-Bill | 2.25% | 0.90% |
| Inflation | CPI-U | 2.25% | 1.50% |

- Most capital market expectations represent passive exposure (beta only); however, return expectations for private market investments reflect active management premiums
- Return expectations are net of fees

* Geometric returns are derived from arithmetic returns and the associated risk (standard deviation).

Policy Target Allocation

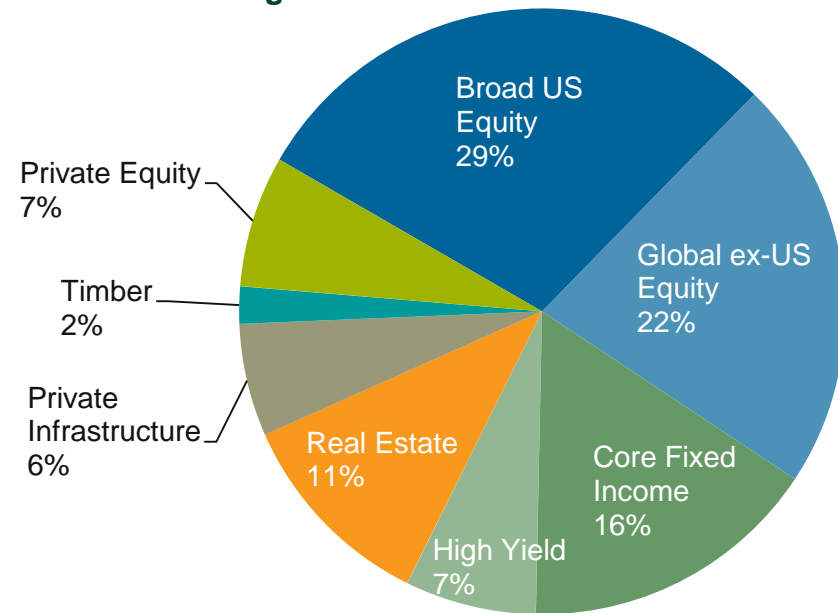
The target asset allocation consists of 51% public equity, 23% fixed income, and 26% alternatives

- Alternatives include real estate, private infrastructure, timber, and private equity

While the Fund's target allocation is projected to return 6.8% over the next 10 years versus an actuarial discount rate of 7.0%, two key items should be noted

- Callan's public market return projections do not incorporate active management premiums
 - Active management premiums accrue when investment firms selected by the State Investment Board outperform their passive benchmarks
 - *It is important to note, though, that investment firms will at times underperform their passive benchmarks*
 - The Plan's public market returns have benefitted from active management by ~25 basis points net of fees (annualized) over the past five years ended 3/31/20
- Callan's 10-year projections are below longer-term expectations due to the current economic environment and the forecast for the next several years

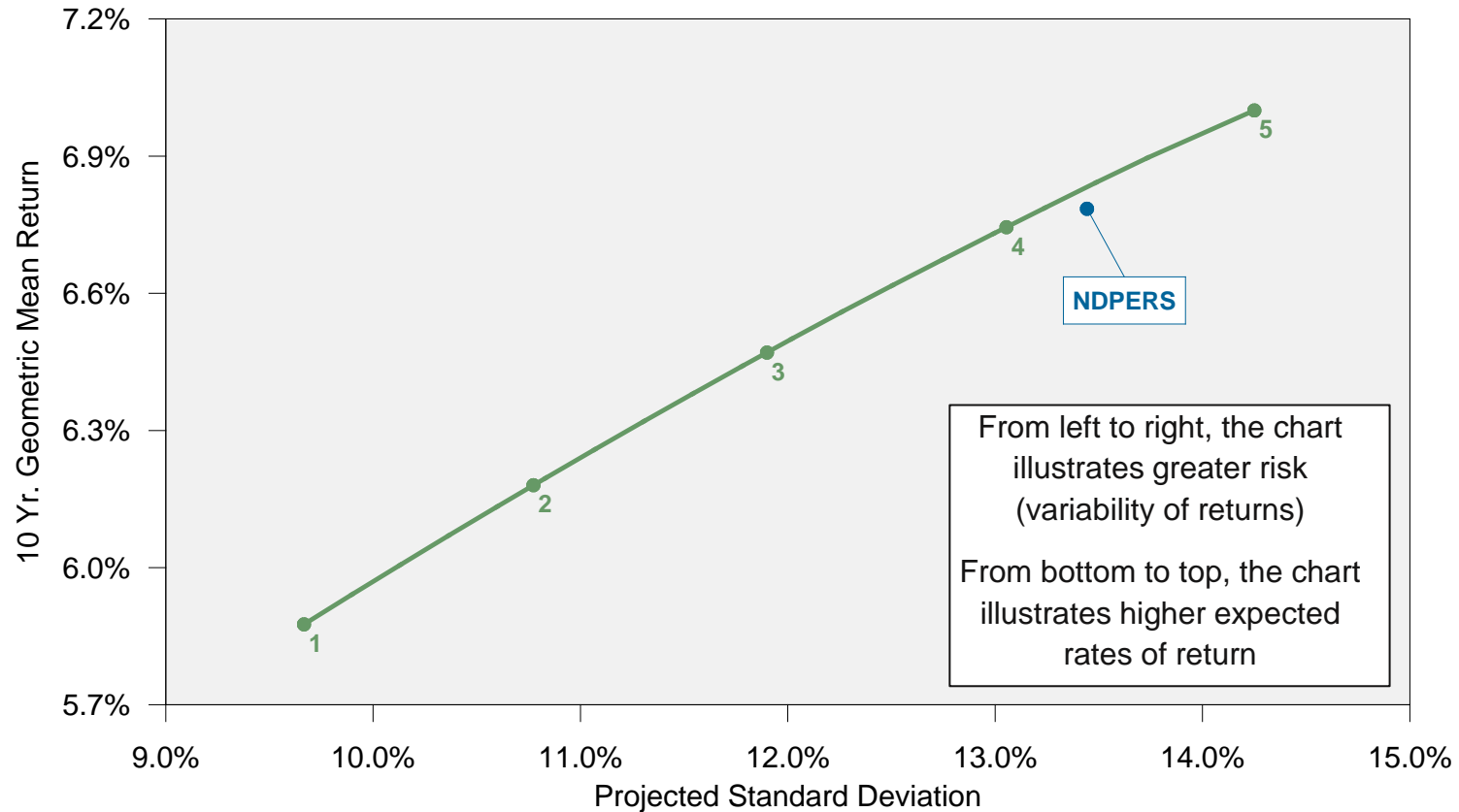
Pension Fund Target



Expected Geometric Mean Return = 6.8%
Expected Standard Deviation = 13.4%

Efficient Frontier

Efficient Frontier



- A series of optimal mixes at different levels of expected return and risk is depicted above
 - Optimal mixes generate the greatest return for a given level of risk, or conversely, the lowest risk for a given level of return
 - Five efficient mixes are numbered and described in more detail on the following page
- The current target portfolio is modestly below the efficient frontier near mix 4

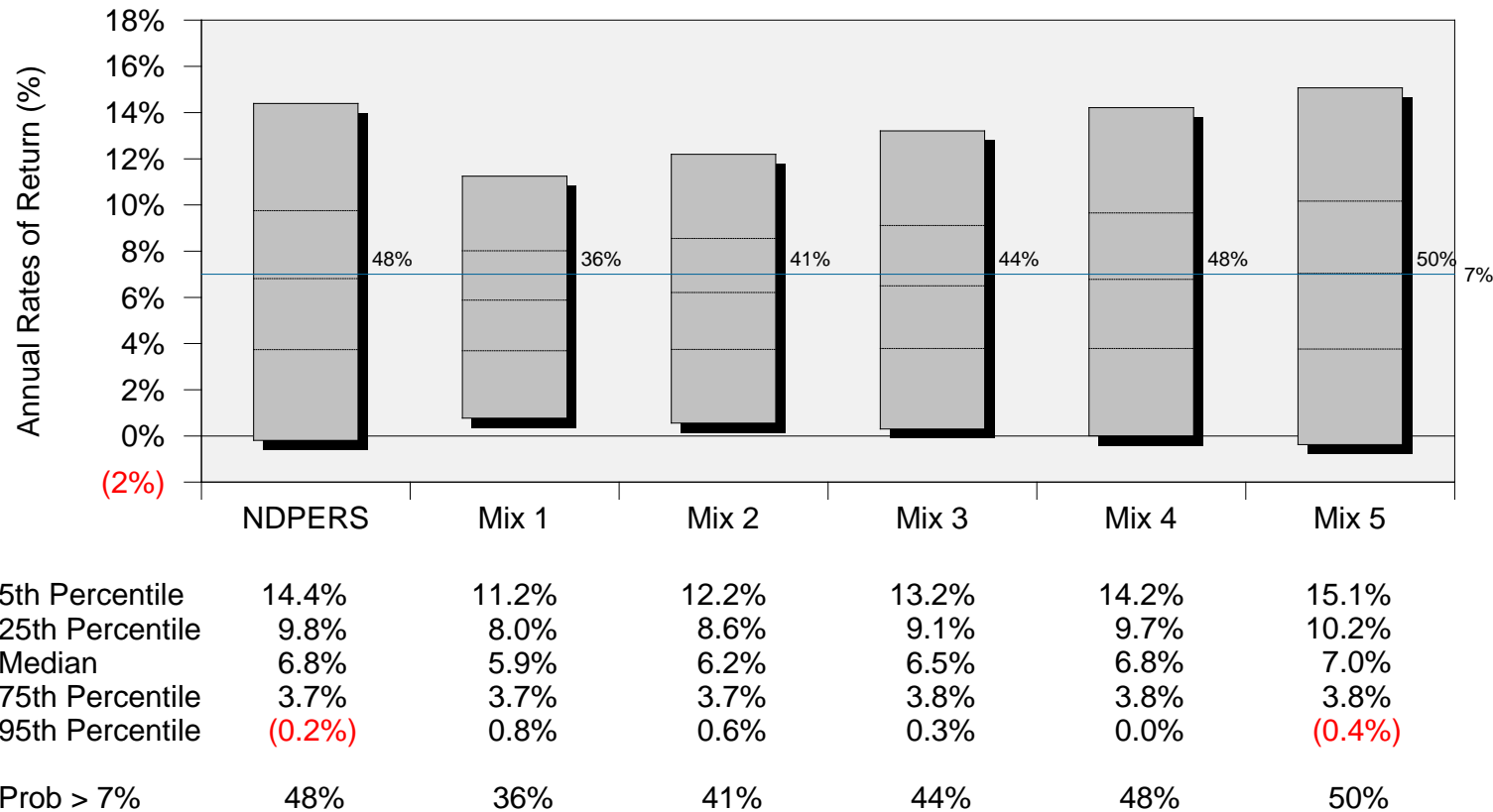
Alternative Asset Mixes

| Asset Class | Policy Target | Mix 1 | Mix 2 | Mix 3 | Mix 4 | Mix 5 |
|------------------------------------|---------------|-------------|--------------|--------------|--------------|--------------|
| Public Equity | 51% | 30% | 34% | 39% | 45% | 51% |
| Broad U.S. Equity | 29% | 18% | 21% | 24% | 27% | 30% |
| Global ex-U.S. Equity | 22% | 12% | 13% | 15% | 18% | 21% |
| Fixed Income | 23% | 50% | 43% | 35% | 27% | 19% |
| Core Fixed Income | 16% | 35% | 30% | 24% | 19% | 13% |
| High Yield | 7% | 15% | 13% | 11% | 8% | 6% |
| Alternatives | 26% | 20% | 23% | 26% | 28% | 30% |
| Real Estate | 11% | 6% | 7% | 8% | 9% | 10% |
| Private Infrastructure | 6% | 6% | 7% | 8% | 9% | 10% |
| Timber | 2% | 0% | 0% | 0% | 0% | 0% |
| Private Equity | 7% | 8% | 9% | 10% | 10% | 10% |
| Expected Return | 6.8% | 5.9% | 6.2% | 6.5% | 6.7% | 7.0% |
| Expected Standard Deviation | 13.4% | 9.7% | 10.8% | 11.9% | 13.1% | 14.3% |

- The optimal mixes are constructed with decreasing allocations to fixed income (from 50% to 19%)
 - High yield equals 30% of total fixed income, private equity is constrained to a maximum of 10%, equal allocations are made to real estate and private infrastructure, and timber is eliminated, as a result of discussions with SIB
 - *Efficient allocations to real estate and private infrastructure are ~75/25, respectively*
- As fixed income decreases, the expected return increases and annual portfolio risk reaches over 14%
- The policy target's risk and return profile is similar to that of mix 4
- Large allocations to alternatives will require stress-testing to determine if the amount of illiquidity is tolerable

Projected Rates of Return (10 Years)

Range of Projected Rates of Return
Projection Period: 10 Years



This is NDPERS's
projected actuarial
return assumption

- Chart reflects annualized return distribution over the next ten years
- Bar heights proportional to return volatility
 - Higher expected (median) returns associated with higher volatilities
 - Increased volatility leads to lower worse-case (95th percentile) returns
- The current policy has a 48% probability of earning 7% or better over the next 10 years

Callan

Asset-Liability Modeling

Current Conditions

Build Actuarial Liability Model

Callan's liability model is based on the GRS 2019 actuarial valuation

Model used to forecast future liabilities

Assets rolled forward using May 31, 2020 actual asset values

Additional forecast assumptions

- Open to new entrants
 - Composition reflects recent new entrants
- 0% workforce growth

| July 1, 2019 Actuarial Valuation | All Plans |
|----------------------------------|------------|
| Actuarial Accrued Liability | \$4,269 mm |
| Market Value of Assets | \$3,097 mm |
| Actuarial Value of Assets | \$3,082 mm |
| Market Funded Status (MVA/AL) | 72.5% |
| Actuarial Funded Status (AVA/AL) | 72.2% |

| Key Assumptions | Actuarial Assumption* | Callan 10-year Expectation |
|-------------------|-----------------------|----------------------------|
| Investment Return | 7.0% | 6.8%** |
| Price Inflation | 2.25% | 2.25% |

*As of July 1, 2020

**Based on Callan's capital market assumptions applied to NDPERS' target asset allocation; used throughout the remainder of the study

Current Conditions

Build Actuarial Liability Model

Contributions (employer and employee) are set by statute

Current employer contribution rates are shown below for the various Plan populations along with the employer actuarial contribution requirement

The Main System's contribution rate is more than 5% below the actuarial rate

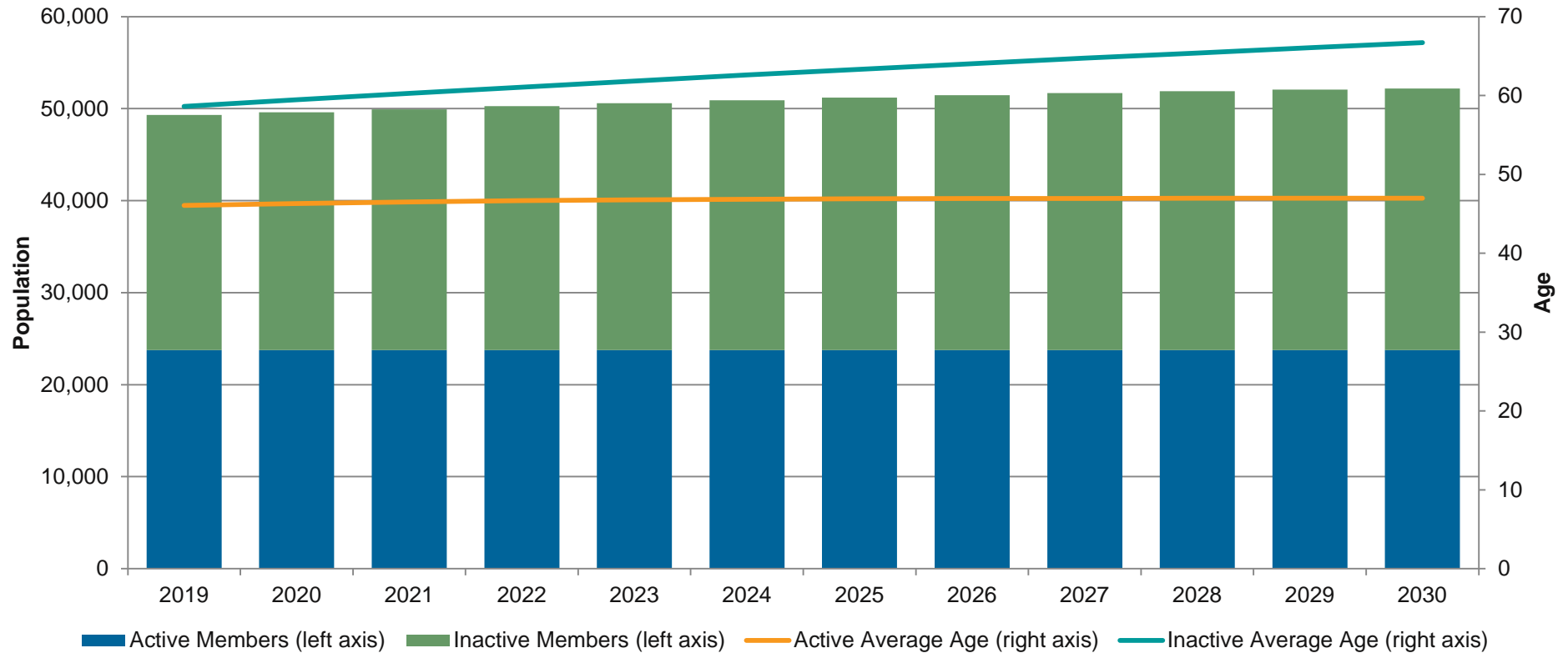
The impact on the Fund of a 2% increase in the employer contribution rate and separately a 1% increase in both the employer and employee contribution rates beginning January 1, 2022 are shown in the appendix

| Employer Contribution Rates | Statutory | Actuarial Requirement | Surplus/(Deficit) |
|---|-----------|-----------------------|-------------------|
| Main System* | 7.12% | 12.22% | -5.10% |
| Judges | 17.52% | 2.83% | 14.69% |
| Public Safety w/ prior Main System service | 9.81% | 8.00% | 1.81% |
| Public Safety w/o prior Main System service | 7.93% | 6.37% | 1.56% |
| Total | 7.31% | 11.94% | -4.63% |

**The Main System employer contribution rate is increasing to 8.26% for new members as of January 1, 2020*

Member Numbers

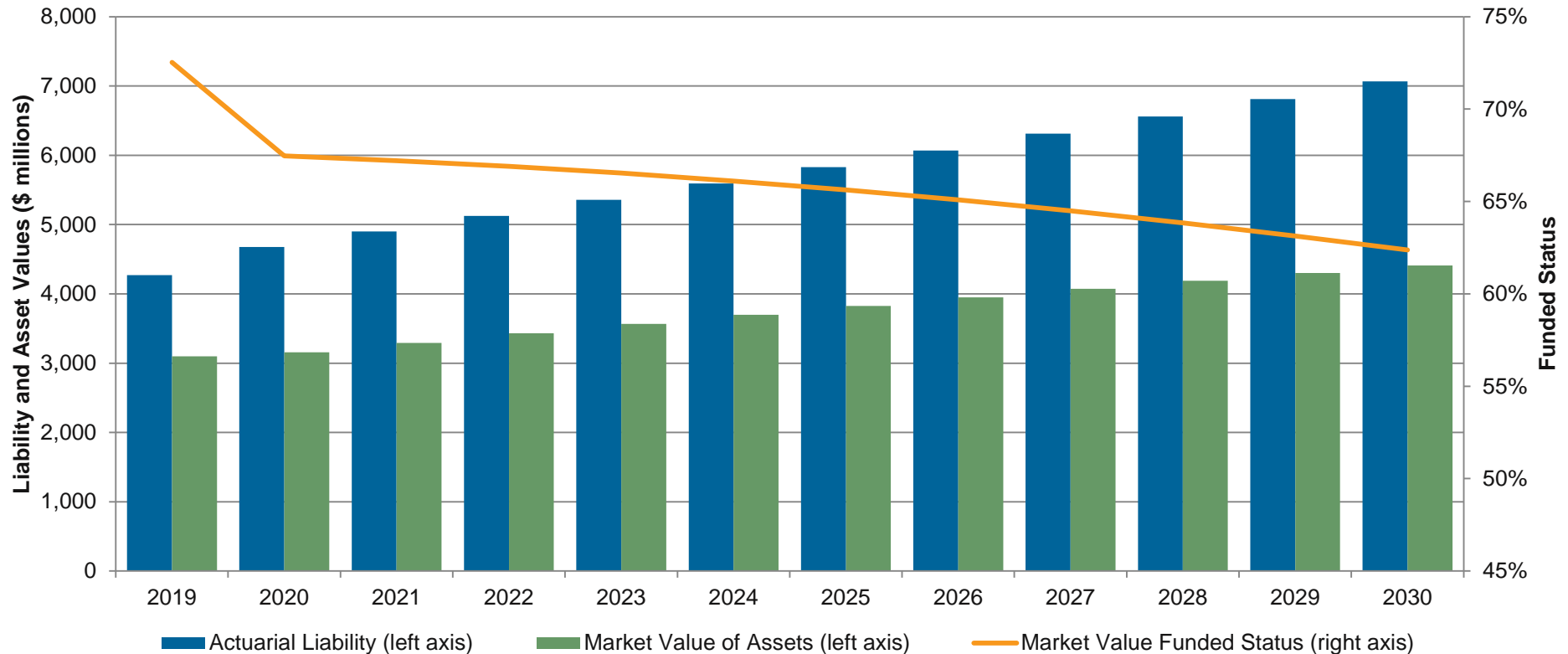
Deterministic Forecast



- Number of active members assumed to remain constant (0% workforce growth)
 - Future new hires replace exits due to retirement, death, disability, and withdrawal
 - Stable active age reflects Plan maturity
- Number of inactive members and their average age increase gradually over time

Funding

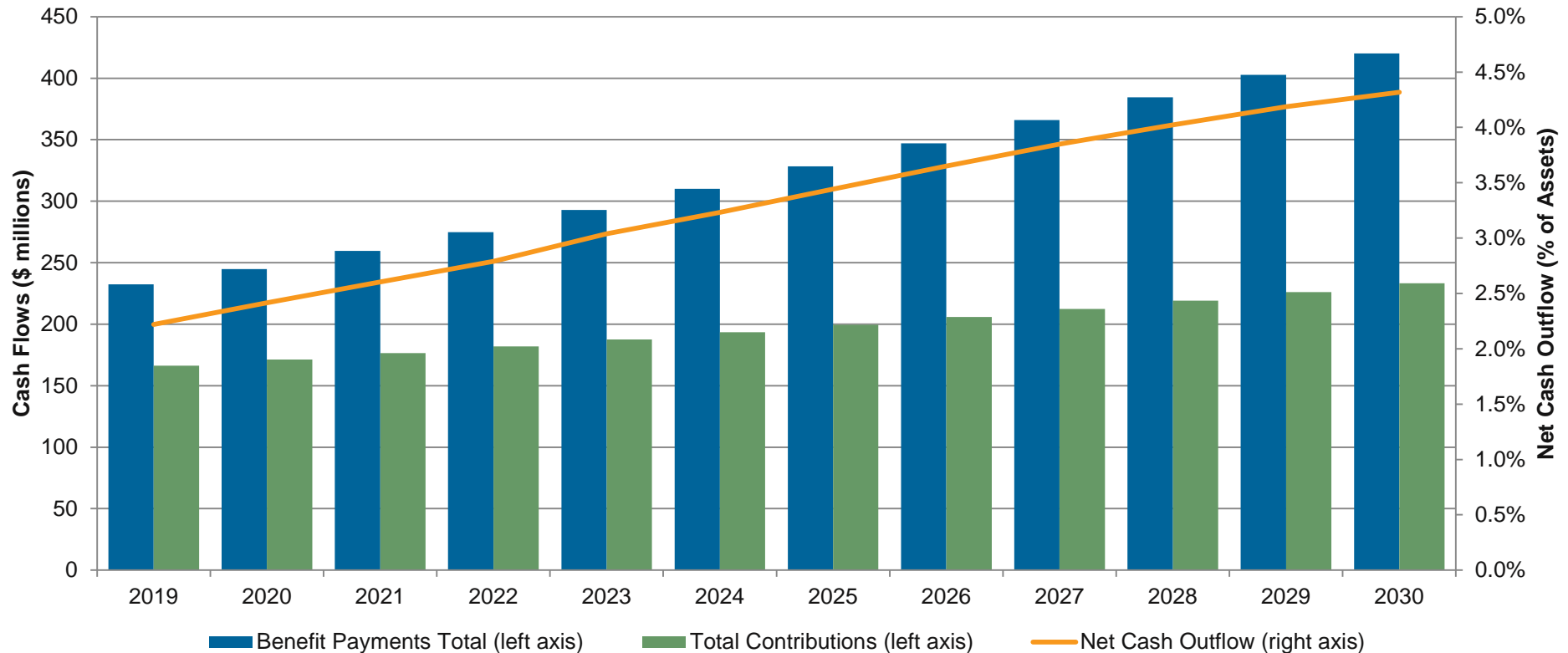
Deterministic Forecast



- Liabilities increase faster than the market value of assets, widening the funding gap
 - Change in assets due to both investment returns and net cash flows (contributions net of benefit payments and expenses)
- Projected funding depends on adherence to the contribution policy
 - Assumes assets earn 6.8%

Cash Flows and Liquidity

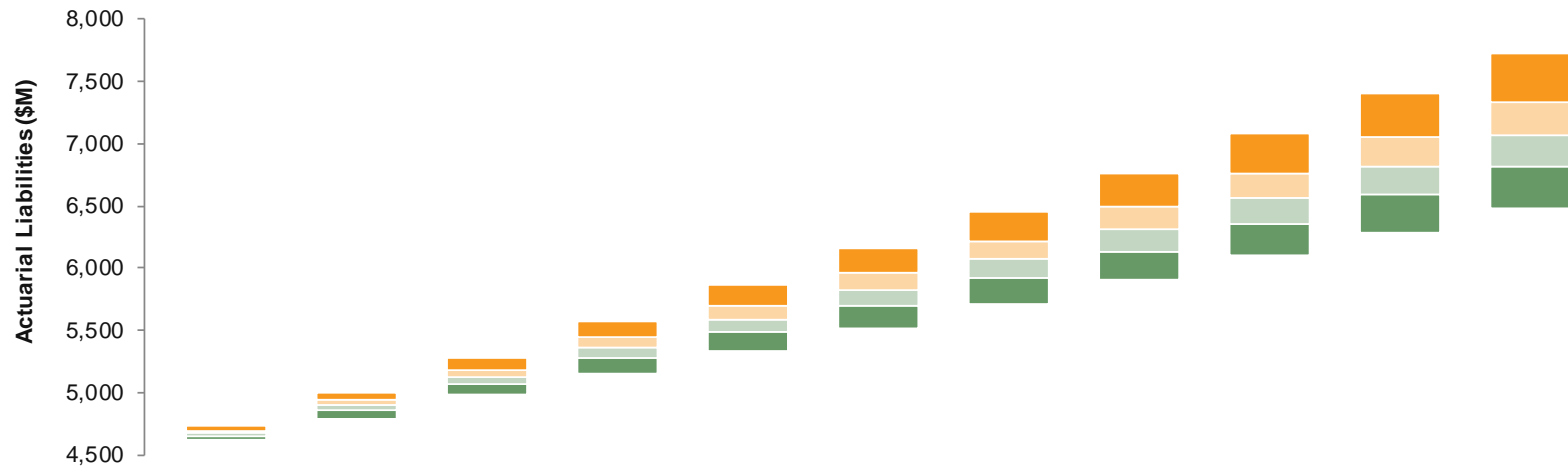
Deterministic Forecast



- Net Cash Outflow = Benefit Payments + Expenses – Employer Contributions – Employee Contributions
- Plan is expected to have growing net outflow (both in nominal dollars and as a percentage of assets) over the coming decade
- Cash flow is a factor used to determine a cap on the level of private investments
- Net outflow as a percentage of assets under 7% should be manageable as long as PERS adheres to the current funding policy, though the trajectory should be closely monitored

Actuarial Liability, 2020-2030

Stochastic Forecast



- Plan liabilities are increasing at a steady pace which is typical for an open plan
- Drivers include wage growth for current employees and a gradually increasing number of inactives
 - Inflation flows through to member compensation which is a component of the retirement benefit formula

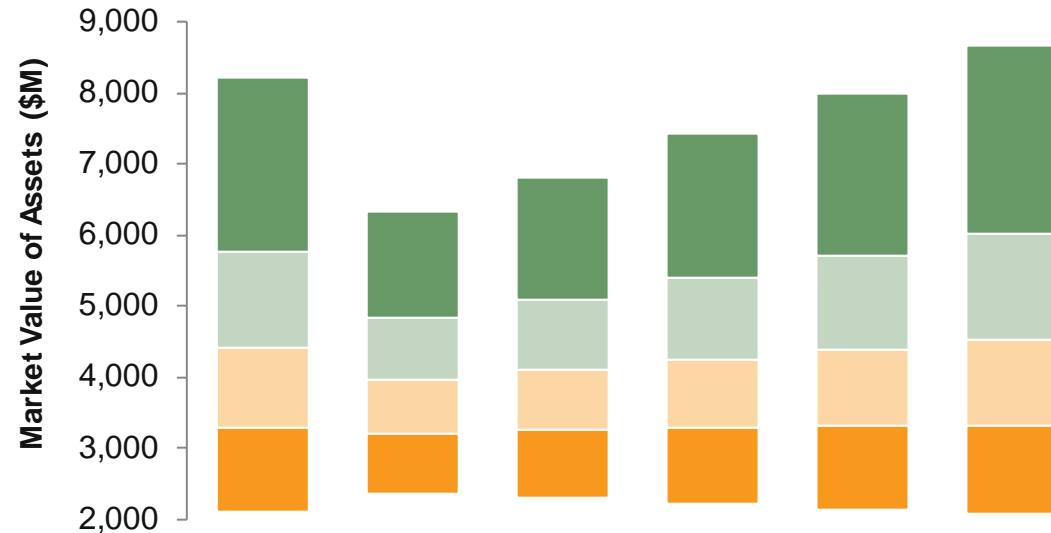
Market Value of Assets in 2030 (10 Years)

Stochastic Forecast

Moving from left to right (mix 1 to mix 5), the range of results widens as one takes on more risk (greater equity exposure)

More aggressive mixes have larger expected values (50th percentile) but lower worse-case (95th percentile) outcomes

- The 50th percentile is the expected case – half of the outcomes are higher and half lower
- The 95th percentile is a worse-case scenario – a 5% probability that assets will be the value shown or lower



| Pctl | Target | Mix 1 | Mix 2 | Mix 3 | Mix 4 | Mix 5 |
|-------|--------|-------|-------|-------|-------|-------|
| 5 | 8,186 | 6,310 | 6,805 | 7,406 | 7,974 | 8,646 |
| 25 | 5,775 | 4,836 | 5,090 | 5,415 | 5,701 | 6,023 |
| 50 | 4,420 | 3,977 | 4,110 | 4,261 | 4,394 | 4,534 |
| 75 | 3,307 | 3,214 | 3,267 | 3,305 | 3,330 | 3,345 |
| 95 | 2,126 | 2,385 | 2,329 | 2,251 | 2,174 | 2,100 |
| Range | 6,060 | 3,925 | 4,477 | 5,155 | 5,799 | 6,546 |

Asset Change = Contributions + Investment Earnings – Benefit Payments & Expenses

Funded Ratio in 2030 (10 Years)

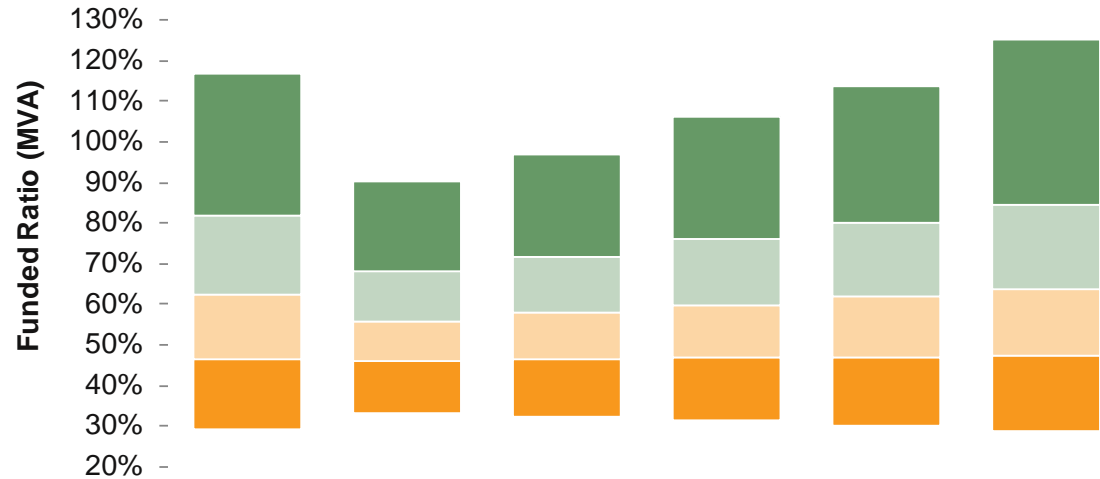
Stochastic Forecast

Starting funded status = 72.5%

The Plan's funded status is expected (50th percentile) to decline over the next ten years under the current funding policy

Funding ratios in worse-case scenarios are particularly low because the contribution policy is not impacted by a declining funded status

More aggressive mixes are expected to have higher funded ratios at the end of 10 years relative to more conservative mixes but have lower funded ratios in worse-case scenarios (95th percentile)



| Pctl | Target | Mix 1 | Mix 2 | Mix 3 | Mix 4 | Mix 5 |
|-------|--------|-------|-------|--------|--------|--------|
| 5 | 116.6% | 90.1% | 96.9% | 105.9% | 113.4% | 124.9% |
| 25 | 81.8% | 68.1% | 71.6% | 75.9% | 80.1% | 84.6% |
| 50 | 62.6% | 56.1% | 58.0% | 60.1% | 61.9% | 64.0% |
| 75 | 46.9% | 46.1% | 46.6% | 46.9% | 47.1% | 47.4% |
| 95 | 29.7% | 33.5% | 32.7% | 31.6% | 30.5% | 29.2% |
| Range | 86.9% | 56.6% | 64.1% | 74.3% | 82.9% | 95.8% |

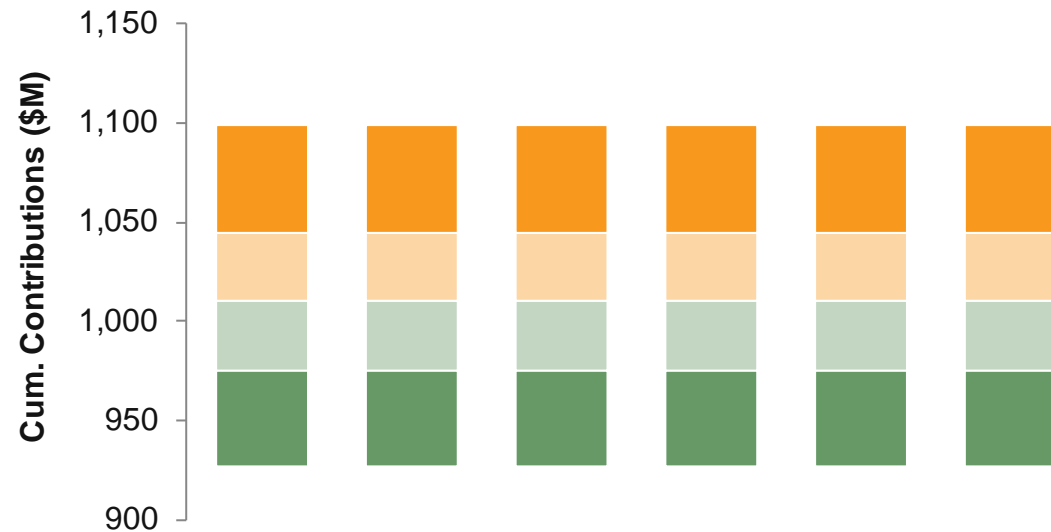
Funded Status = Market Value of Assets / Actuarial Liability

Cumulative Contributions through 2030 (10 Years)

Stochastic Forecast

There is no contribution variability across the asset mixes due to the statutory percentage of pay policy

Contribution volatility within an asset mix stems from simulated inflation which impacts salaries



| Pctl | Target | Mix 1 | Mix 2 | Mix 3 | Mix 4 | Mix 5 |
|-------|--------|-------|-------|-------|-------|-------|
| 95 | 1,099 | 1,099 | 1,099 | 1,099 | 1,099 | 1,099 |
| 75 | 1,045 | 1,045 | 1,045 | 1,045 | 1,045 | 1,045 |
| 50 | 1,011 | 1,011 | 1,011 | 1,011 | 1,011 | 1,011 |
| 25 | 976 | 976 | 976 | 976 | 976 | 976 |
| 5 | 928 | 928 | 928 | 928 | 928 | 928 |
| Range | 171 | 171 | 171 | 171 | 171 | 171 |

Ultimate Net Cost in 2030 (10 Years)

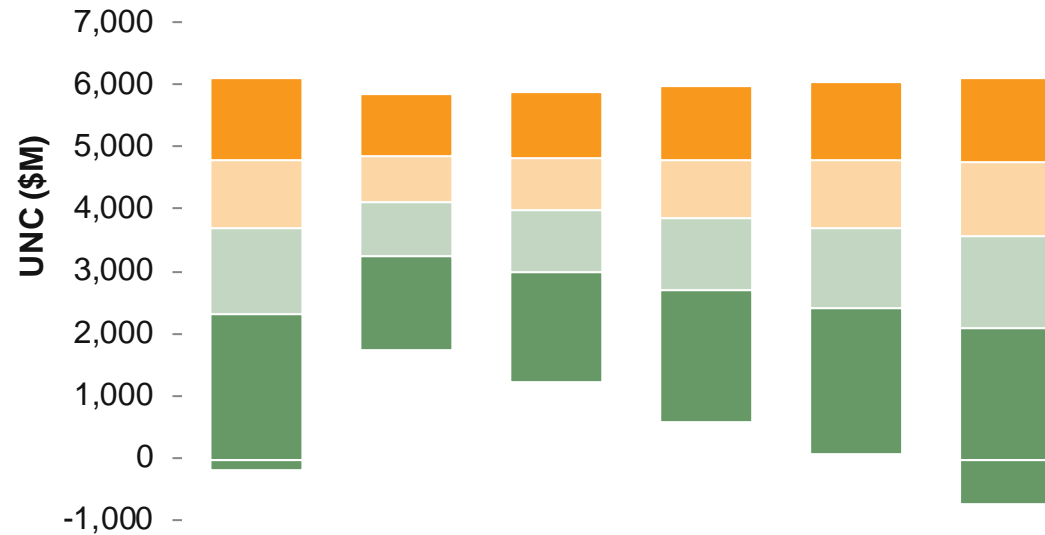
Stochastic Forecast

Ultimate net cost (UNC) = 10-Year cumulative contributions + 7/1/2030 unfunded actuarial liability

UNC is a more complete measure of the cost to the employer since it captures what is expected to be paid over 10 years plus what is owed at the end of the 10-year period

- Negative numbers indicate the Plan is in a surplus position at 7/1/2030

More aggressive mixes lower UNC in the expected case but result in greater UNC in a worse-case scenario



| Pctl | Target | Mix 1 | Mix 2 | Mix 3 | Mix 4 | Mix 5 |
|-------|--------|-------|-------|-------|-------|-------|
| 95 | 6,084 | 5,812 | 5,863 | 5,956 | 6,024 | 6,091 |
| 75 | 4,759 | 4,850 | 4,816 | 4,787 | 4,766 | 4,734 |
| 50 | 3,674 | 4,115 | 3,981 | 3,834 | 3,693 | 3,562 |
| 25 | 2,326 | 3,237 | 2,996 | 2,698 | 2,417 | 2,094 |
| 5 | -185 | 1,738 | 1,234 | 582 | 70 | -728 |
| Range | 6,269 | 4,075 | 4,629 | 5,374 | 5,954 | 6,819 |

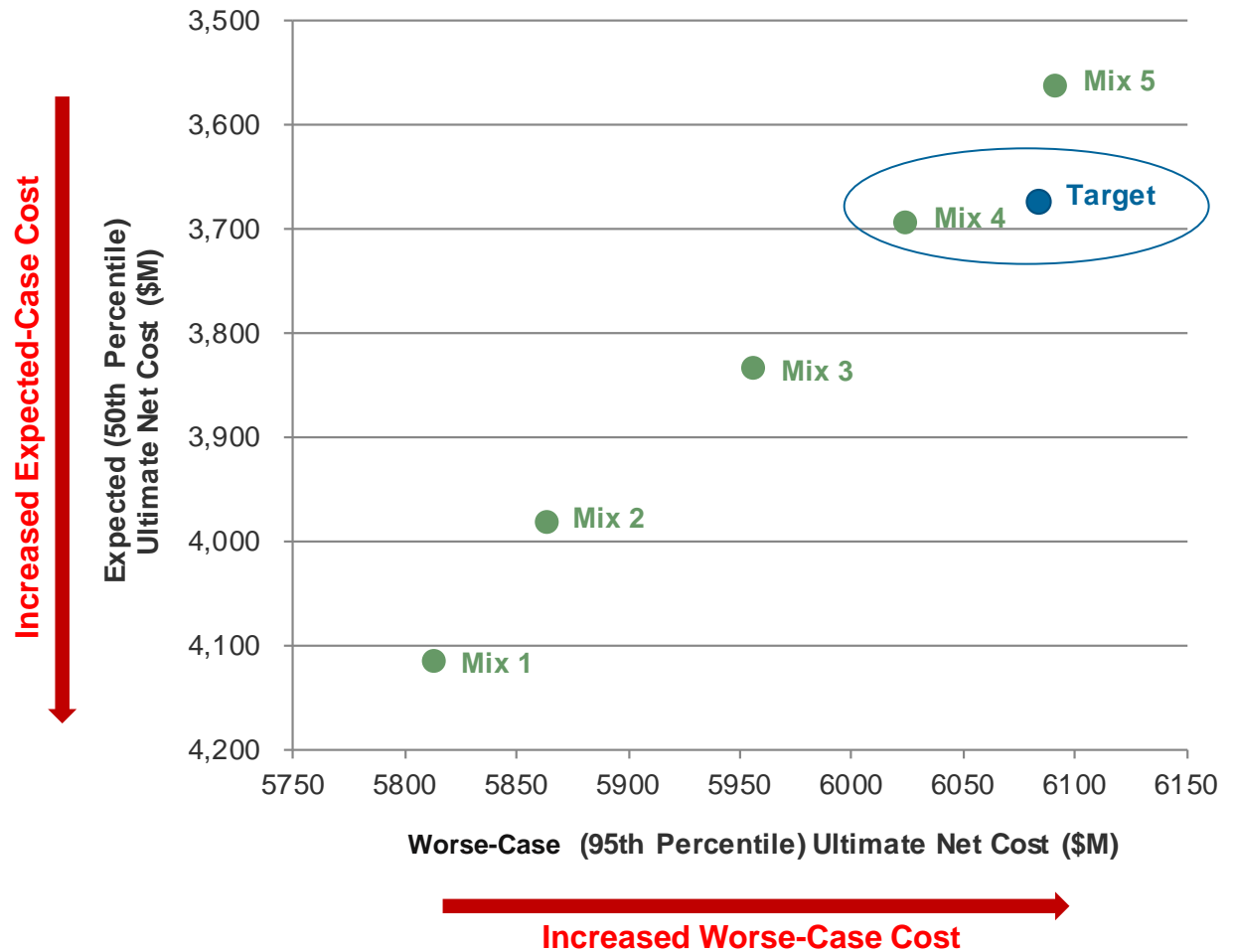
UNC = Cumulative Contributions + Unfunded Liability

Ultimate Net Cost in 2030 (10 Years): Expected (50th) vs Worse Case (95th)

Stochastic Forecast

Tradeoff is roughly linear for optimal mixes

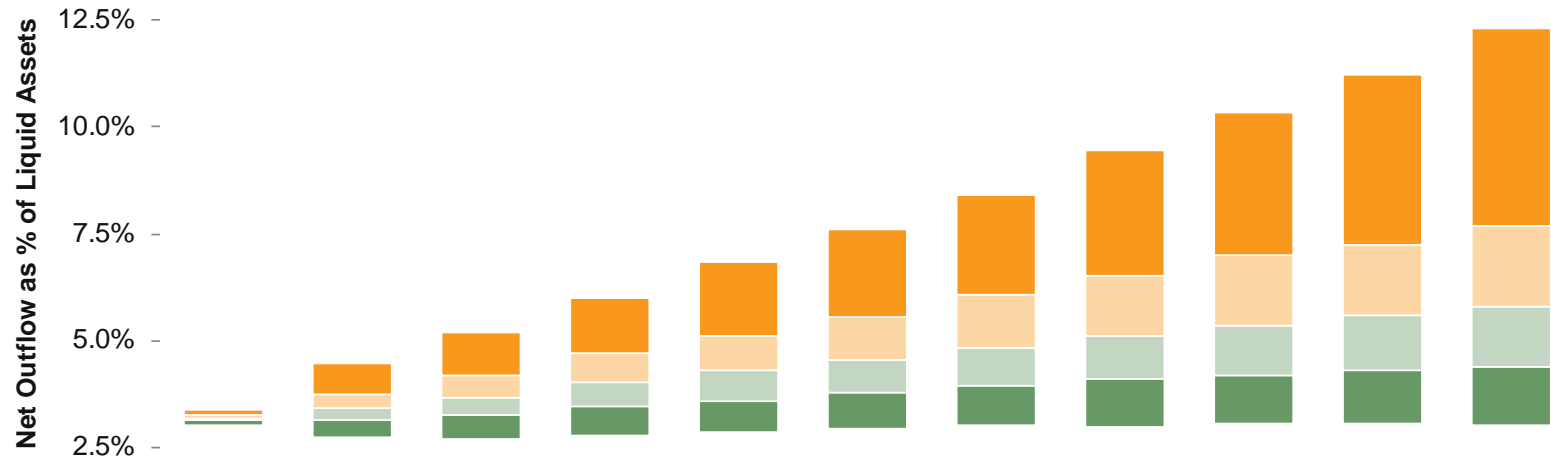
Mix 4 reduces worse-case ultimate net cost by \$60 million relative to current target with slightly more cost in the expected case



Liquidity and Stress Testing

Net Outflow as a Percentage of Liquid Assets, 2020-2030

Stochastic Forecast



| Pctl | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
|-------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 95 | 3.4% | 4.5% | 5.2% | 6.0% | 6.9% | 7.6% | 8.4% | 9.4% | 10.3% | 11.2% | 12.3% |
| 75 | 3.3% | 3.8% | 4.2% | 4.7% | 5.1% | 5.6% | 6.1% | 6.5% | 7.0% | 7.3% | 7.7% |
| 50 | 3.2% | 3.4% | 3.7% | 4.0% | 4.3% | 4.6% | 4.8% | 5.1% | 5.4% | 5.6% | 5.8% |
| 25 | 3.2% | 3.2% | 3.3% | 3.5% | 3.6% | 3.8% | 4.0% | 4.1% | 4.2% | 4.3% | 4.4% |
| 5 | 3.0% | 2.8% | 2.7% | 2.8% | 2.9% | 3.0% | 3.0% | 3.0% | 3.1% | 3.1% | 3.0% |
| Range | 0.3% | 1.7% | 2.5% | 3.2% | 4.0% | 4.6% | 5.4% | 6.4% | 7.2% | 8.1% | 9.2% |

- Net Outflow = Benefit Payments & Expenses – Employee & Employer Contributions
 - A useful indicator of ongoing liquidity needs
 - Ratio < 7.0% is typically manageable; >10% presents high liquidity pressure and illiquid investments may need to be reduced
 - Based on our experience, most public funds have net outflow of 4-7% depending on funded status, funding policy, and plan maturity
- For the current target (74% liquid assets), liquidity needs are expected (50th percentile) to be manageable; in worse-case (95th percentile) scenarios net outflows exceed 10%
- The liquidity analysis assumes the funding policy is adhered to

Stress Testing

The current target and mixes 3 and 4 were subjected to six investment scenarios to gauge the impact on investment performance, funding, and net outflow

The six scenarios include three historical and three hypothetical

- Historical

- Global Financial Crisis (GFC): October 2007 – February 2009
- Black Monday: October 1987
- U.S. Debt Ceiling Crisis and Downgrade: June – September 2011

- Hypothetical

- Equities Decline 20% for 1 Year (bear market definition)
- Perfect Storm for 1 Year (equities decline 20%, Treasuries and spreads increase 1%)
- Perfect Storm for 3 Years (equities decline 15% annually, Treasuries and spreads increase 1% annually)

Findings

- Performance

- The target underperforms mix 4, while mix 3 generates the best performance which is not surprising given it is the most conservative of the three portfolios

- Funding

- Funded status drops by more than 10% in nominal terms, and falls below 50% for the GFC and Perfect Storm for 3 Years

- Net Outflow

- Net outflow as a percentage of liquid assets reaches relatively high levels (>7% for the GFC and Perfect Storm for 3 Years)

The findings support the ability of the Fund to implement investment policies such as the current target and mixes 3 and 4 and the relatively large illiquid allocations they employ

Callan

Recommendation

Recommendation

The combination of a statutory contribution rate below that of the actuarially required contribution and an expected low-return environment over the next 10 years results in a deterioration of the funded status over time

Many factors support an asset allocation with a risk posture similar to the current target

- Pursuit of a 7% return; long time horizon; actuarial methodology (static contribution rate and asset smoothing)

While moving to a more aggressive asset allocation is expected to generate greater returns and a higher funded status, it also increases the risk of “bad investment outcomes” which in turn could result in further deterioration of the Plan’s funded status and the need for higher contribution rates

The statutory contribution policy combined with the relatively large illiquid allocation leads us to recommend maintaining the current risk posture (mix 4a) or moving to a slightly less aggressive asset allocation (mix 4)

- Reduces reliance on public equity markets
- Slight increase to alternatives which can provide a source of uncorrelated returns and potential for alpha generation and fixed income which provides downside protection in the event of a large equity drawdown
 - A high allocation to illiquid investments is suitable for a long-term investor with an actuarially sound funding policy
 - Potential sources of liquidity in a crisis include a long Treasury mandate (1.5% of the total fund), cash accounts (almost 1% of the total fund), the Treasury allocations within some of the other fixed income managers, and the cash flows coming from some of the real estate and infrastructure funds

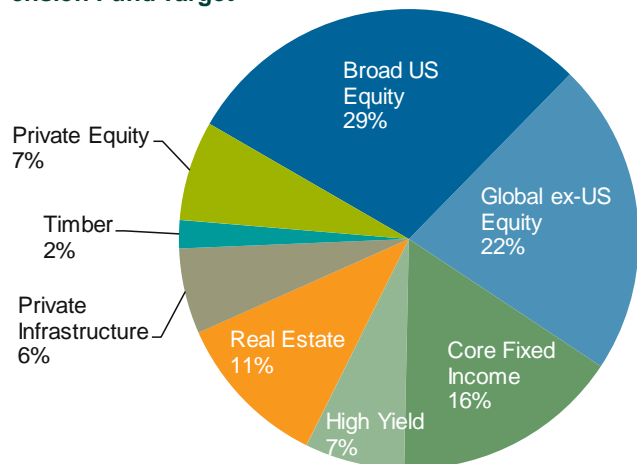
Recommendation

Finally, while the target and mixes 4 and 4a have expected returns over the next 10 years that fall short of the 7% return assumption, there are mitigating factors that offset the projected returns

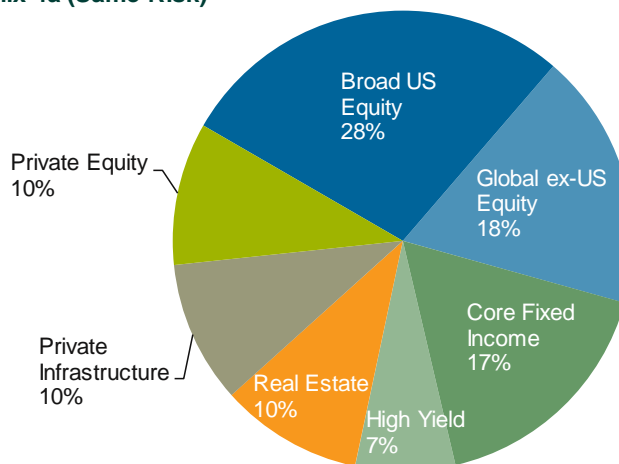
- Callan's public market return projections are based on passive (i.e., index fund) implementation and do not incorporate active management premiums
- Callan's 10-year projections are cyclically lower than our longer-term (i.e., greater than 10 years) expectations
- The target and mixes 4 and 4a have ~50% probability of achieving a 7% return over the next 10 years

Recommendation

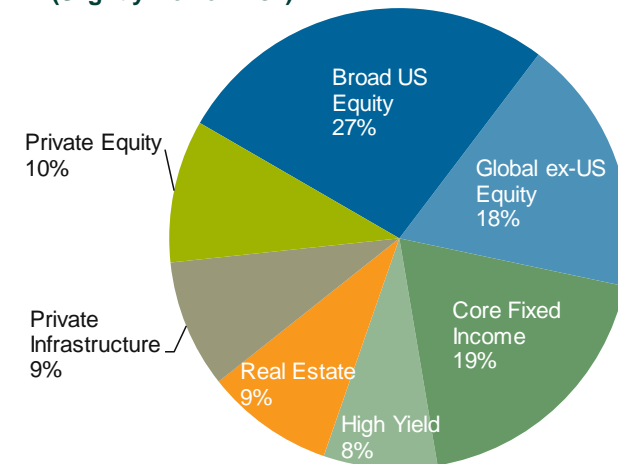
Pension Fund Target



Mix 4a (Same Risk)



Mix 4 (Slightly Lower Risk)



| Asset Class | Policy Target | Same Risk Mix 4a | % Change | \$M Change | Lower Risk Mix 4 | % Change | \$M Change |
|------------------------------------|---------------|------------------|------------|----------------|------------------|------------|----------------|
| Public Equity | 51% | 46% | -5% | (\$161) | 45% | -6% | (\$193) |
| Broad U.S. Equity | 29% | 28% | -1% | (\$19) | 27% | -2% | (\$51) |
| Global ex-U.S. Equity | 22% | 18% | -4% | (\$141) | 18% | -4% | (\$141) |
| Fixed Income | 23% | 24% | 1% | \$32 | 27% | 4% | \$128 |
| Core Fixed Income | 16% | 17% | 1% | \$32 | 19% | 3% | \$96 |
| High Yield | 7% | 7% | 0% | \$0 | 8% | 1% | \$32 |
| Alternatives | 26% | 30% | 4% | \$128 | 28% | 2% | \$64 |
| Real Estate | 11% | 10% | -1% | (\$32) | 9% | -2% | (\$64) |
| Private Infrastructure | 6% | 10% | 4% | \$128 | 9% | 3% | \$96 |
| Timber | 2% | 0% | -2% | (\$64) | 0% | -2% | (\$64) |
| Private Equity | 7% | 10% | 3% | \$96 | 10% | 3% | \$96 |
| Expected Return | 6.8% | 6.8% | | | 6.7% | | |
| Expected Standard Deviation | 13.4% | 13.4% | | | 13.1% | | |

Note: Dollar changes based on June 30, 2020 asset value

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Next Steps and Timeline

Next Steps

Incorporate feedback from today's meeting

Deliver the final study to NDPERS in September

Timeline

Asset-Liability Kickoff **COMPLETED**

Meeting Date: May 26

Preliminary Asset-Liability Results **COMPLETED**

Meeting Date: July 22

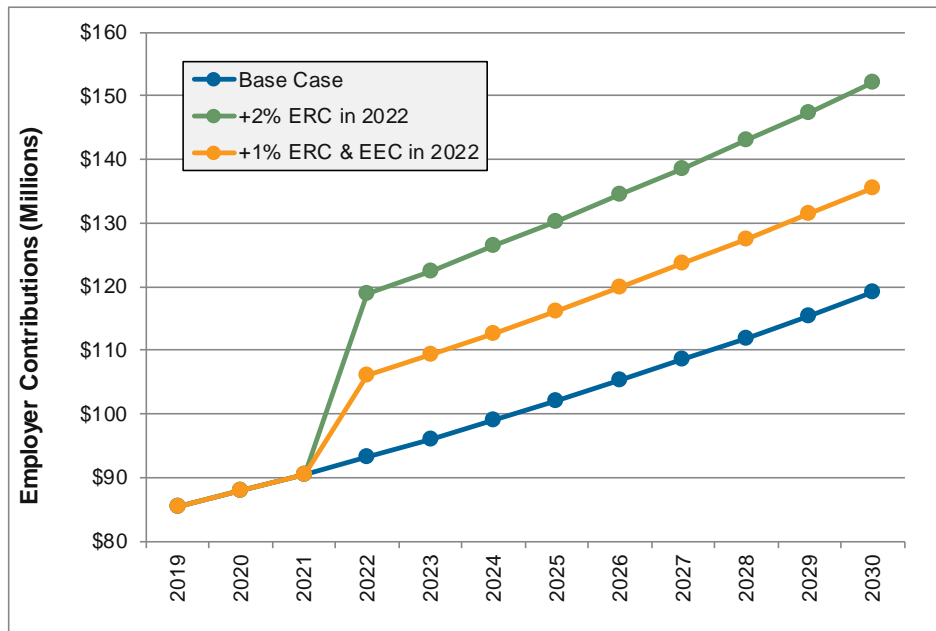
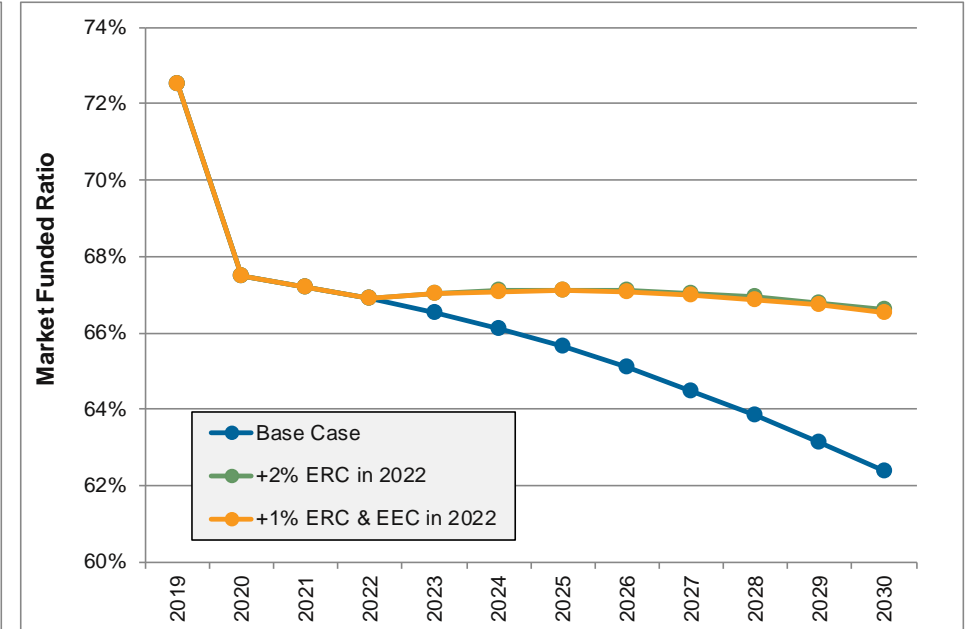
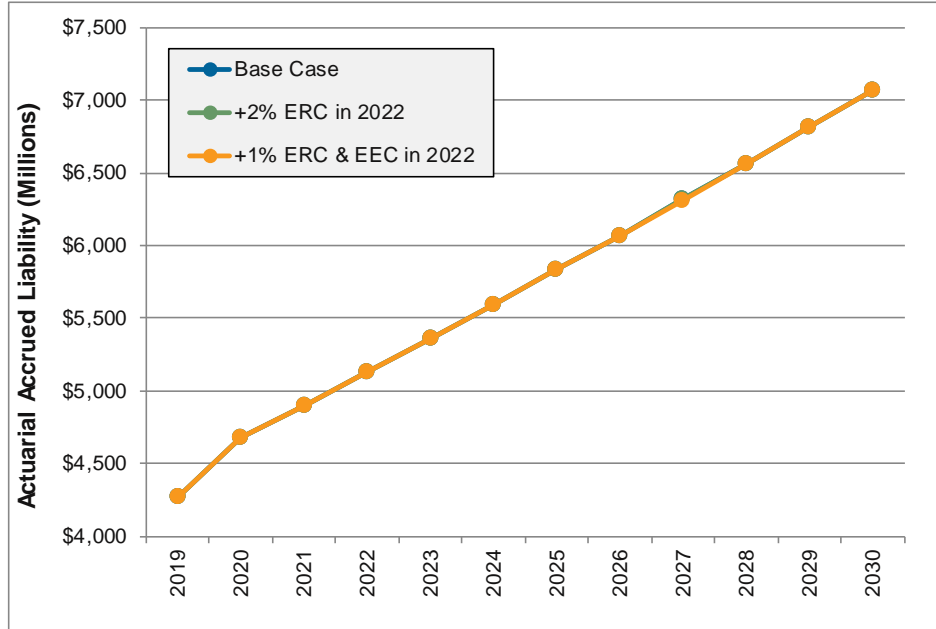
Final Asset-Liability Results **IN PROGRESS**

Meeting Dates: August 27 and September 8

Callan

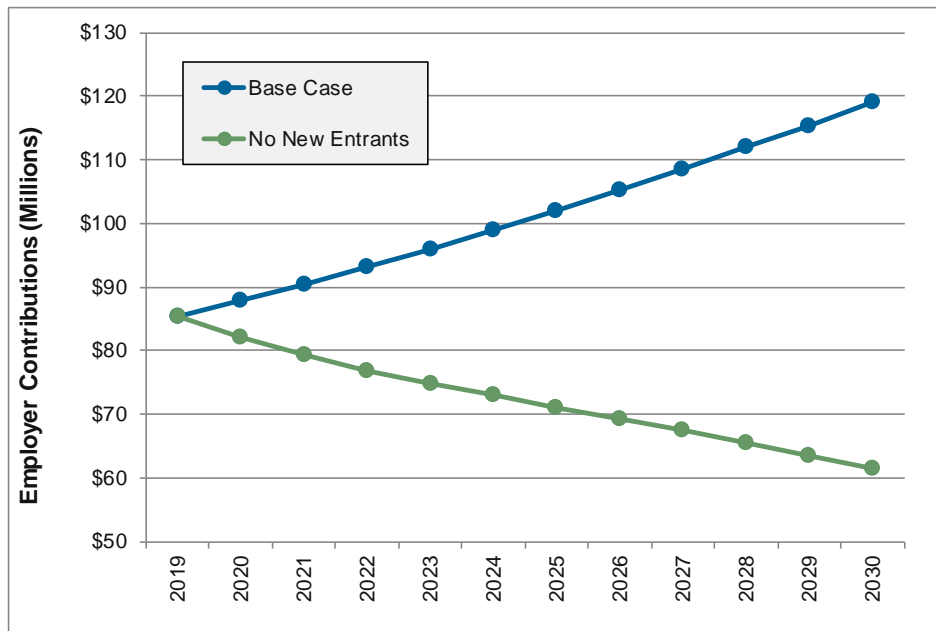
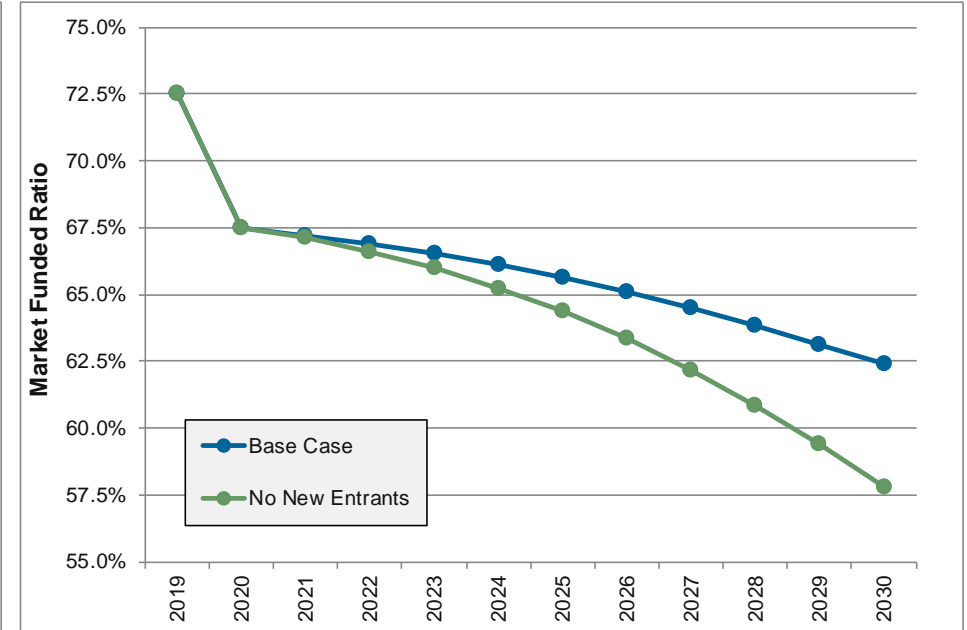
Appendix

Additional Contribution Scenarios



- Two additional contribution scenarios are shown alongside the current statutory contribution policy
 - Employer contributions rates rise 2% in 2022
 - Employer and employee contribution rates rise 1% in 2022
- There is no change in the actuarial liability
- Funded status improves, though still declines beyond 2025 albeit at a much slower pace
- Not surprising that employer contributions rise
 - +2% ER: Additional \$263 million through 2030
 - +1% EE/ER: Additional \$131 million through 2030

Additional Population Scenario



- A scenario in which the Plan is closed to new entrants in 2020 is shown alongside the current open plan
- Actuarial liability growth slows
 - \$537 million lower by 2030
- Despite the decline in the liability, the market funded ratio declines due to fewer contributions
 - \$345 million in fewer employer contributions through 2030 which does not account for the loss from compounding
 - Employee contributions (not shown) also decline

Stress Tests

Six Scenarios

Historical Scenarios

- (1) 2008 Financial Crisis (October 2007 – February 2009)
- (2) Black Monday (October 1987)
- (3) 2011 U.S. Debt Ceiling Crisis and Downgrade (June – September 2011)

Parametric Scenarios

- (4) Equities Decline 20% for 1 Year (bear market definition)
- (5) Perfect Storm for 1 Year (equities decline 20%, Treasuries and spreads increase 1%)
- (6) Perfect Storm for 3 Years (equities decline 15% annually, Treasuries and spreads increase 1% annually)

Asset Mixes Tested

- Current Target:
 - 51% Public equity, 23% fixed income, 26% alts
- Mix 3:
 - 39% public equity, 35% fixed income, 26% alts
- Mix 4:
 - 45% public equity, 27% fixed income, 28% alts

Stress Tests

Drawdowns

| | (1) | (2) | (3) | (4) | (5) | (6) |
|-------------------------|------------------------------|---------------------|--|--|---------------------------------|----------------------------------|
| Asset Class | <i>2008 Financial Crisis</i> | <i>Black Monday</i> | <i>2011 U.S. Debt Ceiling Crisis and Downgrade</i> | <i>Equities Decline 20% for 1 Year</i> | <i>Perfect Storm for 1 Year</i> | <i>Perfect Storm for 3 Years</i> |
| U.S. Equity | -42% | -22% | -15% | -20% | -20% | -45% |
| Global ex-US Equity | -48% | -14% | -19% | -20% | -20% | -45% |
| U.S. Fixed Income | 5% | 4% | 4% | 0% | -7% | -25% |
| High Yield Fixed Income | -20% | -3% | -6% | -5% | -10% | -30% |
| Real Estate / Timber | -21% | -11% | -8% | -10% | -10% | -23% |
| Private Equity | -21% | -11% | -8% | -10% | -10% | -23% |
| Infrastructure | -21% | -11% | -8% | -10% | -10% | -23% |
| Total Drawdown | <i>2008 Financial Crisis</i> | <i>Black Monday</i> | <i>2011 U.S. Debt Ceiling Crisis and Downgrade</i> | <i>Equities Decline 20% for 1 Year</i> | <i>Perfect Storm for 1 Year</i> | <i>Perfect Storm for 3 Years</i> |
| Target (26% Alts) | -28.7% | -12.2% | -10.4% | -13.1% | -14.6% | -34.9% |
| Mix 3 (26% Alts) | -23.7% | -9.9% | -8.3% | -10.9% | -13.2% | -32.7% |
| Mix 4 (28% Alts) | -26.4% | -11.3% | -9.4% | -12.2% | -14.0% | -33.7% |

- Returns shown represent index performance
 - Public Asset Classes: Russell 3000, MSCI ACWI ex-US IMI, Bloomberg Barclays Aggregate, Bloomberg High Yield
 - Private Asset Classes: 0.5 * Russell 3000
 - Estimate based on Cambridge PE Fund and NCREIF ODCE Index Data
- 2008 Financial Crisis and Perfect Storm for 3 Years are the most extreme stress tests
- Equities Decline 20% for 1 Year is the most similar scenario to recent events

Stress Tests

Additional Metrics

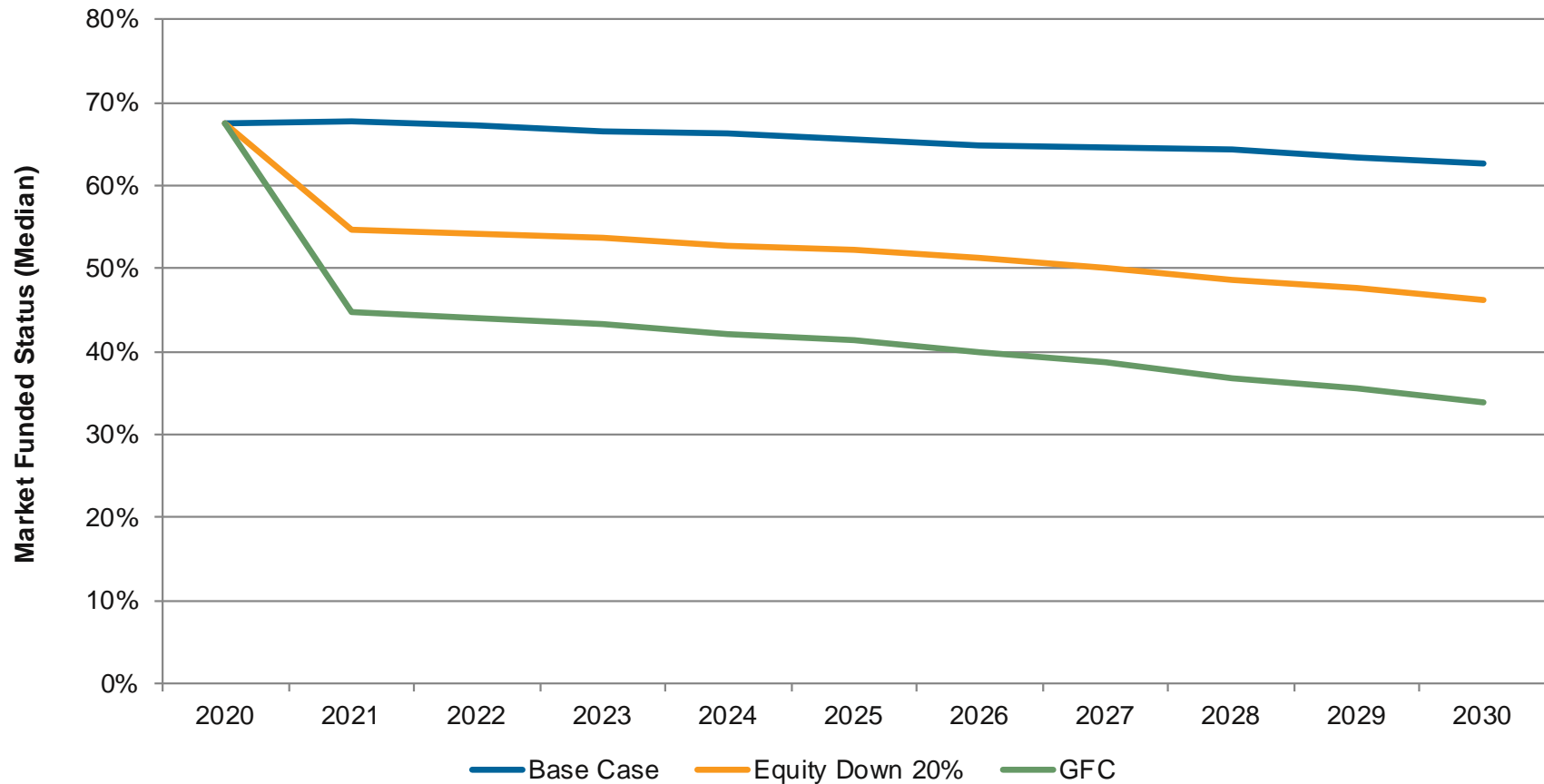
| | (1) | (2) | (3) | (4) | (5) | (6) |
|--|------------------------------|---------------------|--|--|---------------------------------|----------------------------------|
| | <i>2008 Financial Crisis</i> | <i>Black Monday</i> | <i>2011 U.S. Debt Ceiling Crisis and Downgrade</i> | <i>Equities Decline 20% for 1 Year</i> | <i>Perfect Storm for 1 Year</i> | <i>Perfect Storm for 3 Years</i> |
| 7/1/20 Funded Ratio | 67.5% | 67.5% | 67.5% | 67.5% | 67.5% | 67.5% |
| 7/1/21 Funded Ratio | | | | | | |
| Target (26% Alts) | 44.2% | 54.8% | 56.0% | 54.2% | 53.2% | 40.2% |
| Mix 3 (26% Alts) | 47.4% | 56.3% | 57.3% | 55.6% | 54.2% | 41.6% |
| Mix 4 (28% Alts) | 45.7% | 55.4% | 56.6% | 54.8% | 53.7% | 40.9% |
| 6/30/20 Alternatives Allocation | | | | | | |
| Target (26% Alts) | 44.8% | 40.5% | 40.5% | 41.2% | 41.5% | 47.5% |
| Mix 3 (26% Alts) | 46.2% | 43.8% | 43.7% | 44.5% | 45.0% | 50.2% |
| Mix 4 (28% Alts) | 47.3% | 43.6% | 43.6% | 44.3% | 44.8% | 50.7% |
| 2020 Net Outflow (% Liquid) | | | | | | |
| Target (26% Alts) | 7.2% | 5.4% | 5.3% | 5.5% | 5.6% | 8.3% |
| Mix 3 (26% Alts) | 6.9% | 5.5% | 5.4% | 5.7% | 5.9% | 8.5% |
| Mix 4 (28% Alts) | 7.3% | 5.6% | 5.5% | 5.7% | 5.9% | 8.7% |

- Assuming scenarios transpire over a one-year period, funded status declines from starting point of 67.5%
 - Below 50% for GFC and Perfect Storm for 3 Years
- Alternative allocations can reach high levels during a crisis due to a combination of the following:
 - Benefit payments funded from liquid asset classes
 - Muted losses from alternatives due to valuation smoothing
 - Capital calls for existing private asset class commitments
- Net outflow (% of liquid assets) can reach relatively high levels (>7% for the GFC and Perfect Storm for 3 Years)

Notes: 7/1/21 Funded Ratio estimate reflects \$262M in benefit payments/expenses, \$176M in total contributions, and a liability estimate of \$4.9B; High yield considered illiquid in stressed environments

Stress Tests

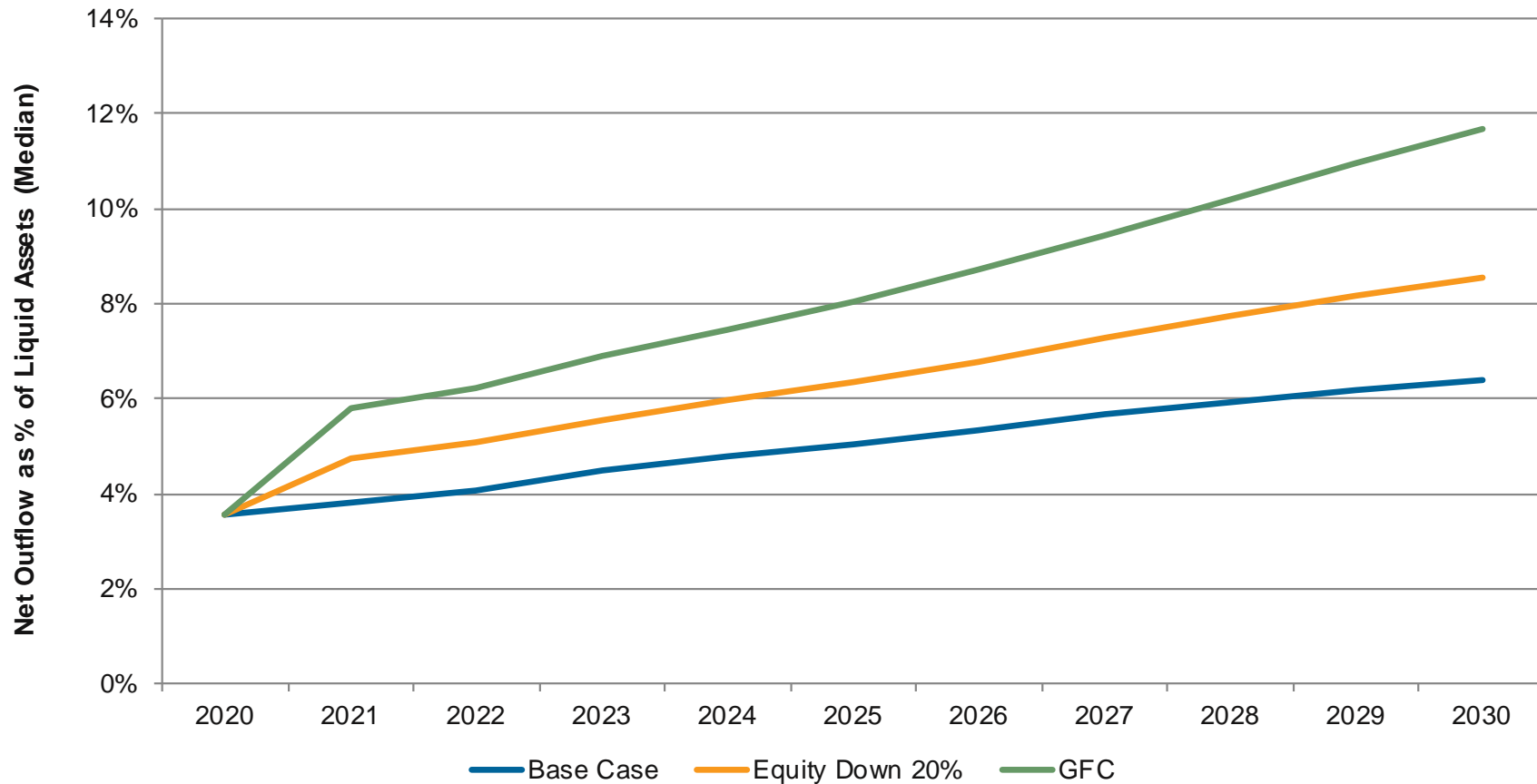
Market Funded Status (2020 = 67.5%)



- Base case funded status gradually declines to 62.6% by 2030
- With equities down 20% , the funded status drops to 54.6% in 2021 and declines to 46.1% by 2030
- In a GFC scenario, the funded status drops to 44.6% in 2021 and falls to just 33.8% by 2030

Stress Tests

Net Outflow as a % of Liquid Assets (2020 = 3.6%)



- Base case net outflow rises to 6.4% by 2030
- With equities down 20% , net outflow rises to 8.6% by 2030
- In a GFC scenario, net outflow rises to 11.7% by 2030
- Outcomes are heavily contingent upon adherence to the funding policy

Note: High yield considered illiquid in stressed environments

Disclaimers

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The statements made herein may include forward-looking statements regarding future results. The forward-looking statements herein: (i) are best estimations consistent with the information available as of the date hereof and (ii) involve known and unknown risks and uncertainties such that actual results may differ materially from these statements. There is no obligation to update or alter any forward-looking statement, whether as a result of new information, future events or otherwise. Undue reliance should not be placed on forward-looking statements.



August 27, 2020

North Dakota PERS RHIC Fund

2020 Asset -Liability Study

Alex Browning
Fund Sponsor Consulting

Paul Erlendson
Fund Sponsor Consulting

Julia Moriarty, CFA
Capital Market Research

Agenda

Introduction and Process Overview

Asset Allocation

Asset-Liability Modeling

Recommendation

Next Steps and Timeline

Callan

Introduction and Process Overview

Introduction

The goal of the asset-liability study is to determine an appropriate long-term mix between return-seeking assets (e.g., equities, real assets, alternatives) and risk-mitigating assets (cash, fixed income)

- 80-90% of funded status volatility is driven by the broad asset allocation decision

Asset allocation will vary by the unique circumstances of the plan

- No “one-size-fits-all” solution exists

The asset-liability study helps NDPERS quantify the impact that different strategies might have on relevant metrics

Factors to consider:

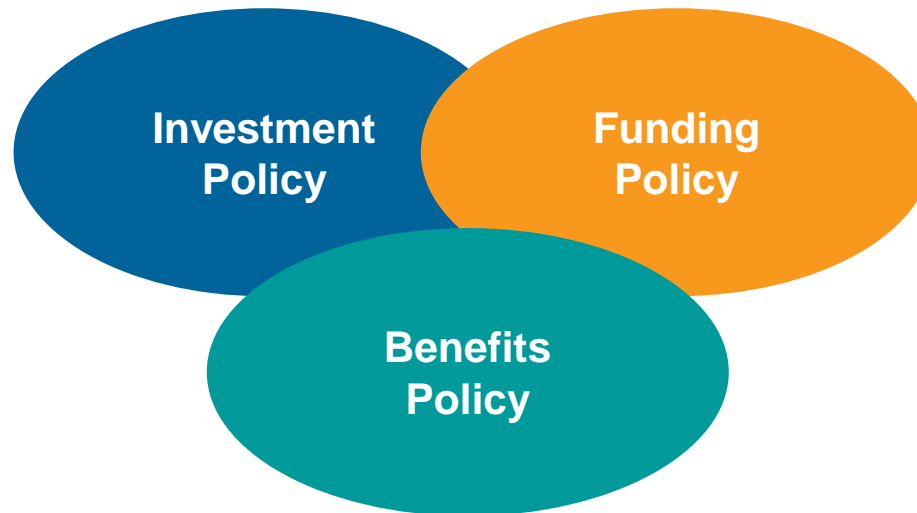
- Liability characteristics
- Funded status
- Contribution policy
- Time horizon
- Liquidity needs

Where Does Asset Allocation Fit In?

Evaluate the interaction of three key policies to identify the optimal investment policy

Investment Policy

- How will the assets supporting the benefits be invested?
- What risk and return objectives?
- How to manage cash flows?



Funding Policy

- How will the benefits/deficits be paid for (funded)?
- What are the actuarial assumptions to use?

Benefits Policy

- What type/kind of benefits?
- What level of benefit?
- When and to whom are they payable?

Callan Asset-Liability Modeling Process

Asset Modeling

Define Capital Market Assumptions

Create Asset Mix Alternatives

Liability Modeling

Define Liability Assumptions

Build Actuarial Liability Model

Simulate Financial Conditions

Define Risk Tolerance

Select Appropriate Target Mix

Callan

Asset Allocation

Callan Capital Market Process and Philosophy

Underlying beliefs guide the development of the projections

- An initial bias toward long-run averages
- An awareness of risk premiums
- A presumption that markets ultimately clear and are rational

Reflect our belief that long-term equilibrium relationships between the capital markets and lasting trends in global economic growth are key drivers to setting capital market expectations

Long-term compensated risk premiums represent “beta”—exposure to each broad market, whether traditional or “exotic,” with limited dependence on successful realization of alpha

The projection process is built around several key building blocks

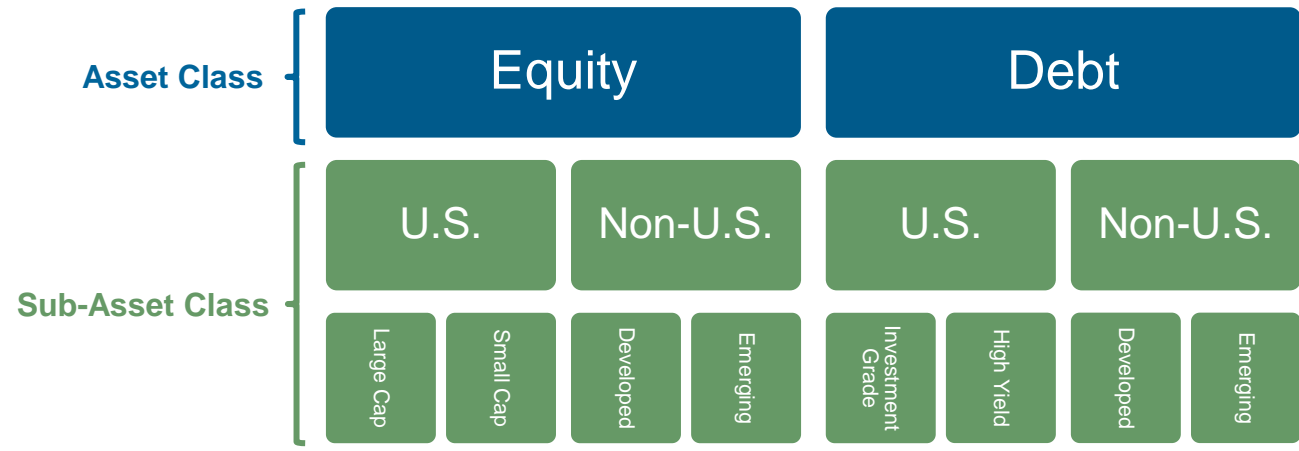
- Advanced modeling at the individual asset class level (e.g., a detailed bond model, an equity model)
- Pathways for both interest rates and inflation
- A cohesive economic outlook
- A framework that encompasses Callan’s beliefs about the long-term operation and efficiencies of the capital markets

The Focus is on Broad Asset Classes

Breakdowns between investment styles within asset classes (growth vs. value, large cap vs. small cap) are best addressed in a manager structure analysis

Primary asset classes and important sub-asset classes include:

- U.S. Stocks
- U.S. Bonds
- Non-U.S. Stocks
- Non-U.S. Bonds
- Real Estate
- Private Equity
- Absolute Return
- Cash



Callan Capital Market Assumptions

Risk and return: 2020–2029

| Asset Class | Index | Projected Return* | Projected Risk |
|--------------------------------|--|-------------------|----------------|
| Equities | | | |
| Broad U.S. Equity | Russell 3000 | 7.15% | 18.10% |
| Large Cap U.S. Equity | S&P 500 | 7.00% | 17.70% |
| Small/Mid Cap U.S. Equity | Russell 2500 | 7.25% | 21.20% |
| Global ex-U.S. Equity | MSCI ACWI ex USA | 7.25% | 20.50% |
| Developed ex-U.S. Equity | MSCI World ex USA | 7.00% | 19.70% |
| Emerging Market Equity | MSCI Emerging Markets | 7.25% | 25.70% |
| Fixed Income | | | |
| Short Duration Govt/Credit | Bloomberg Barclays 1-3 Yr G/C | 2.70% | 2.10% |
| Core U.S. Fixed | Bloomberg Barclays Aggregate | 2.75% | 3.75% |
| Long Government/Credit | Bloomberg Barclays Long G/C | 2.75% | 10.60% |
| TIPS | Bloomberg Barclays TIPS | 2.40% | 5.05% |
| High Yield | Bloomberg Barclays High Yield | 4.65% | 10.25% |
| Global ex-U.S. Fixed | Bloomberg Barclays Gbl Agg xUSD | 0.90% | 9.20% |
| Emerging Market Sovereign Debt | EMBI Global Diversified | 4.35% | 9.50% |
| Other | | | |
| Core Real Estate | NCREIF ODCE | 6.25% | 14.00% |
| Timberland | NCREIF Timberland | 6.05% | 14.60% |
| Farmland | NCREIF Farmland | 6.10% | 15.00% |
| Private Infrastructure | DJB Glob Infr / FTSE Dev Core Infr 50/50 | 6.60% | 15.20% |
| Private Equity | Cambridge Private Equity | 8.50% | 27.80% |
| Hedge Funds | Callan Hedge FoF Database | 5.00% | 8.70% |
| Commodities | Bloomberg Commodity | 2.75% | 18.00% |
| Cash Equivalents | 90-Day T-Bill | 2.25% | 0.90% |
| Inflation | CPI-U | 2.25% | 1.50% |

- Most capital market expectations represent passive exposure (beta only); however, return expectations for private market investments reflect active management premiums
- Return expectations are net of fees

* Geometric returns are derived from arithmetic returns and the associated risk (standard deviation).

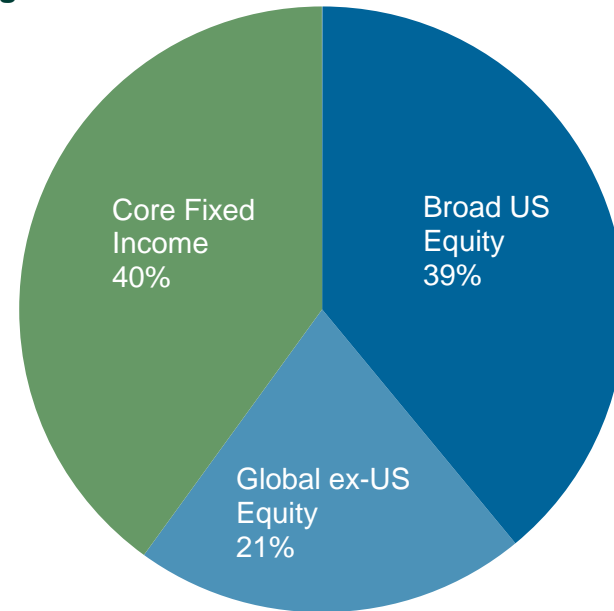
Policy Target Allocation

The target asset allocation consists of 60% public equity and 40% fixed income

While the Fund's target allocation is projected to return 5.9% over the next 10 years versus an actuarial discount rate of 6.5%, two key items should be noted

- Callan's public market return projections do not incorporate active management premiums
 - Active management premiums accrue when investment firms selected by the State Investment Board outperform their passive benchmarks
 - *It is important to note, though, that investment firms will at times underperform their passive benchmarks*
 - The Plan has benefitted from active management by ~10 basis points net of fees (annualized) over the past ten years ended 3/31/20
- Callan's 10-year projections are below longer-term expectations due to the current economic environment and the forecast for the next several years

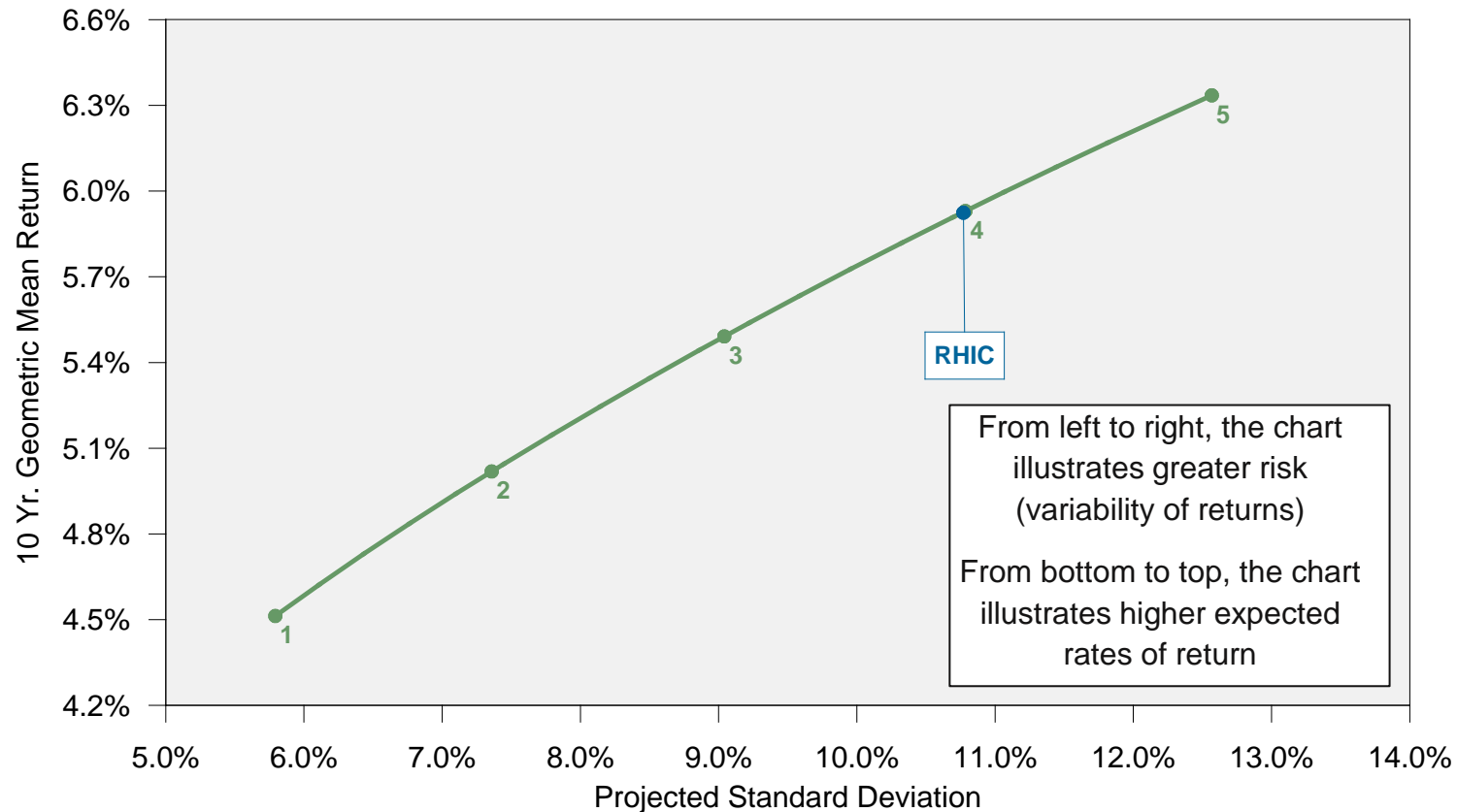
RHIC Fund Target



Expected Geometric Mean Return = 5.9%
Expected Standard Deviation = 10.8%

Efficient Frontier

Efficient Frontier



- A series of optimal mixes at different levels of expected return and risk is depicted above
 - Optimal mixes generate the greatest return for a given level of risk, or conversely, the lowest risk for a given level of return
 - Five efficient mixes are numbered and described in more detail on the following page
- The current target portfolio is virtually identical to Mix 4 from a return and risk perspective

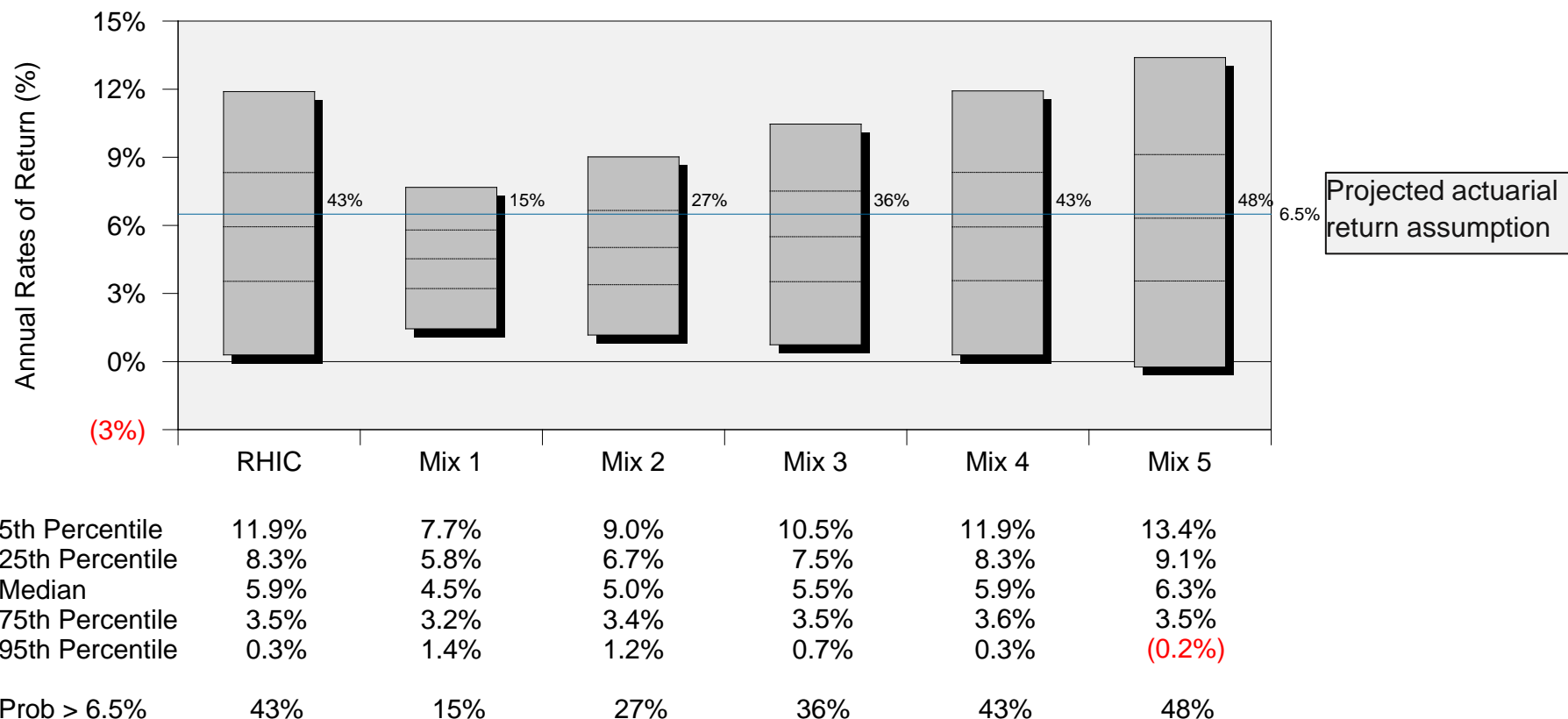
Alternative Asset Mixes

| Asset Class | Policy Target | Mix 1 | Mix 2 | Mix 3 | Mix 4 | Mix 5 |
|------------------------------------|---------------|-------------|-------------|-------------|--------------|--------------|
| Public Equity | 60% | 30% | 40% | 50% | 60% | 70% |
| Broad U.S. Equity | 39% | 18% | 24% | 30% | 36% | 42% |
| Global ex-U.S. Equity | 21% | 12% | 16% | 20% | 24% | 28% |
| Fixed Income | 40% | 70% | 60% | 50% | 40% | 30% |
| Core Fixed Income | 40% | 70% | 60% | 50% | 40% | 30% |
| Expected Return | 5.9% | 4.5% | 5.0% | 5.5% | 5.9% | 6.3% |
| Expected Standard Deviation | 10.8% | 5.8% | 7.4% | 9.0% | 10.8% | 12.6% |

- The optimal mixes are constructed with decreasing allocations to Fixed Income (from 70% to 30%)
- As the Fixed Income allocation decreases, the expected return increases and annual portfolio risk reaches over 12%
- The Policy Target's risk and return profile is virtually identical to that of Mix 4

Projected Rates of Return (10 Years)

Range of Projected Rates of Return
Projection Period: 10 Years



- Chart reflects annualized return distribution over the next ten years
- Bar heights proportional to return volatility
 - Higher expected (median) returns associated with higher volatilities
 - Increased volatility leads to lower worse-case (95th percentile) returns
- The current policy has a 43% probability of earning 6.5% or better over the next 10 years

Callan

Asset-Liability Modeling

Current Conditions

Build Actuarial Liability Model

Callan's liability model is based on the GRS 2019 actuarial valuation

Model used to forecast future liabilities

Assets rolled forward using May 31, 2020 actual asset values

Additional forecast assumptions

- Closed to new entrants

| July 1, 2019 Actuarial Valuation | RHIC |
|--|------------|
| Actuarial Accrued Liability | \$217.8 mm |
| Market Value of Assets | \$137.5 mm |
| Actuarial Value of Assets | \$137.6 mm |
| Market Funded Status (MVA/AL) | 63.1% |
| Actuarial Funded Status (AVA/AL) | 63.2% |
| Statutory Employer Contrib. (% of payroll) | 1.14% |

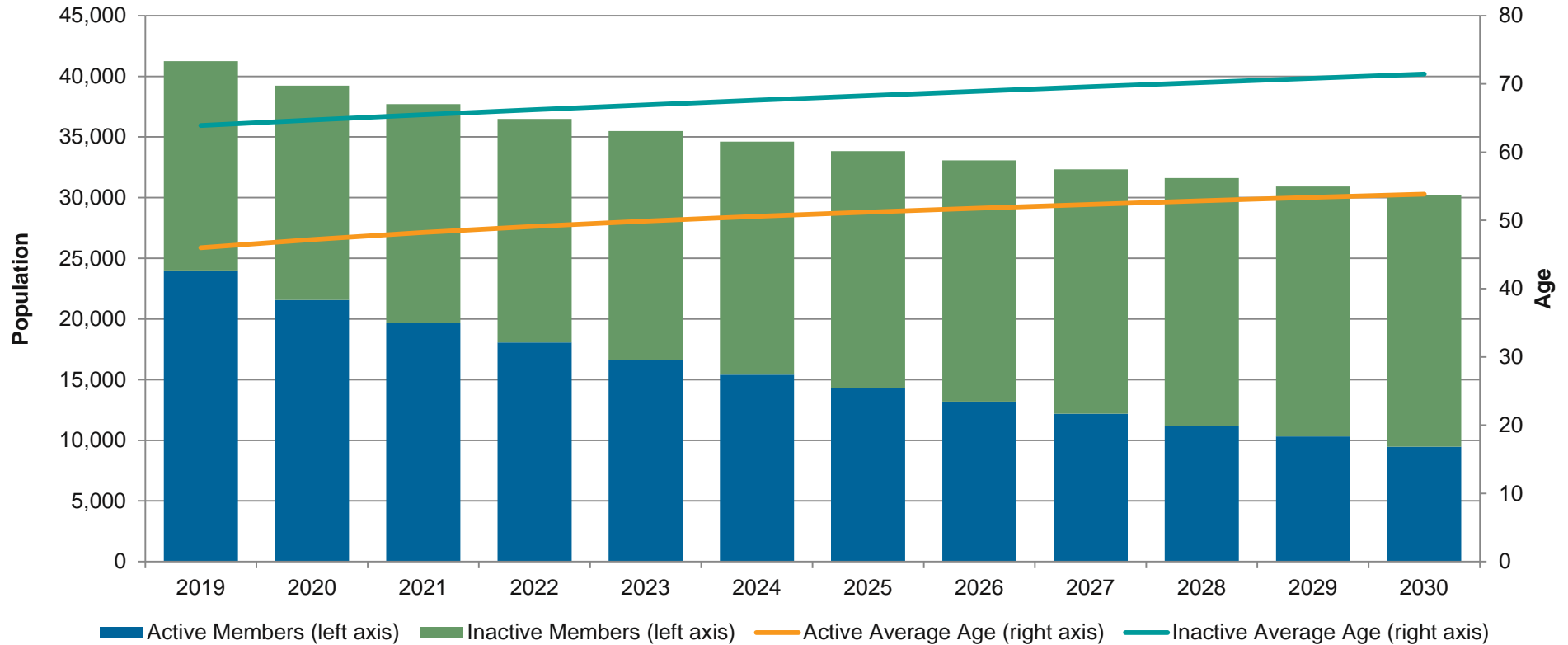
| Key Assumptions | Actuarial Assumption* | Callan 10-year Expectation |
|-------------------|-----------------------|----------------------------|
| Investment Return | 6.5% | 5.9%** |
| Price Inflation | 2.25% | 2.25% |

*As of July 1, 2020

**Based on Callan's capital market assumptions applied to the RHIC Fund's target asset allocation; used throughout the remainder of the study

Member Numbers

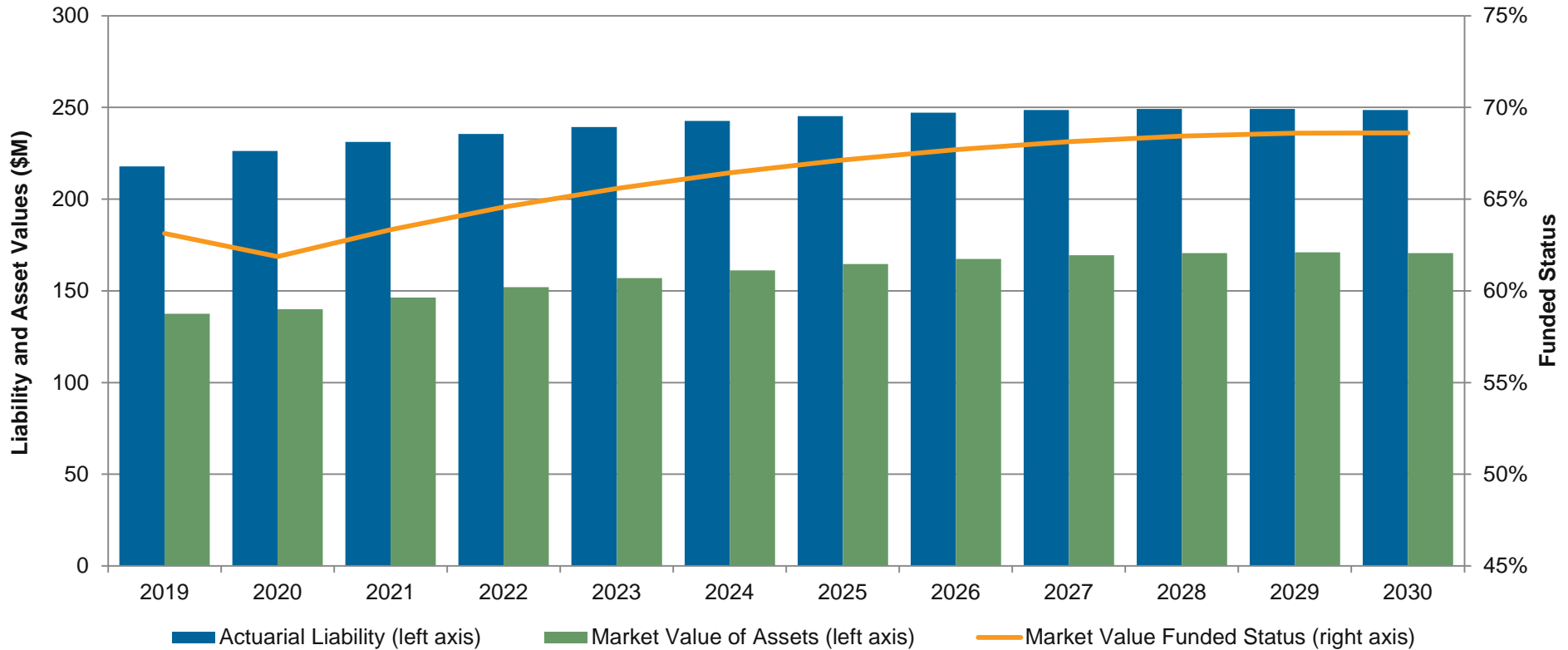
Deterministic Forecast



- Number of active members declines as the Plan is closed to new entrants
 - Rising active average age reflects plan closure to new entrants
- Number of inactive members and their average age increase steadily over time

Funding

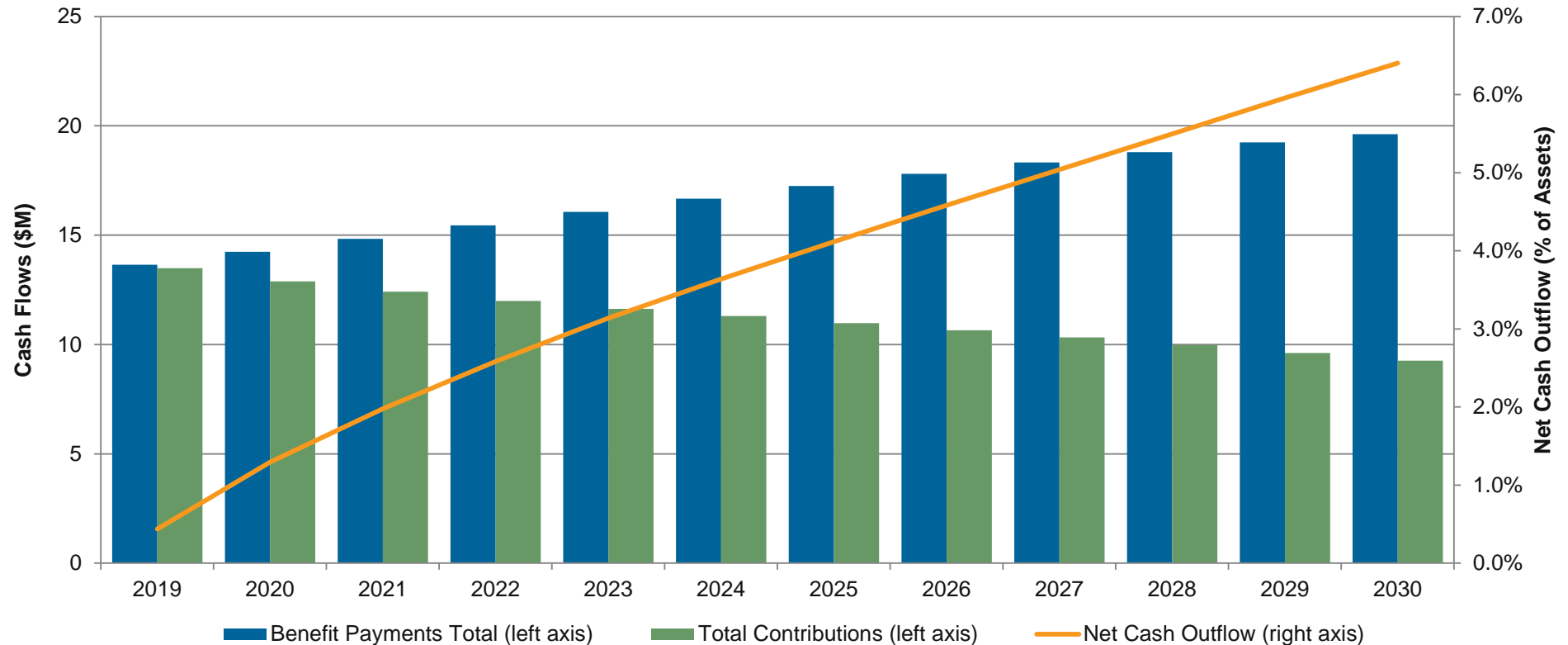
Deterministic Forecast



- Market value of assets increases faster than the liabilities, narrowing the funding gap through 2030
 - Change in assets due to both investment returns and net cash flows (contributions net of benefit payments and expenses)
 - Extending the projection beyond 2030 shows a decline in the funded status as assets fall faster than the liabilities
- Projected funding depends on adherence to the contribution policy
 - Assumes assets earn 5.9%

Cash Flows and Liquidity

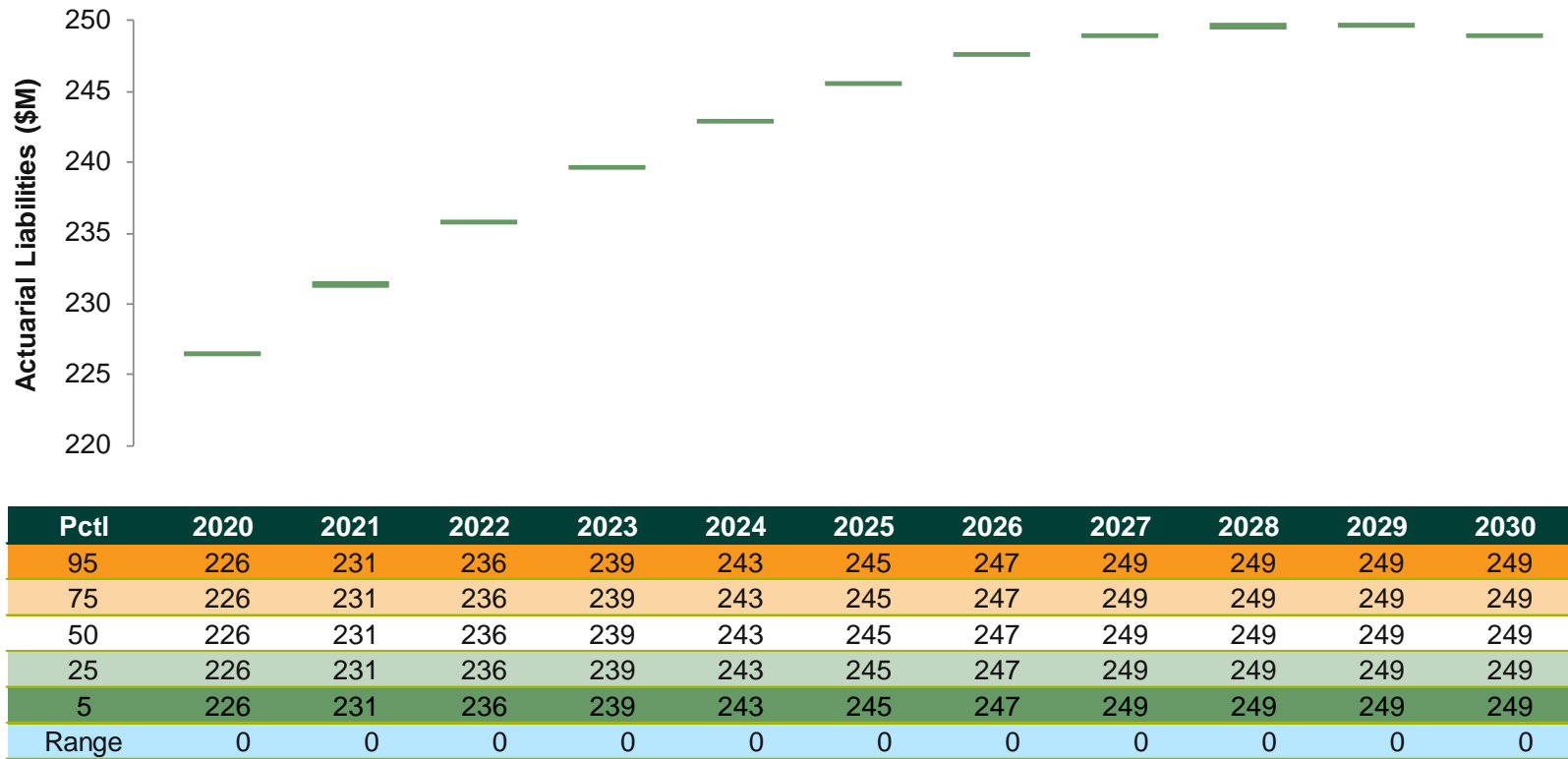
Deterministic Forecast



- Net Cash Outflow = Benefit Payments + Expenses – Employer Contributions
- Plan is expected to have growing net outflow (both in nominal dollars and as a percentage of assets) over the coming decade
 - Extending the projection beyond 2030 shows the net outflow percentage continuing to climb as contributions fall and benefit payments rise through 2036

Actuarial Liability, 2020-2030

Stochastic Forecast



- With the Plan recently closed to new entrants, liabilities growth slows and liabilities begin to fall by 2030

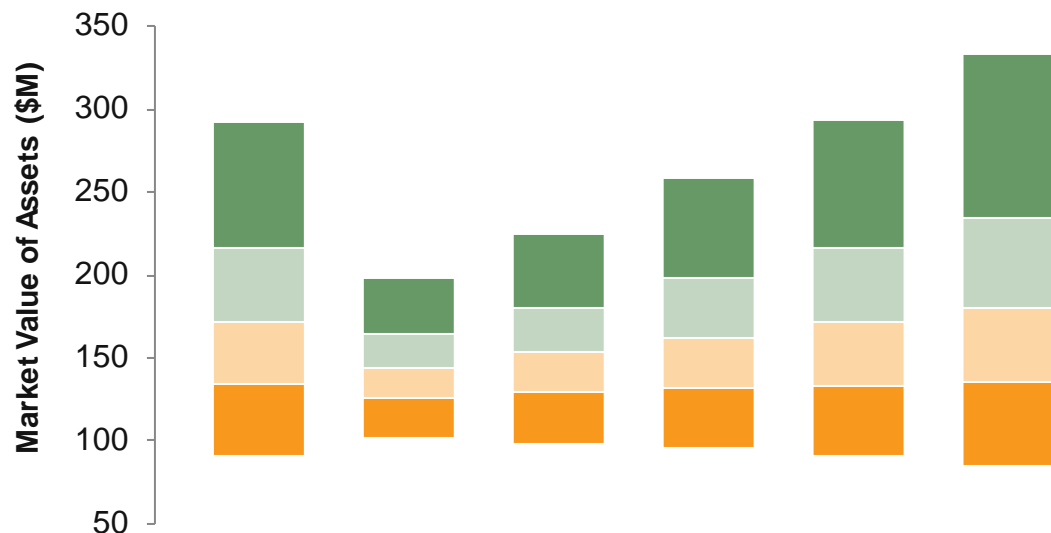
Market Value of Assets in 2030 (10 Years)

Stochastic Forecast

Moving from left to right (Mix 1 to Mix 5), the range of results widens as one takes on more risk (greater equity exposure)

More aggressive mixes have larger expected values (50th percentile) but lower worse-case (95th percentile) outcomes

- The 50th percentile is the expected case – half of the outcomes are higher and half lower
- The 95th percentile is a worse-case scenario – a 5% probability that assets will be the value shown or lower



| Pctl | Target | Mix 1 | Mix 2 | Mix 3 | Mix 4 | Mix 5 |
|-------|--------|-------|-------|-------|-------|-------|
| 5 | 292 | 198 | 225 | 258 | 292 | 332 |
| 25 | 216 | 164 | 180 | 198 | 217 | 234 |
| 50 | 171 | 144 | 154 | 163 | 172 | 180 |
| 75 | 135 | 126 | 130 | 133 | 134 | 136 |
| 95 | 92 | 103 | 99 | 96 | 92 | 86 |
| Range | 199 | 95 | 125 | 161 | 201 | 246 |

Asset Change = Contributions + Investment Earnings – Benefit Payments & Expenses

Funded Ratio in 2030 (10 Years)

Stochastic Forecast

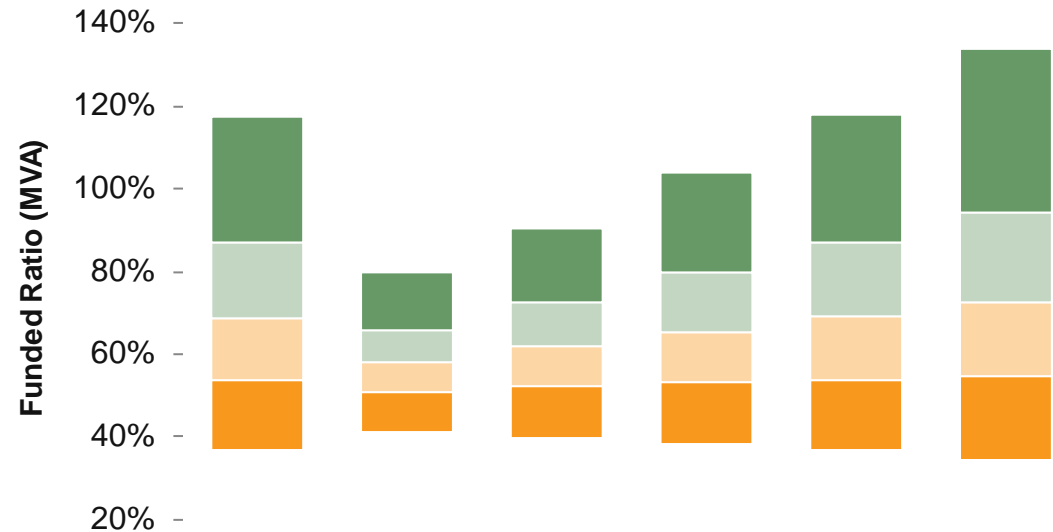
Starting funded status = 63.1%

The Plan's funded status is expected (50th percentile) to improve over the next ten years under the current funding policy

- Mixes 1 and 2 expect a decline in the funding ratio while Mixes 3, 4, and 5 expect to see an improvement in funding

Funding ratios in worse-case scenarios are particularly low because the contribution policy is not impacted by a declining funded status

More aggressive mixes are expected to have higher funded ratios at the end of 10 years relative to more conservative mixes but have lower funded ratios in worse-case scenarios (95th percentile)



| Pctl | Target | Mix 1 | Mix 2 | Mix 3 | Mix 4 | Mix 5 |
|-------|--------|-------|-------|-------|-------|-------|
| 5 | 117% | 80% | 90% | 104% | 118% | 134% |
| 25 | 87% | 66% | 72% | 80% | 87% | 94% |
| 50 | 69% | 58% | 62% | 65% | 69% | 73% |
| 75 | 54% | 51% | 52% | 53% | 54% | 55% |
| 95 | 37% | 41% | 40% | 39% | 37% | 35% |
| Range | 80% | 38% | 50% | 65% | 81% | 99% |

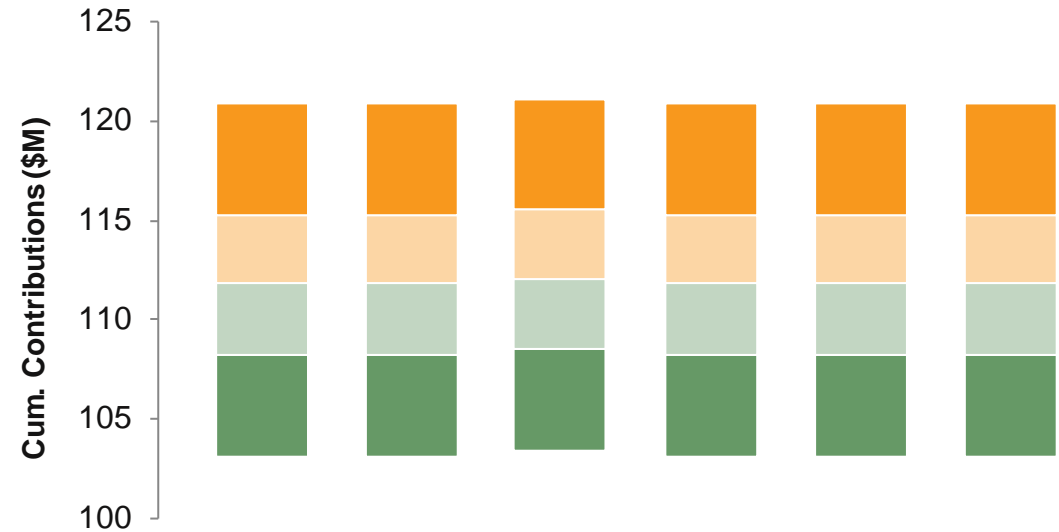
Funded Status = Market Value of Assets / Actuarial Liability

Cumulative Contributions through 2030 (10 Years)

Stochastic Forecast

There is no contribution variability across the asset mixes due to the statutory percentage of pay policy

Contribution volatility within an asset mix stems from simulated inflation which impacts salaries



| Pctl | Target | Mix 1 | Mix 2 | Mix 3 | Mix 4 | Mix 5 |
|-------|--------|-------|-------|-------|-------|-------|
| 95 | 121 | 121 | 121 | 121 | 121 | 121 |
| 75 | 115 | 115 | 115 | 115 | 115 | 115 |
| 50 | 112 | 112 | 112 | 112 | 112 | 112 |
| 25 | 108 | 108 | 108 | 108 | 108 | 108 |
| 5 | 103 | 103 | 103 | 103 | 103 | 103 |
| Range | 18 | 18 | 18 | 18 | 18 | 18 |

Ultimate Net Cost in 2030 (10 Years)

Stochastic Forecast

UNC is a more complete measure of the cost to the employer since it captures what is expected to be paid over 10 years plus what is owed at the end of the 10-year period

Ultimate net cost (UNC) = 10-Year cumulative contributions + 7/1/2030 unfunded actuarial liability

More aggressive mixes lower UNC in the expected case but result in greater UNC in a worse-case scenario



| Pctl | Target | Mix 1 | Mix 2 | Mix 3 | Mix 4 | Mix 5 |
|-------|--------|-------|-------|-------|-------|-------|
| 95 | 268 | 256 | 259 | 263 | 269 | 276 |
| 75 | 225 | 234 | 230 | 227 | 225 | 224 |
| 50 | 189 | 216 | 207 | 198 | 188 | 180 |
| 25 | 145 | 197 | 180 | 162 | 145 | 125 |
| 5 | 70 | 166 | 138 | 105 | 69 | 31 |
| Range | 198 | 90 | 121 | 158 | 200 | 245 |

UNC = Cumulative Contributions + Unfunded Liability

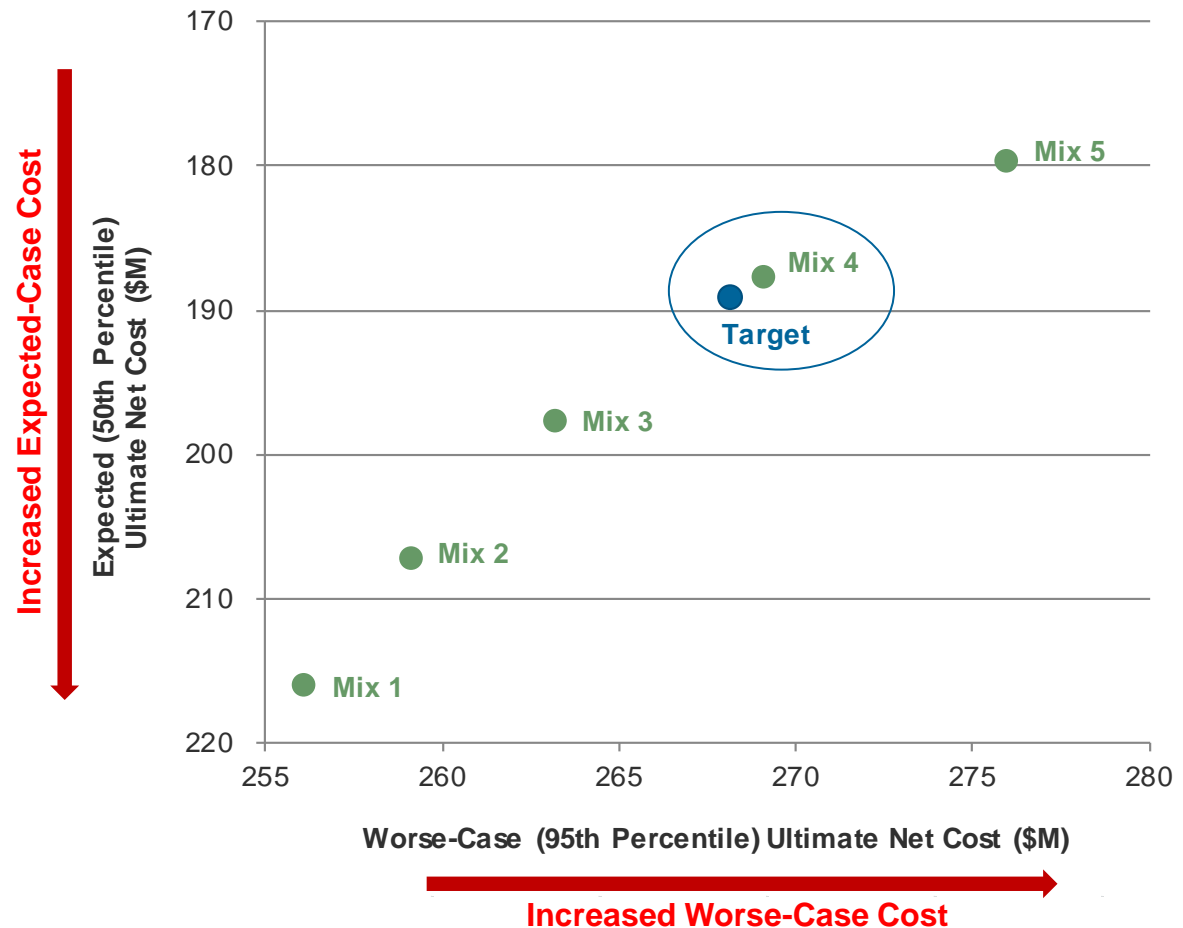
Ultimate Net Cost in 2030 (10 Years): Expected (50th) vs Worse Case (95th)

Stochastic Forecast

Tradeoff is roughly linear for optimal mixes

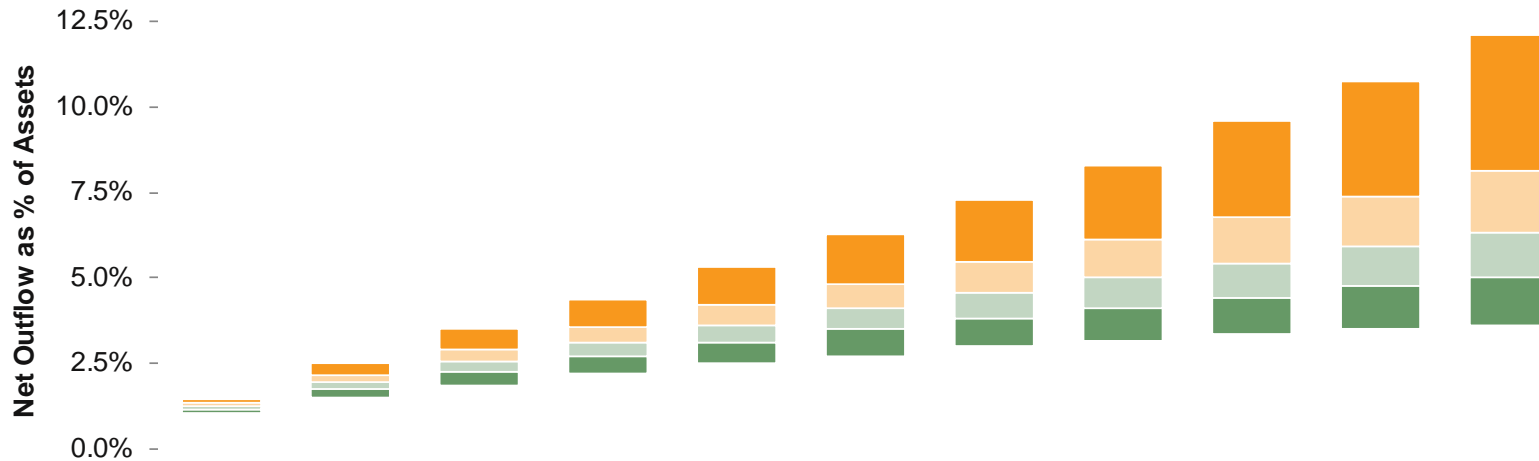
Mix 4 and the current target are very similar, each with 60% equity though with slightly different weights to US and non-US

Mix 4 marginally lowers expected-case cost relative to the current target, though with slightly greater cost in a worse-case scenario



Net Outflow as a Percentage of Assets, 2020-2030

Stochastic Forecast



| Pctl | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|
| 95 | 1.5% | 2.5% | 3.5% | 4.4% | 5.3% | 6.3% | 7.3% | 8.3% | 9.6% | 10.7% | 12.1% |
| 75 | 1.4% | 2.2% | 2.9% | 3.6% | 4.2% | 4.8% | 5.5% | 6.1% | 6.8% | 7.4% | 8.1% |
| 50 | 1.3% | 2.0% | 2.6% | 3.1% | 3.6% | 4.1% | 4.6% | 5.0% | 5.5% | 5.9% | 6.3% |
| 25 | 1.2% | 1.8% | 2.3% | 2.7% | 3.1% | 3.5% | 3.8% | 4.1% | 4.4% | 4.8% | 5.0% |
| 5 | 1.1% | 1.5% | 1.9% | 2.2% | 2.6% | 2.8% | 3.0% | 3.2% | 3.4% | 3.6% | 3.6% |
| Range | 0.4% | 1.0% | 1.6% | 2.1% | 2.8% | 3.5% | 4.2% | 5.1% | 6.2% | 7.2% | 8.4% |

- Net Outflow = Benefit Payments & Expenses – Employer Contributions
 - A useful indicator of ongoing liquidity needs
 - Ratio < 7.0% is typically manageable; >10% presents high liquidity pressure depending on the level of illiquid assets in the portfolio
 - Based on our experience, most public funds have net outflow of 4-7% depending on funded status, funding policy, and plan maturity
- For the current target (100% liquid), liquidity needs are expected (50th percentile) to be manageable; in worse-case (95th percentile) scenarios net outflows exceed 10%
- The liquidity analysis assumes the funding policy is adhered to

Recommendation

Recommendation

The combination of the current funding and investment policies may lead to a modest improvement in the funded status over the next 10 years despite the expectation of a low-return environment

- Looking beyond 10 years shows a decline in the funded status as assets fall faster than the liabilities
- 30 years out assets are projected to be approximately \$20 million versus a liability of roughly \$150 million under the current funding policy (deterministic projection)
 - Employer contributions fall from ~\$13 million today to just \$2 million 30 years out as the number of active employees on which to base the statutory percentage of pay contribution policy declines dramatically (~24,000 active participants at July 1, 2019 versus less than a 1,000 in 30 years)

Many factors support an asset allocation with a risk posture similar to (mix 4) or slightly more aggressive (mix 4a) than the current target

- Pursuit of a 6.5% return
- Long time horizon
- Static contribution rate

Further diversification via core real estate might be worth studying but we are not recommending it be included in the asset allocation at this particular time

- An allocation to real estate would reduce the reliance on both public equity and low yielding fixed income while modestly raising the expected return for the same level of risk
- Real estate may also offer some protection in a rising inflation environment

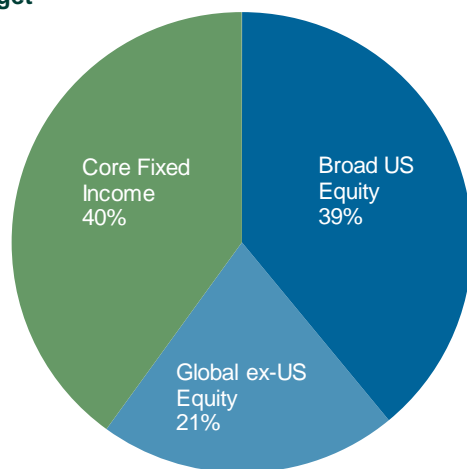
Recommendation

Finally, while the target and mixes 4 and 4a have expected returns over the next 10 years that fall short of the 6.5% return assumption, there are mitigating factors that offset the projected returns

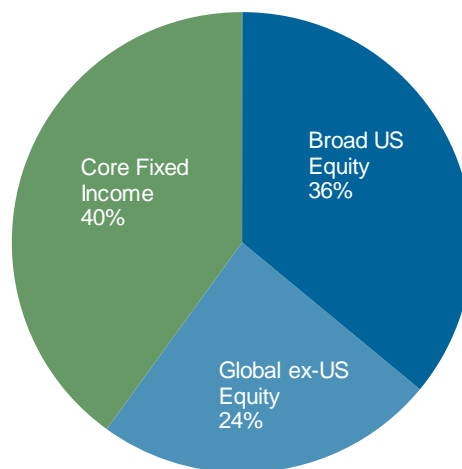
- Callan's public market return projections are based on passive (i.e., index fund) implementation and do not incorporate active management premiums
- Callan's 10-year projections are cyclically lower than our longer-term (i.e., greater than 10 years) expectations
- The target and mixes 4 and 4a have a 43-46% probability of achieving a 6.5% return over the next 10 years

Recommendation

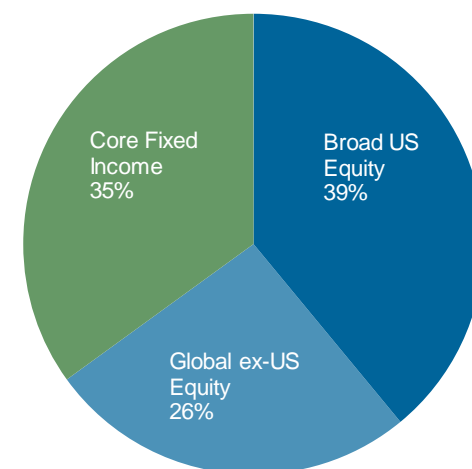
RHIC Fund Target



Mix 4



Mix 4a



| Asset Class | Policy Target | Same Risk | | | More Risk | | |
|-----------------------|---------------|------------|-----------|------------|------------|------------|--------------|
| | | Mix 4 | % Change | \$M Change | Mix 4a | % Change | \$M Change |
| Public Equity | 60% | 60% | 0% | \$0 | 65% | 5% | \$7 |
| Broad U.S. Equity | 39% | 36% | -3% | (\$4) | 39% | 0% | \$0 |
| Global ex-U.S. Equity | 21% | 24% | 3% | \$4 | 26% | 5% | \$7 |
| Fixed Income | 40% | 40% | 0% | \$0 | 35% | -5% | (\$7) |
| Core Fixed Income | 40% | 40% | 0% | \$0 | 35% | -5% | (\$7) |

| | |
|-------------------------|-------|
| Expected Return | 5.9% |
| Expected Std. Deviation | 10.8% |
| Prob. ≥ 6.5% | 43% |

| |
|-------|
| 5.9% |
| 10.8% |
| 43% |

| |
|-------|
| 6.1% |
| 11.7% |
| 46% |

Note: Dollar changes based on June 30, 2020 asset value

Next Steps and Timeline

Next Steps

Incorporate feedback from today's meeting

Deliver the final study to NDPERS in September

Timeline

Asset-Liability Kickoff **COMPLETED**

Meeting Date: May 26

Preliminary Asset-Liability Results **COMPLETED**

Meeting Date: July 22

Final Asset-Liability Results **IN PROGRESS**

Meeting Dates: August 27 and September 8

Disclaimers

This report is for informational purposes only and should not be construed as legal or tax advice on any matter. Any decision you make on the basis of this content is your sole responsibility. You should consult with legal and tax advisers before applying any of this information to your particular situation.

This report may consist of statements of opinion, which are made as of the date they are expressed and are not statements of fact.

Reference to or inclusion in this report of any product, service or entity should not be construed as a recommendation, approval, affiliation or endorsement of such product, service or entity by Callan.

Past performance is no guarantee of future results.

The statements made herein may include forward-looking statements regarding future results. The forward-looking statements herein: (i) are best estimations consistent with the information available as of the date hereof and (ii) involve known and unknown risks and uncertainties such that actual results may differ materially from these statements. There is no obligation to update or alter any forward-looking statement, whether as a result of new information, future events or otherwise. Undue reliance should not be placed on forward-looking statements.



**North Dakota
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Fax: (701) 328-3920 Email ndpers-info@nd.gov Website <https://ndpers.nd.gov>

Memorandum

TO: NDPERS Board

FROM: Bryan

DATE: September 8, 2020

SUBJECT: Asset Liability Study

Callan has completed the Asset Liability Study for the NDPERS Main plan and Retiree Health Insurance Credit (RHIC) plan and has several recommendations. The studies are attached.

The Main plan asset allocations:

Recommendation

The combination of a statutory contribution rate below that of the actuarially required contribution and an expected low-return environment over the next 10 years results in a deterioration of the funded status over time

Many factors support an asset allocation with a risk posture similar to the current target

- Pursuit of a 7% return; long time horizon; actuarial methodology (static contribution rate and asset smoothing)

While moving to a more aggressive asset allocation is expected to generate greater returns and a higher funded status, it also increases the risk of "bad investment outcomes" which in turn could result in further deterioration of the Plan's funded status and the need for higher contribution rates

The statutory contribution policy combined with the relatively large illiquid allocation leads us to recommend maintaining the current risk posture (mix 4a) or moving to a slightly less aggressive asset allocation (mix 4)

- Reduces reliance on public equity markets
- Slight increase to alternatives which can provide a source of uncorrelated returns and potential for alpha generation and fixed income which provides downside protection in the event of a large equity drawdown
 - A high allocation to illiquid investments is suitable for a long-term investor with an actuarially sound funding policy
 - Potential sources of liquidity in a crisis include a long Treasury mandate (1.5% of the total fund), cash accounts (almost 1% of the total fund), the Treasury allocations within some of the other fixed income managers, and the cash flows coming from some of the real estate and infrastructure funds

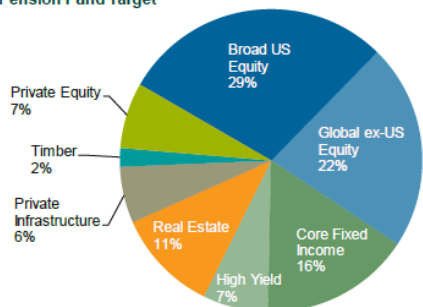
Recommendation

Finally, while the target and mixes 4 and 4a have expected returns over the next 10 years that fall short of the 7% return assumption, there are mitigating factors that offset the projected returns

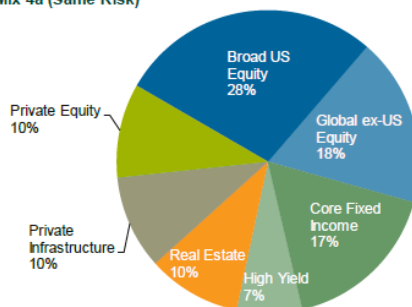
- Callan's public market return projections are based on passive (i.e., index fund) implementation and do not incorporate active management premiums
- Callan's 10-year projections are cyclically lower than our longer-term (i.e., greater than 10 years) expectations
- The target and mixes 4 and 4a have ~50% probability of achieving a 7% return over the next 10 years

Recommendation

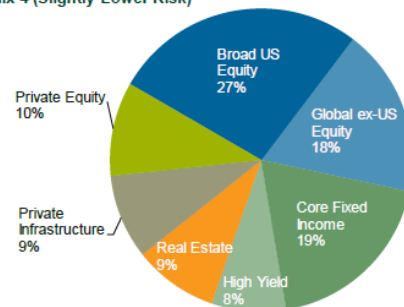
Pension Fund Target



Mix 4a (Same Risk)



Mix 4 (Slightly Lower Risk)



| Asset Class | Policy Target | Same Risk Mix 4a | % Change | \$M Change | Lower Risk Mix 4 | % Change | \$M Change |
|------------------------------------|---------------|------------------|------------|----------------|------------------|------------|----------------|
| Public Equity | 51% | 46% | -5% | (\$161) | 45% | -6% | (\$193) |
| Broad U.S. Equity | 29% | 28% | -1% | (\$19) | 27% | -2% | (\$51) |
| Global ex-U.S. Equity | 22% | 18% | -4% | (\$141) | 18% | -4% | (\$141) |
| Fixed Income | 23% | 24% | 1% | \$32 | 27% | 4% | \$128 |
| Core Fixed Income | 16% | 17% | 1% | \$32 | 19% | 3% | \$96 |
| High Yield | 7% | 7% | 0% | \$0 | 8% | 1% | \$32 |
| Alternatives | 26% | 30% | 4% | \$128 | 28% | 2% | \$64 |
| Real Estate | 11% | 10% | -1% | (\$32) | 9% | -2% | (\$64) |
| Private Infrastructure | 6% | 10% | 4% | \$128 | 9% | 3% | \$96 |
| Timber | 2% | 0% | -2% | (\$64) | 0% | -2% | (\$64) |
| Private Equity | 7% | 10% | 3% | \$96 | 10% | 3% | \$96 |
| Expected Return | 6.8% | 6.8% | | | 6.7% | | |
| Expected Standard Deviation | 13.4% | 13.4% | | | 13.1% | | |

Note: Dollar changes based on June 30, 2020 asset value

Callan

Knowledge. Experience. Integrity.

2020 Asset-Liability Study

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The Retiree Health Insurance Credit plan asset allocations:

Recommendation

The combination of the current funding and investment policies may lead to a modest improvement in the funded status over the next 10 years despite the expectation of a low-return environment

- Looking beyond 10 years shows a decline in the funded status as assets fall faster than the liabilities
- 30 years out assets are projected to be approximately \$20 million versus a liability of roughly \$150 million under the current funding policy (deterministic projection)
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Many factors support an asset allocation with a risk posture similar to (mix 4) or slightly more aggressive (mix 4a) than the current target

- Pursuit of a 6.5% return
- Long time horizon
- Static contribution rate

Further diversification via core real estate might be worth studying but we are not recommending it be included in the asset allocation at this particular time

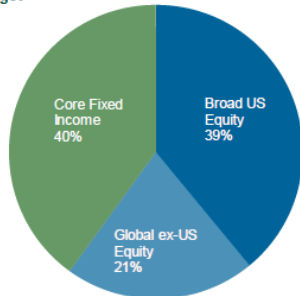
- An allocation to real estate would reduce the reliance on both public equity and low yielding fixed income while modestly raising the expected return for the same level of risk
- Real estate may also offer some protection in a rising inflation environment

Finally, while the target and mixes 4 and 4a have expected returns over the next 10 years that fall short of the 6.5% return assumption, there are mitigating factors that offset the projected returns

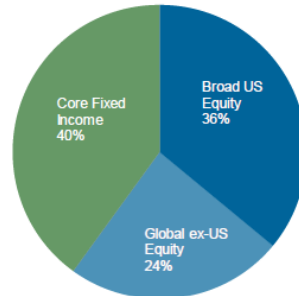
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- Callan's 10-year projections are cyclically lower than our longer-term (i.e., greater than 10 years) expectations
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Recommendation

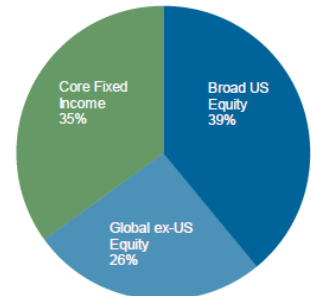
RHIC Fund Target



Mix 4



Mix 4a



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|-------------------------|---------------|-----------|----------|------------|-----------|----------|------------|
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| Fixed Income | 40% | 40% | 0% | \$0 | 35% | -5% | (\$7) |
| Core Fixed Income | 40% | 40% | 0% | \$0 | 35% | -5% | (\$7) |
| Expected Return | 5.9% | 5.9% | | | 6.1% | | |
| Expected Std. Deviation | 10.8% | 10.8% | | | 11.7% | | |
| Prob. ≥ 6.5% | 43% | 43% | | | 46% | | |

Note: Dollar changes based on June 30, 2020 asset value

BOARD ACTION:

Main Plan:

Maintain current asset allocations or move to asset allocation 4 or 4a as suggested by Callan.

RHIC Plan:

Maintain current asset allocations or move to asset allocation 4 or 4a as suggested by Callan.



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Fax: (701) 328-3920 Email ndpers-info@nd.gov Website <https://ndpers.nd.gov>

Memorandum

TO: NDPERS Board

FROM: Bryan

DATE: September 8, 2020

SUBJECT: Investment Consultant RFP Update

The Investment Consultant RFP has proposals due August 31st. We received 10 proposals. NDPERS staff will work on the review of the submissions and bring the results to the NDPERS Board in October.

1.4 Proposal Schedule

| | |
|--------------------------------|----------------------------------|
| RFP Issued: | July 1, 2020 |
| Vendor Questions Due: | 5:00 p.m., CDT, July 23, 2020 |
| Responses to Questions Issued: | August 6, 2020 |
| Proposals Due: | 5:00 p.m., CDT, August 31, 2020 |
| PERS Board Review: | October 27, 2020 |
| Vendor Interviews: | November 10, 2020 (if necessary) |
| Vendor Selection: | No later than November 2020 |

If you have any questions, we will be available at the NDPERS Board meeting.



Memorandum

TO: NDPERS Board

FROM: Bryan Reinhardt

DATE: September 8, 2020

SUBJECT: 457 Companion Plan & 401(a) Plan 2nd Quarter 2020 Report

Here is the 2nd quarter 2020 investment report for the 401(a) & 457 Companion Plans. The reports are available separately on the NDPERS website. The NDPERS Investment Sub-committee reviewed the 2nd quarter reports. The two plans have 8,232 participants with about \$155 million in assets. Assets in the 401(a) plan increased to \$15.5 million on June 30, 2020 from \$13.1 million as of March 31, 2020 (\$15.5 as of December 31, 2019). The number of active participants is at 96. The TIAA-CREF Target Date funds have 61% of the plan assets.

Assets in the 457 Companion Plan increased to \$139.3 million on June 30, 2020 from \$118.4 as of March 31, 2020 (\$138.9 million as of December 31, 2019). The number of active participants is increasing and is now at 5,782. The TIAA-CREF Target Date funds have 71% of the plan assets.

Benchmarks:

Fund returns for the quarter were all positive. Core fund performance was mixed when compared to their benchmarks and peer funds. Seventeen of the 36 core funds beat both their benchmarks and peer funds in the second quarter. Note that index funds are expected to slightly underperform their benchmarks because of fund administration fees.

Fund / Investment News:

The NDPERS Investment Subcommittee received the 2nd quarter 2020 plan review, field activity report, and investment overview with TIAA. The Subcommittee reviewed the two funds under formal fund review (Templeton Global Bond – TGBAX and Prudential Mid Cap Growth – PEGZX). The Subcommittee marked Templeton Global Bond – TGBAX as underperforming for the quarter. Callan gave an overview of the asset liability study results for the main plan and RHIC plan. Dave Hunter gave a 2nd Quarter 2020 performance update on the defined benefit plans. Fiscal year performance for the main plan was 3.41% (lower than the assumed rate of return). The RHIC return was 4.98%, Job Service was 2.82% and the insurance fund was 2.35%. Proposals for the investment consultant RFP are due August 31 and there has been some interest.

NDPERS
Quarterly Investment
Report
2nd Quarter
4/1/2020 – 6/30/2020



North Dakota Public Employees Retirement System
400 E Bdwy, Suite 505
Box 1657
Bismarck, ND 58502

| INITIAL OFFERING: | | | | |
|----------------------|--|--|---|--------|
| | Hartford Dividend & Growth T.Rowe Price Equity Income | Vanguard 500 Index Vanguard Dividend Growth | Franklin Growth Adv Wells Fargo Adv Growth Adm | LARGE |
| | | | | |
| | | | | |
| | Virtus Mid Cap Value Equity I | Columbia Mid Cap Index A | Prudential Jennison Mid Cap Growth Z | MEDIUM |
| | | | | |
| | | | | |
| | Northern Small Cap Value | DFA US Small Cap | Brown Capital Mgmt Small Co Inv | SMALL |
| | | | | |
| | | | | |
| | VALUE | BLEND | GROWTH | |
| BALANCED FUND: | T.Rowe Price Capital Appreciation | | | |
| INCOME FUNDS: | Wells Fargo Stable Value Fund J | Vanguard Prime Money Market | | |
| BOND FUNDS: | Baird Core Plus Bond Fund | Vanguard Total Bond Index Fund | Templeton Global Bond | |
| | Mass Mutual Inflation Protected Bond Fund | Prudential High Yield Z | | |
| REAL ESTATE: | Cohen & Steers Realty Shares | | | |
| INTERNATIONAL FUNDS: | American Funds New Perspective | Vanguard Total Intl Stock Index | Oppenheimer Developing Markets Y | |
| LIFESTYLE FUNDS: | TIAA-CREF Lifecycle Ret Income | TIAA-CREF Lifecycle 2025 | TIAA-CREF Lifecycle 2045 | |
| | TIAA-CREF Lifecycle 2010 | TIAA-CREF Lifecycle 2030 | TIAA-CREF Lifecycle 2050 | |
| | TIAA-CREF Lifecycle 2015 | TIAA-CREF Lifecycle 2035 | TIAA-CREF Lifecycle 2055 | |
| | TIAA-CREF Lifecycle 2020 | TIAA-CREF Lifecycle 2040 | TIAA-CREF Lifecycle 2060 | |
| FUND STYLE CHANGES: | | | | |
| | | | | LARGE |
| | | | | |
| | | | Brown Capital Mgmt Small Co Inv | MEDIUM |
| | | Northern Small Cap Value | | SMALL |
| | VALUE | BLEND | GROWTH | |
| OTHER FUNDS: | | | | |
| CURRENT LINEUP: | | | | |
| | Hartford Dividend & Growth T.Rowe Price Equity Income | Vanguard 500 Index Vanguard Dividend Growth | Franklin Growth Adv Wells Fargo Adv Growth Adm | LARGE |
| | | | | |
| | | | | |
| | Virtus Mid Cap Value Equity | Columbia Mid Cap Index A | Prudential Jennison Mid Cap Growth Z | MEDIUM |
| | | | | |
| | | | Brown Capital Mgmt Small Co Inv | |
| | | DFA US Small Cap Northern Small Cap Value | | SMALL |
| | | | | |
| | | | | |
| | VALUE | BLEND | GROWTH | |
| BALANCED FUND: | T.Rowe Price Capital Appreciation | | | |
| INCOME FUNDS: | Wells Fargo Stable Value Fund J | Vanguard Treasury Money Market | | |
| BOND FUNDS: | Baird Core Plus Bond Fund | Vanguard Total Bond Index Fund | Templeton Global Bond | |
| | Mass Mutual Inflation Protected Bond Fund | Prudential High Yield Z | | |
| REAL ESTATE: | Cohen & Steers Realty Shares | | | |
| INTERNATIONAL FUNDS: | American Funds New Perspective | Vanguard Total Intl Stock Index | Oppenheimer Developing Markets Y | |
| LIFESTYLE FUNDS: | TIAA-CREF Lifecycle Ret Income | TIAA-CREF Lifecycle 2025 | TIAA-CREF Lifecycle 2045 | |
| | TIAA-CREF Lifecycle 2010 | TIAA-CREF Lifecycle 2030 | TIAA-CREF Lifecycle 2050 | |
| | TIAA-CREF Lifecycle 2015 | TIAA-CREF Lifecycle 2035 | TIAA-CREF Lifecycle 2055 | |
| | TIAA-CREF Lifecycle 2020 | TIAA-CREF Lifecycle 2040 | TIAA-CREF Lifecycle 2060 | |

NDPERS Investment Benchmarks - 2nd Quarter 2020

| | Quarter | Y-T-D | 1-Year | 3-Year | 5-Year |
|--|---------|---------|---------|--------|--------|
| <u>Stable Value / Money Market Fund</u> | | | | | |
| Vanguard Treasury Money Market - VUSXX | 0.08% | 0.44% | 1.40% | 1.62% | 1.08% |
| Wells Fargo Stable Return Fund J - WFSJ# | 0.39% | 0.78% | 1.66% | 1.48% | 1.27% |
| 3 Month T-Bill Index | 0.14% | 0.52% | 1.56% | 1.72% | 1.15% |
| <u>Fixed Income Fund</u> | | | | | |
| Mass Mutual Income Bond Fund - MIPYX | 6.21% | 4.99% | 7.19% | 4.52% | 3.51% |
| Baird Core Plus Bond Fund - BCOSX | 5.70% | 5.68% | 8.53% | 5.31% | 4.60% |
| Vanguard Total Bond Market Index Fund - VBTXX | 2.98% | 6.35% | 8.96% | 5.34% | 4.31% |
| US Aggregate Bond Index | 3.03% | 6.30% | 8.92% | 5.40% | 4.37% |
| Taxable Corporate Bond Fund Universe | 9.27% | 4.08% | 7.98% | 5.39% | 5.05% |
| Prudential High Yield Z - PHYZX | 10.64% | -5.04% | -0.59% | 3.64% | 5.11% |
| BofA High Yield Bond Fund Index | 9.61% | -4.78% | -1.10% | 2.94% | 4.58% |
| High Yield Bond Fund Universe | 8.62% | -5.17% | -1.89% | 2.04% | 3.38% |
| Templeton Global Bond Adv - TGBAX <ON WATCH> | 0.09% | -4.34% | -6.08% | -0.92% | 0.56% |
| World Govt Bond Index | 2.04% | 4.08% | 4.60% | 3.98% | 3.70% |
| World Bond Fund Universe | 6.02% | 0.57% | 1.60% | 2.25% | 2.56% |
| <u>Real Estate Fund</u> | | | | | |
| Cohen & Steers Realty Shares - CSRSX | 12.75% | -12.99% | -4.61% | 4.48% | 6.75% |
| FTSE NAREIT Equity REITs Index | 13.25% | -13.30% | -6.47% | 3.51% | 6.56% |
| Real Estate Fund Universe | 13.66% | -16.19% | -9.81% | 0.60% | 3.98% |
| <u>Balanced Fund</u> | | | | | |
| T.Rowe Price Capital Appreciation - PACLX | 13.70% | 0.00% | 5.97% | 9.57% | 9.44% |
| 60% Large Cap Value Univ & 40% Taxable Bond Universe | 13.12% | -7.49% | -1.36% | 3.49% | 4.70% |
| 60% Russell 1000 Value & 40% Agg Bond Index | 9.79% | -7.24% | -1.74% | 3.25% | 4.53% |
| <u>Large Cap Equities - Value</u> | | | | | |
| Hartford Dividend & Growth - HDGTX | 14.91% | -10.87% | -0.90% | 6.12% | 7.68% |
| T.Rowe Price Equity Income - PRFDX | 13.38% | -18.78% | -11.18% | 0.87% | 4.15% |
| Russell 1000 Value Index | 14.29% | -16.26% | -8.84% | 1.82% | 4.64% |
| Large Cap Value Fund Universe | 15.68% | -15.20% | -7.59% | 2.22% | 4.47% |
| <u>Large Cap Equities - Blend</u> | | | | | |
| Vanguard Institutional Index - VINIX | 20.55% | -3.08% | 7.49% | 10.70% | 10.70% |
| Vanguard Dividend Growth Fund - VDIGX | 13.14% | -6.42% | 1.27% | 10.04% | 10.24% |
| S&P 500 Index | 20.54% | -3.08% | 7.51% | 10.73% | 10.73% |
| Large Cap Blend Fund Universe | 19.61% | -5.48% | 3.74% | 8.15% | 8.35% |
| <u>Large Cap Equities - Growth</u> | | | | | |
| Wells Fargo Adv Growth Adm - SGRKX | 34.66% | 12.80% | 20.56% | 21.07% | 15.19% |
| Russell 3000 Growth Index | 27.99% | 8.98% | 21.94% | 18.21% | 15.23% |
| Franklin Growth Adv - FCGAX | 23.94% | 3.98% | 12.96% | 14.25% | 12.78% |
| Russell 1000 Growth Index | 27.84% | 9.81% | 23.28% | 19.00% | 15.89% |
| Large Cap Growth Fund Universe | 27.43% | 7.84% | 17.34% | 15.95% | 12.84% |
| <u>Mid Cap Equities - Value</u> | | | | | |
| Virtus Mid Cap Value Equity I - SMVTX | 20.18% | -20.84% | -11.71% | 0.55% | 4.35% |
| Russell Mid Cap Value | 19.95% | -18.09% | -11.81% | -0.54% | 3.32% |
| Mid Cap Value Fund Universe | 19.39% | -19.78% | -13.56% | -1.59% | 2.10% |
| <u>Mid Cap Equities - Blend</u> | | | | | |
| Columbia Mid Cap Index A - NTIAX | 24.02% | -13.00% | -7.18% | 1.90% | 4.72% |
| S&P Mid Cap 400 | 24.07% | -12.78% | -6.70% | 2.39% | 5.22% |
| Mid Cap Blend Fund Universe | 22.13% | -12.55% | -6.19% | 2.41% | 3.86% |
| <u>Mid Cap Equities - Growth</u> | | | | | |
| Prudential Jennison Mid Cap Growth - PEGZX <ON WATCH> | 29.89% | 3.90% | 11.52% | 12.92% | 9.25% |
| Russell Mid Cap Growth | 30.26% | 4.16% | 11.91% | 14.76% | 11.60% |
| Mid Cap Growth Fund Universe | 30.27% | 3.60% | 9.65% | 12.58% | 9.92% |

Fund Returns in RED do not meet both benchmarks.

Fund Returns in BLACK meet both benchmarks.

NDPERS Investment Benchmarks - 2nd Quarter 2020

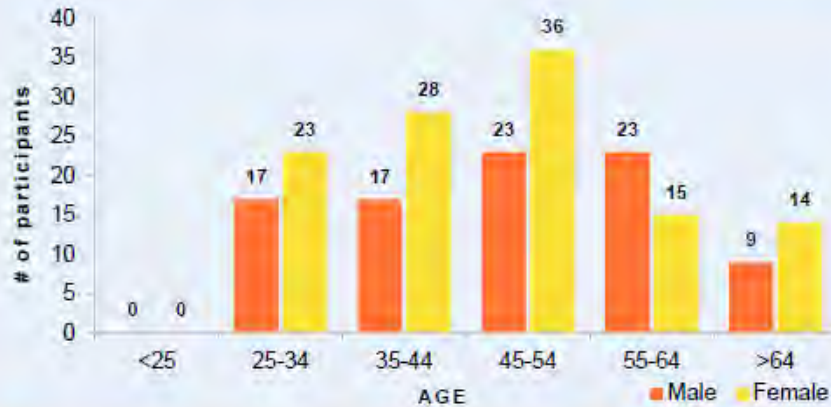
| | Quarter | Y-T-D | 1-Year | 3-Year | 5-Year |
|--|---------------|----------------|----------------|---------------|---------------|
| Small Cap Equities - Value | | | | | |
| Northern Small Cap Value Fund - NOSGX | 14.74% | -24.77% | -19.57% | -5.45% | 0.27% |
| Russell 2000 Value Index | 18.91% | -23.50% | -17.48% | -4.35% | 1.26% |
| Small Value Fund Universe | 22.29% | -22.95% | -17.33% | -5.15% | -0.33% |
| Small Cap Equities - Blend | | | | | |
| DFA US Small Cap - DFSTX | 23.54% | -16.89% | -11.71% | -1.29% | 2.33% |
| Russell 2000 Index | 25.42% | -12.98% | -6.63% | 2.01% | 4.29% |
| Small Blend Fund Universe | 22.95% | -16.88% | -11.41% | -0.64% | 2.49% |
| Small Cap Equities - Growth | | | | | |
| Brown Capital Mgmt Small Co Inv - BCSIX | 36.46% | 15.37% | 16.35% | 17.46% | 16.04% |
| Russell 2000 Growth Index | 30.58% | -3.06% | 3.48% | 7.86% | 6.86% |
| Small Growth Fund Universe | 32.19% | -0.10% | 4.46% | 10.08% | 8.28% |
| International Equity Funds | | | | | |
| American Funds New Perspective Fund - RNPEX | 23.74% | 1.14% | 10.72% | 10.90% | 10.14% |
| Vanguard Total Intl Stock Index Inv - VTIAH | 18.11% | -10.59% | -4.09% | 1.09% | 2.42% |
| MSCI ACWI Index | 16.12% | -11.00% | -4.80% | 1.13% | 2.26% |
| International Stock Fund Universe | 16.24% | -10.93% | -4.66% | 0.30% | 1.79% |
| Oppenheimer Developing Markets Y - ODVYX | 18.22% | -8.77% | -1.87% | 4.35% | 4.59% |
| MSCI Emerging Markets Index | 18.08% | -9.78% | -3.39% | 1.90% | 2.86% |
| Diversified Emerging Mkts Universe | 20.68% | -9.77% | -3.66% | 1.15% | 2.46% |
| Asset Allocation Funds: | | | | | |
| TIAA-CREF Lifecycle Ret Income - TLIRX | 10.66% | -0.05% | 4.53% | 5.16% | 5.02% |
| Income Benchmark | 6.27% | 1.43% | 4.99% | 4.61% | 4.18% |
| TIAA-CREF Lifecycle 2010 - TCLEX | 10.65% | -0.07% | 4.51% | 5.28% | 5.16% |
| 2010 Benchmark | 9.60% | -0.24% | 4.45% | 5.18% | 4.97% |
| TIAA-CREF Lifecycle 2015 - TCLIX | 11.65% | -0.48% | 4.45% | 5.44% | 5.36% |
| 2015 Benchmark | 11.34% | -1.12% | 4.17% | 5.49% | 5.38% |
| TIAA-CREF Lifecycle 2020 - TCLTX | 12.51% | -0.99% | 4.35% | 5.65% | 5.61% |
| 2020 Benchmark | 12.82% | -1.87% | 3.92% | 5.75% | 5.73% |
| TIAA-CREF Lifecycle 2025 - TCLFX | 14.12% | -1.68% | 4.11% | 5.85% | 5.88% |
| 2025 Benchmark | 14.08% | -2.50% | 3.72% | 5.98% | 6.03% |
| TIAA-CREF Lifecycle 2030 - TCLNX | 15.61% | -2.49% | 3.86% | 6.01% | 6.11% |
| 2030 Benchmark | 16.17% | -3.58% | 3.36% | 6.33% | 6.52% |
| TIAA-CREF Lifecycle 2035 - TCLRX | 17.18% | -3.35% | 3.56% | 6.16% | 6.32% |
| 2035 Benchmark | 18.65% | -5.20% | 2.55% | 6.61% | 6.98% |
| TIAA-CREF Lifecycle 2040 - TCLOX | 18.70% | -4.13% | 3.22% | 6.26% | 6.47% |
| 2040 Benchmark | 19.56% | -5.73% | 2.33% | 6.74% | 7.17% |
| TIAA-CREF Lifecycle 2045 - TTFRX | 20.06% | -4.83% | 2.98% | 6.21% | 6.56% |
| 2045 Benchmark | 19.58% | -5.73% | 2.33% | 6.75% | 7.18% |
| TIAA-CREF Lifecycle 2050 - TLFrx | 20.29% | -4.96% | 2.84% | 6.24% | 6.61% |
| 2050 Benchmark | 19.58% | -5.73% | 2.33% | 6.75% | 7.18% |
| TIAA-CREF Lifecycle 2055 - TTRLX | 20.43% | -5.12% | 2.78% | 6.23% | 6.65% |
| 2055 Benchmark | 19.59% | -5.73% | 2.34% | 6.75% | 7.18% |
| TIAA-CREF Lifecycle 2060 - TLXRX | 20.64% | -5.14% | 2.84% | 6.25% | 6.71% |
| 2060 Benchmark | 19.59% | -5.72% | 2.35% | 6.76% | 7.19% |
| Income Benchmark is comprised of 11.1% Wilshire 5000, 9.1% MSCI ACWI, 52.4% Ag Bond, 5.0% REIT Index, 22.4% 3 Month T-Bill | | | | | |
| 2010 Benchmark is comprised of 23.1% Wilshire 5000, 14.9% MSCI ACWI, 42.0% Ag Bond, 5.0% REIT Index, 15.0% 3 Month T-Bill | | | | | |
| 2015 Benchmark is comprised of 29.6% Wilshire 5000, 17.7% MSCI ACWI, 36.2% Ag Bond, 5.0% REIT Index, 11.5% 3 Month T-Bill | | | | | |
| 2020 Benchmark is comprised of 35.1% Wilshire 5000, 20.1% MSCI ACWI, 31.2% Ag Bond, 5.0% REIT Index, 8.6% 3 Month T-Bill | | | | | |
| 2025 Benchmark is comprised of 39.8% Wilshire 5000, 22.1% MSCI ACWI, 27.0% Ag Bond, 5.0% REIT Index, 6.1% 3 Month T-Bill | | | | | |
| 2030 Benchmark is comprised of 47.6% Wilshire 5000, 25.5% MSCI ACWI, 19.7% Ag Bond, 5.0% REIT Index, 2.2% 3 Month T-Bill | | | | | |
| 2035 Benchmark is comprised of 57.4% Wilshire 5000, 29.7% MSCI ACWI, 5.8% Ag Bond, 5.0% REIT Index, 2.1% 3 Month T-Bill | | | | | |
| 2040 Benchmark is comprised of 60.8% Wilshire 5000, 31.3% MSCI ACWI, 1.8% Ag Bond, 5.0% REIT Index, 1.3% 3 Month T-Bill | | | | | |
| 2045 Benchmark is comprised of 60.9% Wilshire 5000, 31.3% MSCI ACWI, 1.8% Ag Bond, 5.0% REIT Index, 1.1% 3 Month T-Bill | | | | | |
| 2050 Benchmark is comprised of 60.9% Wilshire 5000, 31.3% MSCI ACWI, 1.8% Ag Bond, 5.0% REIT Index, 1.1% 3 Month T-Bill | | | | | |
| 2055 Benchmark is comprised of 61.0% Wilshire 5000, 31.2% MSCI ACWI, 1.7% Ag Bond, 5.0% REIT Index, 1.1% 3 Month T-Bill | | | | | |
| 2060 Benchmark is comprised of 61.0% Wilshire 5000, 31.2% MSCI ACWI, 1.8% Ag Bond, 5.0% REIT Index, 1.1% 3 Month T-Bill | | | | | |
| Wilshire 5000 Index | 22.69% | -2.86% | 6.54% | 10.02% | 9.94% |
| FTSE NAREIT Equity REITs Index | 13.25% | -13.30% | -6.47% | 3.51% | 6.56% |
| MSCI ACWI Index | 16.12% | -11.00% | -4.80% | 1.13% | 2.26% |
| US Aggregate Bond Index | 3.03% | 6.30% | 8.92% | 5.40% | 4.37% |
| 3 Month T-Bill Index | 0.14% | 0.52% | 1.56% | 1.72% | 1.15% |

Fund Returns in RED do not meet both benchmarks.

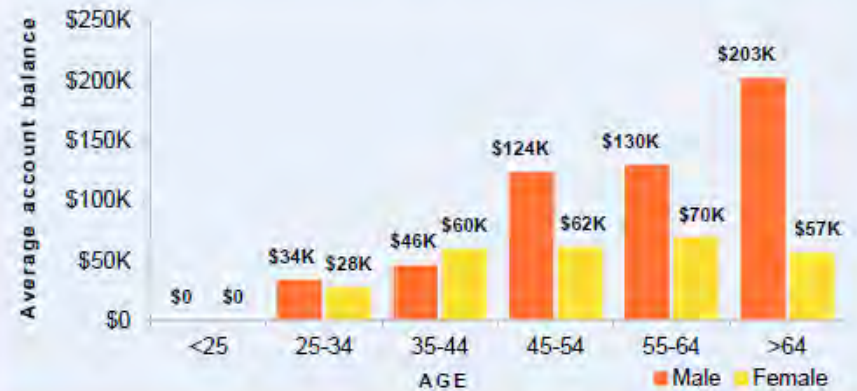
Fund Returns in BLACK meet both benchmarks.

Employee summary: Gender and age¹

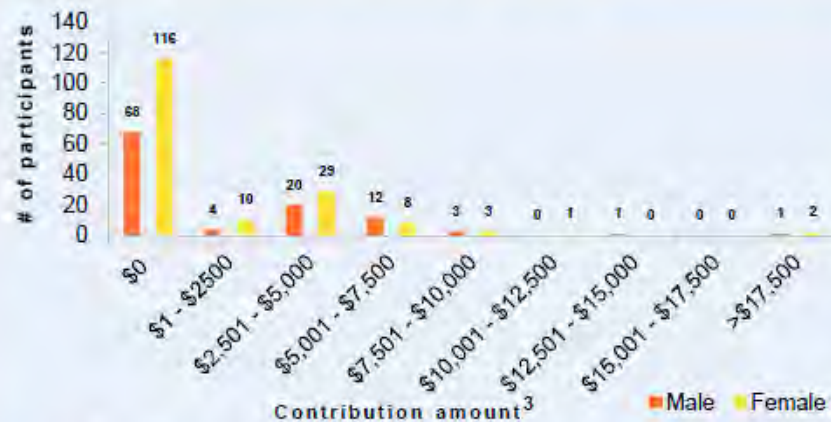
Demographics by Age and Gender



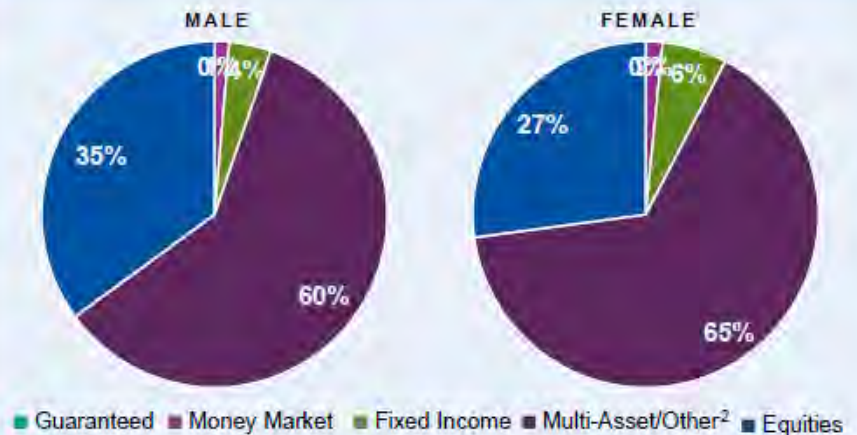
Average Account Balance by Age and Gender



Employee Contribution Amounts by Gender



Diversification by Gender

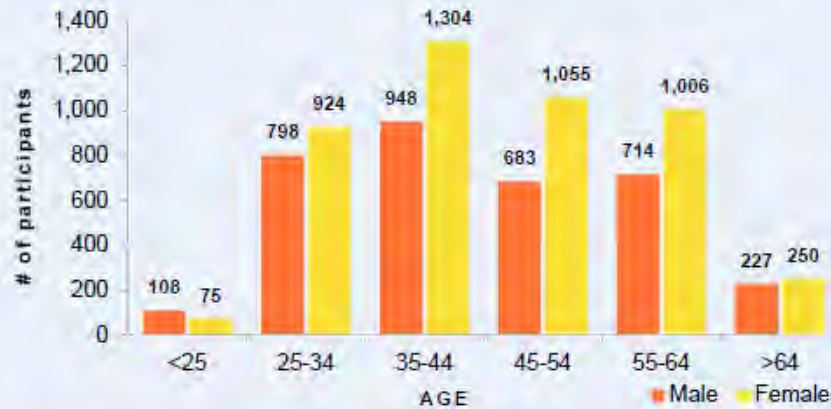


This report is as of the period ending 06/30/2020 and reflects the trailing 12 months of activity unless otherwise noted. The report includes all TIAA plans except 457(f), 457(b) Private, Nonqualified Deferred Compensation, and Retirement Healthcare plans. 1. Data reflected is for all participant statuses except Employee Contribution Amounts by Gender which includes only active or leave status. Does not include 2 participants with no age or gender on file. 2. Multi-Asset/Other includes Lifecycle, Real Estate, and Brokerage. 3. Contribution data reflects the trailing 12 months of data.

NORTH DAKOTA PUBLIC EMPLOYEES RETIREMENT SYSTEM COMPANION PLAN

Employee summary: Gender and age¹

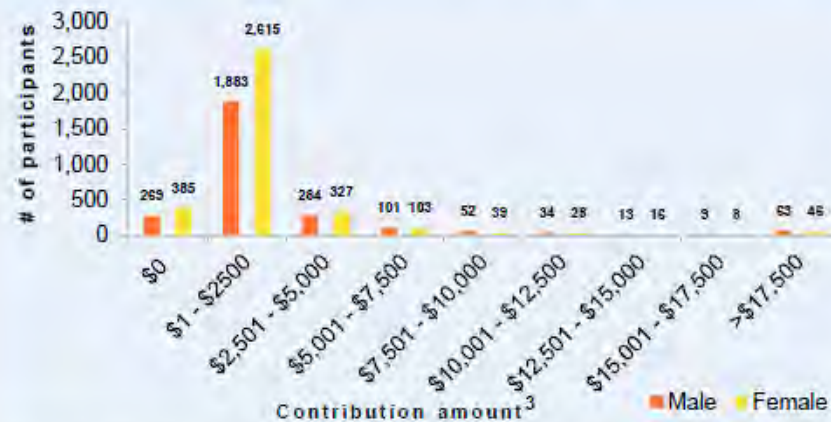
Demographics by Age and Gender



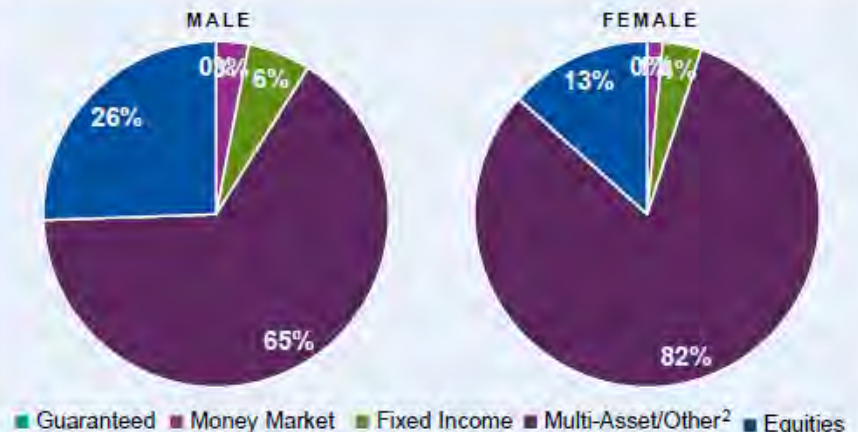
Average Account Balance by Age and Gender



Employee Contribution Amounts by Gender



Diversification by Gender



This report is as of the period ending 06/30/2020 and reflects the trailing 12 months of activity unless otherwise noted. The report includes all TIAA plans except 457(f), 457(b) Private, Nonqualified Deferred Compensation, and Retirement Healthcare plans. 1. Data reflected is for all participant statuses except Employee Contribution Amounts by Gender which includes only active or leave status. Does not include 290 participants with no age or gender on file. 2. Multi-Asset/Other includes Lifecycle, Real Estate, and Brokerage. 3. Contribution data reflects the trailing 12 months of data.

Plan Summary



As of 06/30/2020

| 457(b) | Assets | Pct |
|--|----------------------|---------------|
| TIAA-CREF Lifecycle 2025 Fund Retirement | \$20,599,962 | 14.8% |
| TIAA-CREF Lifecycle 2020 Fund Retirement | \$16,862,300 | 12.1% |
| TIAA-CREF Lifecycle 2030 Fund Retirement | \$14,838,654 | 10.7% |
| TIAA-CREF Lifecycle 2035 Fund Retirement | \$11,204,431 | 8.0% |
| TIAA-CREF Lifecycle 2045 Fund Retirement | \$9,029,329 | 6.5% |
| TIAA-CREF Lifecycle 2040 Fund Retirement | \$9,006,032 | 6.5% |
| TIAA-CREF Lifecycle 2015 Fund Retirement | \$7,631,980 | 5.5% |
| Vanguard Institutional Index Fund Institutional | \$6,462,073 | 4.6% |
| TIAA-CREF Lifecycle 2050 Fund Retirement | \$5,871,400 | 4.2% |
| Vanguard Total Bond Market Index Fund Admiral | \$3,507,236 | 2.5% |
| Vanguard Admiral Treasury Money Market Fund Investor | \$3,048,553 | 2.2% |
| Vanguard Total International Stock Index Fund Admiral | \$2,859,005 | 2.1% |
| Brown Capital Management Small Company Fund Investor | \$2,628,616 | 1.9% |
| Vanguard Dividend Growth Fund Investor | \$2,487,669 | 1.8% |
| Wells Fargo Stable Value Fund - J | \$2,262,844 | 1.6% |
| TIAA-CREF Lifecycle 2055 Fund Retirement | \$1,933,193 | 1.4% |
| Franklin Growth Fund Advisor | \$1,896,135 | 1.4% |
| Wells Fargo Growth Fund Administrator | \$1,427,754 | 1.0% |
| T. Rowe Price Capital Appreciation Fund Advisor | \$1,365,947 | 1.0% |
| TIAA-CREF Lifecycle 2010 Fund Retirement | \$1,231,058 | 0.9% |
| Columbia Mid Cap Index Fund A | \$1,211,472 | 0.9% |
| Invesco Oppenheimer Developing Markets Fund Y | \$1,039,873 | 0.7% |
| TIAA-CREF Lifecycle Retirement Income Fund Retirement | \$1,006,549 | 0.7% |
| Hartford Dividend and Growth Fund R5 | \$1,005,464 | 0.7% |
| Baird Core Plus Bond Fund Investor | \$934,640 | 0.7% |
| PGIM High Yield Fund Z | \$922,033 | 0.7% |
| T. Rowe Price Equity Income Fund | \$839,874 | 0.6% |
| Virtus Ceredex Mid-Cap Value Equity Fund I | \$836,458 | 0.6% |
| Self Directed Brokerage Account | \$816,361 | 0.6% |
| American Funds New Perspective Fund R4 | \$762,270 | 0.5% |
| Cohen & Steers Realty Shares | \$721,059 | 0.5% |
| Prudential Jennison Mid-Cap Growth Fund Z | \$663,935 | 0.5% |
| Northern Small Cap Value Fund | \$614,406 | 0.4% |
| MassMutual Premier Inflation-Protected and Income Fund Service Class | \$567,879 | 0.4% |
| Templeton Global Bond Fund Advisor | \$524,997 | 0.4% |
| DFA U.S. Small Cap Portfolio Institutional | \$354,340 | 0.3% |
| TIAA-CREF Lifecycle 2060 Fund Retirement | \$301,407 | 0.2% |
| Total | \$139,277,186 | 100.0% |

| 401(a) | Assets | Pct |
|--|----------------------|---------------|
| TIAA-CREF Lifecycle 2030 Fund Retirement | \$1,969,727 | 12.7% |
| TIAA-CREF Lifecycle 2025 Fund Retirement | \$1,809,796 | 11.7% |
| TIAA-CREF Lifecycle 2035 Fund Retirement | \$1,659,970 | 10.7% |
| TIAA-CREF Lifecycle 2020 Fund Retirement | \$1,035,579 | 6.7% |
| Vanguard Institutional Index Fund Institutional | \$890,579 | 5.8% |
| TIAA-CREF Lifecycle 2050 Fund Retirement | \$746,804 | 4.8% |
| Brown Capital Management Small Company Fund Investor | \$718,569 | 4.6% |
| TIAA-CREF Lifecycle 2045 Fund Retirement | \$676,028 | 4.4% |
| TIAA-CREF Lifecycle 2040 Fund Retirement | \$589,633 | 3.8% |
| Wells Fargo Growth Fund Administrator | \$465,933 | 3.0% |
| TIAA-CREF Lifecycle 2055 Fund Retirement | \$452,860 | 2.9% |
| Franklin Growth Fund Advisor | \$428,543 | 2.8% |
| T. Rowe Price Capital Appreciation Fund Advisor | \$391,398 | 2.5% |
| TIAA-CREF Lifecycle 2010 Fund Retirement | \$389,070 | 2.5% |
| Vanguard Total International Stock Index Fund Admiral | \$325,158 | 2.1% |
| PGIM High Yield Fund Z | \$285,606 | 1.8% |
| American Funds New Perspective Fund R4 | \$246,976 | 1.6% |
| Cohen & Steers Realty Shares | \$229,777 | 1.5% |
| Vanguard Dividend Growth Fund Investor | \$224,747 | 1.5% |
| Vanguard Admiral Treasury Money Market Fund Investor | \$224,680 | 1.5% |
| Hartford Dividend and Growth Fund R5 | \$211,793 | 1.4% |
| Invesco Oppenheimer Developing Markets Fund Y | \$184,978 | 1.2% |
| Baird Core Plus Bond Fund Investor | \$165,045 | 1.1% |
| Wells Fargo Stable Value Fund - J | \$155,565 | 1.0% |
| Columbia Mid Cap Index Fund A | \$149,465 | 1.0% |
| Vanguard Total Bond Market Index Fund Admiral | \$141,167 | 0.9% |
| T. Rowe Price Equity Income Fund | \$125,566 | 0.8% |
| Northern Small Cap Value Fund | \$98,777 | 0.6% |
| Self Directed Brokerage Account | \$94,299 | 0.6% |
| DFA U.S. Small Cap Portfolio Institutional | \$87,980 | 0.6% |
| Prudential Jennison Mid-Cap Growth Fund Z | \$84,514 | 0.5% |
| Templeton Global Bond Fund Advisor | \$80,996 | 0.5% |
| MassMutual Premier Inflation-Protected and Income Fund Service Class | \$68,767 | 0.4% |
| TIAA-CREF Lifecycle 2015 Fund Retirement | \$37,264 | 0.2% |
| Virtus Ceredex Mid-Cap Value Equity Fund I | \$31,258 | 0.2% |
| TIAA-CREF Lifecycle 2060 Fund Retirement | \$5,975 | 0.0% |
| TIAA-CREF Lifecycle Retirement Income Fund Retirement | \$0 | 0.0% |
| Total | \$15,484,841 | 100.0% |
| Grand Total | \$154,762,027 | |



**North Dakota
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Fax: (701) 328-3920 Email ndpers-info@nd.gov Website <https://ndpers.nd.gov>

Memorandum

TO: NDPERS Board

FROM: Rebecca

DATE: September 8, 2020

SUBJECT: 401(a)/457 Defined Contribution Plan Renewal

Effective July 1, 2017, TIAA was awarded the bid for the 401(a)/457 Defined Contribution Plan services. The Board approved renewing the contract with TIAA for July 1, 2019 through June 30, 2021, which is the 2nd 2-year period for renewal. TIAA has now provided the same cost for services (23 bps) for the final 2-year period, July 1, 2021 through June 30, 2023 (Attachment 1).

Attachment 2 is the Employee Engagement 2020 Quarter 2 summary which was recently provided to the Investment Sub-Committee. This summary provides the most recent quarterly snapshot of the member counseling services provided by TIAA, as well as feedback from these participants. Attachment 3 was also provided to the Investment Sub-Committee and is a quarterly overview of general participant enrollment, demographic and account detail.

Overall, staff is satisfied with the services being provided by TIAA and has received little feedback from participants indicating they are dissatisfied. Therefore, staff recommends that we amend the current contract to renew with TIAA for the July 1, 2021 through June 30, 2023 contract period.

If the Board opts not to renew with TIAA, staff will begin preparations of the 401(a)/457 Defined Contribution Plan Request for Proposal and will bring it to the Board for approval at a future meeting.

Board Action Requested

Approve staff's recommendation to amend the current contract to renew with TIAA for the 401(a)/457 Defined Contribution Plan services for the July 1, 2021 through June 30, 2023 contract period.

From: [Thorpe, Melissa](#)
To: [Fricke, Rebecca D.](#)
Cc: [Anderson, MaryJo V.](#); [Miller, Scott A.](#)
Subject: RE: July 1, 2021 - June 30, 2023
Date: Monday, August 31, 2020 4:31:12 PM
Attachments: [image001.png](#)
[image002.png](#)
[image004.png](#)

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Thanks for clarifying. In April, we did a plan economic review and the outcome was no price reduction without some efficiency gains. Our pricing team said we could renew with the current cost (23 bps) which means no price increase either. Many variables factored into cost, we can have Chris Godwin attend another discussion to explain if that would be helpful.

Sincerely,

Melissa Thorpe
Relationship Manager | TIAA Financial Solutions
TIAA
1670 Broadway | Suite 3300
Denver, CO 80202
Office: 303.607.2164
Melissa.Thorpe@tiaa.org
www.tiaa.org

TIAA-CREF Individual & Institutional Services, LLC, Member FINRA and SIPC



From: Fricke, Rebecca D. <rfricke@nd.gov>
Sent: Monday, August 31, 2020 3:17 PM
To: Thorpe, Melissa <Melissa.Thorpe@tiaa.org>
Cc: Anderson, MaryJo V. <msteffes@nd.gov>; Miller, Scott A. <scottmiller@nd.gov>
Subject: RE: July 1, 2021 - June 30, 2023

Hi Melissa. What we are looking for at this time is if the cost to perform services will remain the same for July 1, 2021-June 30, 2023 as the current period (July 1, 2019-June 30, 2021)? If so, that is what I will take to the Board and then if approved, we will work on a contract amendment with our legal.

Can you confirm if the cost to perform services to NDPERS will remain the same for this period?

Thanks.

Rebecca Fricke



North Dakota Public Employees Retirement System
400 East Broadway Avenue Suite 505 | PO Box 1657
Bismarck, ND 58502 | Online <https://ndpers.nd.gov>
P 701.328.3978 | TF 800.803.7377 | F 701.328.3920
email rfricke@nd.gov | Find us on [facebook](#)

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or damage that may arise from the use of this email or attachments.

From: Thorpe, Melissa <Melissa.Thorpe@tiaa.org>
Sent: Monday, August 31, 2020 4:04 PM
To: Fricke, Rebecca D. <rfricke@nd.gov>
Cc: Anderson, MaryJo V. <msteffes@nd.gov>; Miller, Scott A. <scottmiller@nd.gov>
Subject: RE: July 1, 2021 - June 30, 2023

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Hello! Please see attached – will this work?

Sincerely,

Melissa Thorpe
Relationship Manager | TIAA Financial Solutions
TIAA
1670 Broadway | Suite 3300
Denver, CO 80202
Office: 303.607.2164
Melissa.Thorpe@tiaa.org
www.tiaa.org

TIAA-CREF Individual & Institutional Services, LLC, Member FINRA and SIPC



From: Fricke, Rebecca D. <rfricke@nd.gov>
Sent: Tuesday, August 25, 2020 8:24 AM
To: Thorpe, Melissa <Melissa.Thorpe@tiaa.org>
Cc: Anderson, MaryJo V. <msteffes@nd.gov>; Miller, Scott A. <scottmiller@nd.gov>
Subject: July 1, 2021 - June 30, 2023
Importance: High

Hi Melissa. I apologize for springing this on you under short notice. We were reviewing the current contract and the following relates to the renewal for the final two year term:

additional two-year terms, beginning July 1, 2019 to June 30, 2021, and July 1, 2021, to June 30, 2023. Employer and TIAA may renegotiate the contract terms during the initial, and any subsequent two-year term, for any subsequent two year term. During the initial contract term, renegotiations may begin in August, 2018 and end no later than September 2018 and Employer will not initiate a formal bidding process during these renegotiations. If the Agreement is renewed, renegotiations for a subsequent two year term may begin in August, 2020 and end no later than September 2020. If Employer and TIAA are unable to reach an agreement during renegotiations, a formal bidding process may be initiated by Employer.

Based upon this, is it possible for TIAA to provide a renewal proposal for July 1, 2021-June 30, 2023 by September 1 so that we can take it to the NDPERS Board at their September 8 meeting?

Thank you.

Rebecca Fricke



North Dakota Public Employees Retirement System
400 East Broadway Avenue Suite 505 | PO Box 1657
Bismarck, ND 58502 | Online <https://ndpers.nd.gov>
P 701.328.3978 | TF 800.803.7377 | F 701.328.3920
email rfricke@nd.gov | Find us on [facebook](#)

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TIAA

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TIAA

NDPERS Employee Engagement – Q2 2020



NDPERS January 1, 2020 - June 30, 2020

| | Days Offered | Seats Offered | Seats Taken | Take Rate | Seats Attended | No Show Rate |
|--------------|--------------|---------------|-------------|------------|----------------|--------------|
| Q1 | 13 | 78 | 60 | 77% | 50 | 17% |
| *Q2 | 23 | 127 | 92 | 72% | 73 | 21% |
| TOTAL | 36 | 205 | 152 | 75% | 123 | 19% |

NDUS Sites January 1, 2020 - June 30, 2020

| | Days Offered | Seats Offered | Seats Taken | Take Rate | Seats Attended | No Show Rate |
|--------------|--------------|---------------|-------------|------------|----------------|--------------|
| Q1 | 44 | 257 | 196 | 76% | 166 | 15% |
| *Q2 | 32 | 152 | 121 | 80% | 110 | 9% |
| TOTAL | 76 | 409 | 317 | 78% | 276 | 24% |

*Q2 – 100% Virtual Meetings

112

FC days offered in North Dakota

614

Available appointments

399

Participant consultations

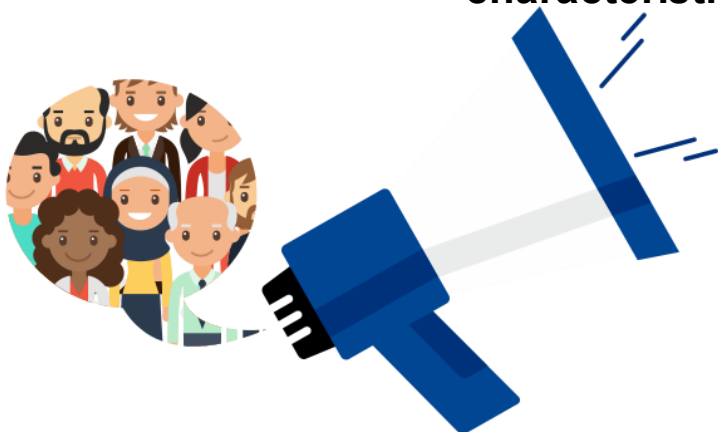
213

Virtual consultations YTD

65%

Overall take and show rate

“Please rate your TIAA consultant on some other specific characteristics”



“Teresa was a pleasure to work with and pointed out things to me that I was unaware of and that needed to be addressed. She was friendly, very helpful, and able to explain things in a way that I could understand. After meeting with her, I recommended her to several colleagues. I will definitely be following up with her to meet again.”

- ❖ How strongly do you agree or disagree that your TIAA consultant put your interests first? = **100%** Agree or Strongly Agree

- ❖ Understanding your needs and goals = **97%** Excellent or Very Good
- ❖ Having the expertise required to handle your financial needs = **94%** Excellent or Very Good
- ❖ Providing quality advice = **97%** Excellent or Very Good
- ❖ Anticipating additional financial issues and bringing them to your attention = **94%** Excellent or Very Good
- ❖ **OVERALL RATING = 96%**

“Thomas was very knowledgeable about the areas that are important to me. He was very respectful, and it was easy to talk with him. I would recommend him to anyone needing assistance. I am not very knowledgeable about financial things, and he patiently explained them to me and answered my questions fully.” ³

Questions?

Plan Review North Dakota Public Employees

Optimizing plan effectiveness to help
drive better outcomes

Delivered by: Melissa Thorpe

As of June 30, 2020



Executive summary: Snapshot

Plan profile

\$154.8 Million

Assets

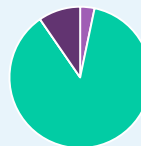
↑ **9.8% Year-over-Year**

Contributions

\$15,254,958

↑ **6.5% Year-over-Year**

| | | |
|-----------|-------|--------------|
| Employer | 3.3% | \$502,209 |
| Employee | 87.1% | \$13,285,836 |
| Matching | 0.0% | \$0 |
| Rollovers | 9.6% | \$1,466,913 |

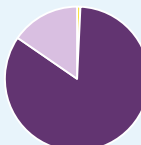


Distributions²

\$5,347,686

↓ **13.7% Year-over-Year**

| | | |
|------------|-------|-------------|
| In-service | 0.7% | \$40,094 |
| Terminated | 83.8% | \$4,483,833 |
| Other | 15.4% | \$823,760 |



Participant profile

8,522

Participants with balances

Participant Counts and Average Balances³

| | | | |
|------------|-------|-----|----------|
| Active | 5,832 | 68% | \$16,950 |
| Terminated | 2,354 | 28% | \$22,383 |
| Other | 336 | 4% | \$9,576 |

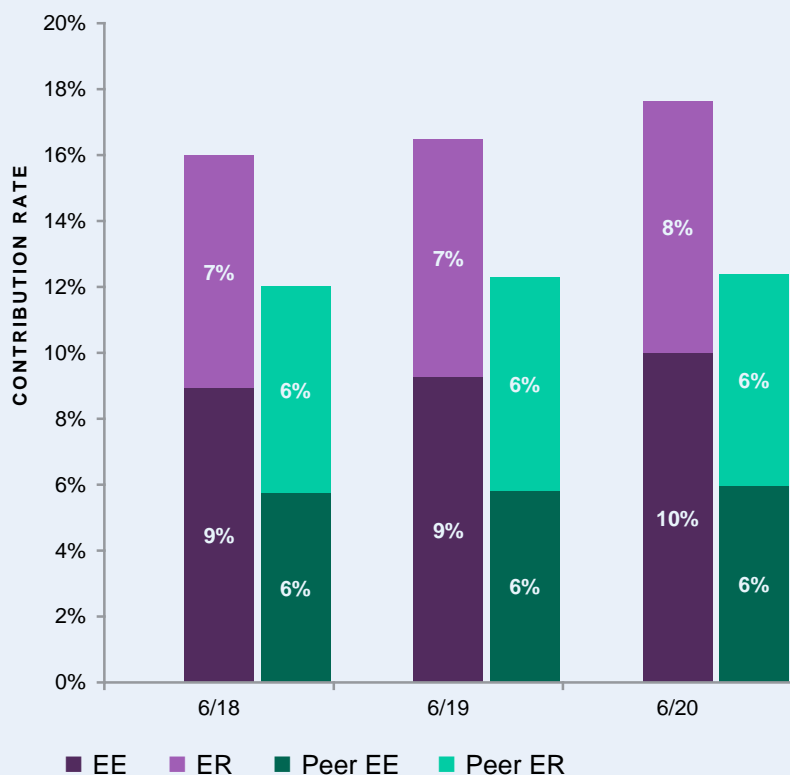
Engagement (as of 6/30/2020)

| | |
|-----------------------------------|-------|
| Total phone calls (Transactional) | 404 |
| Advice | 701 |
| Increased contributions | 3,561 |
| Rebalanced | 1,057 |

This report is as of the period ending 06/30/2020 and reflects the trailing 12 months of activity unless otherwise noted. The report includes all TIAA plans except 457(f), 457(b) Private, Nonqualified Deferred Compensation, and Retirement Healthcare plans. This report excludes details on non-participant accounts (forfeiture and revenue credit account) but includes the balances. 1. Refer to the "Income replacement ratio methodology and assumptions" page. 2. Certain Distributions (e.g., QDRO, Disability or Age 70.5 Minimum Distribution) may be categorized under In-Service, Terminated or Other. Please see the Glossary for additional information. 3. "Active" participants have a status of Active or Leave, a balance greater than zero and have made a contribution in the last 12 months. "Terminated" participants have a status of Terminated and a balance. "Other" represents all other participants in the plans (other status codes and non-contributing) with a balance.

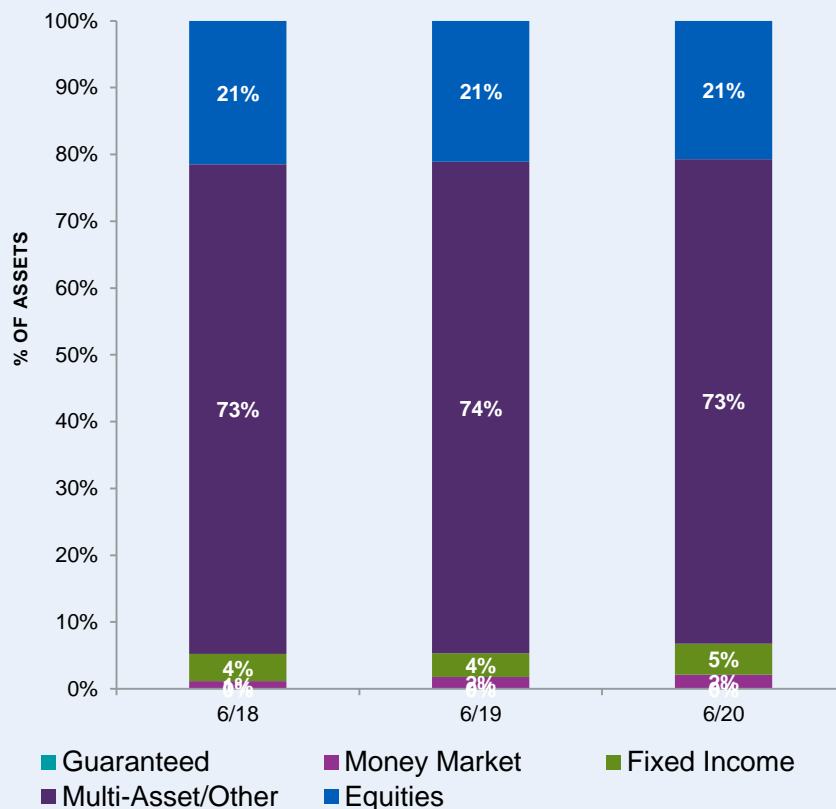
Executive summary: Participant trends

Contributions Impacting Plan Outcome



The peer benchmark represents a group of institutions with TIAA recordkept assets in the not-for-profit market with total plan assets between 100M and 500M.

Diversification



Multi-Asset/Other includes Lifecycle, Real Estate, and Brokerage.

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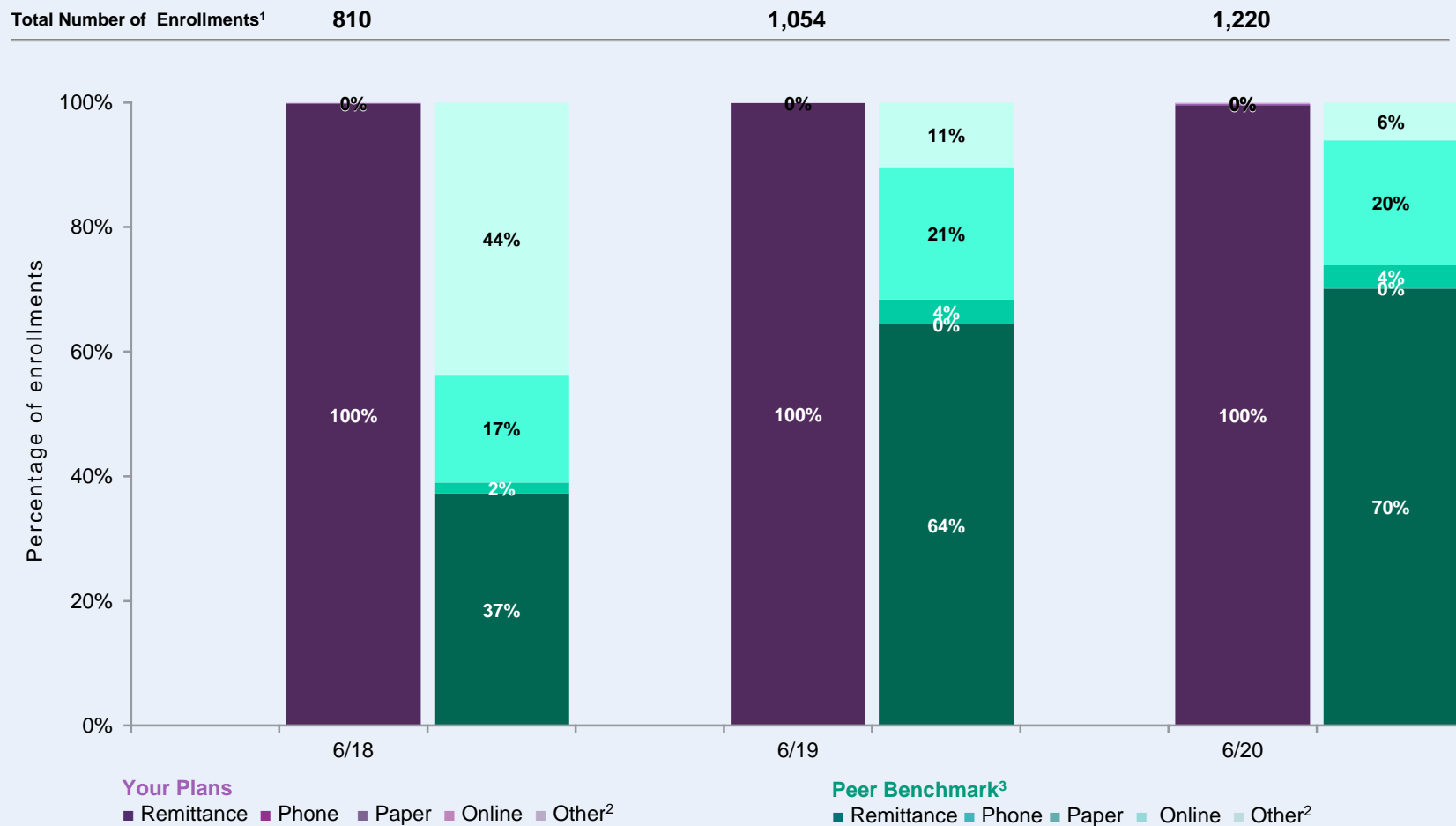
Employee Summary

Important plan and participant details



Employee summary: Enrollment trends

Enrollment by method



This report is as of the period ending 06/30/2020 and reflects the trailing 12 months of activity unless otherwise noted. The report includes all TIAA plans except 457(f), 457(b) Private, Nonqualified Deferred Compensation, and Retirement Healthcare plans. 1. If a participant is enrolled in more than one plan, they are still only counted as one unique enrollment in this chart. 2. "Other" includes the following enrollment categories: Internet/Admin, Negative, Enhanced Administrative Services (EAS) and Unknown. 3. The peer benchmark represents a group of institutions with TIAA recordkept assets in the not-for-profit market with total plan assets between 100M and 500M.

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Employee summary: Enrollment trends

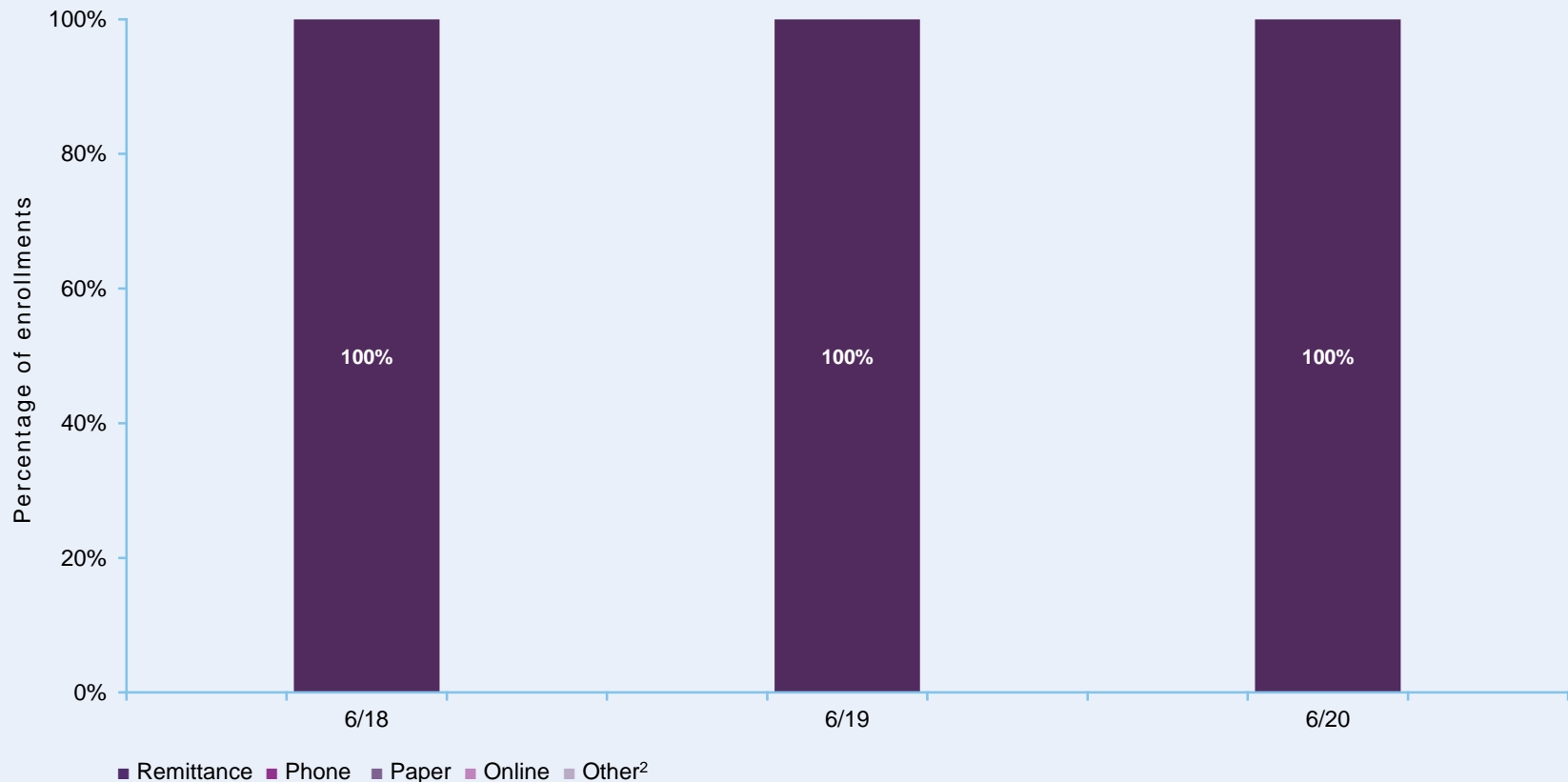
Enrollment by method

Total Number of Enrollments¹

16

2

4

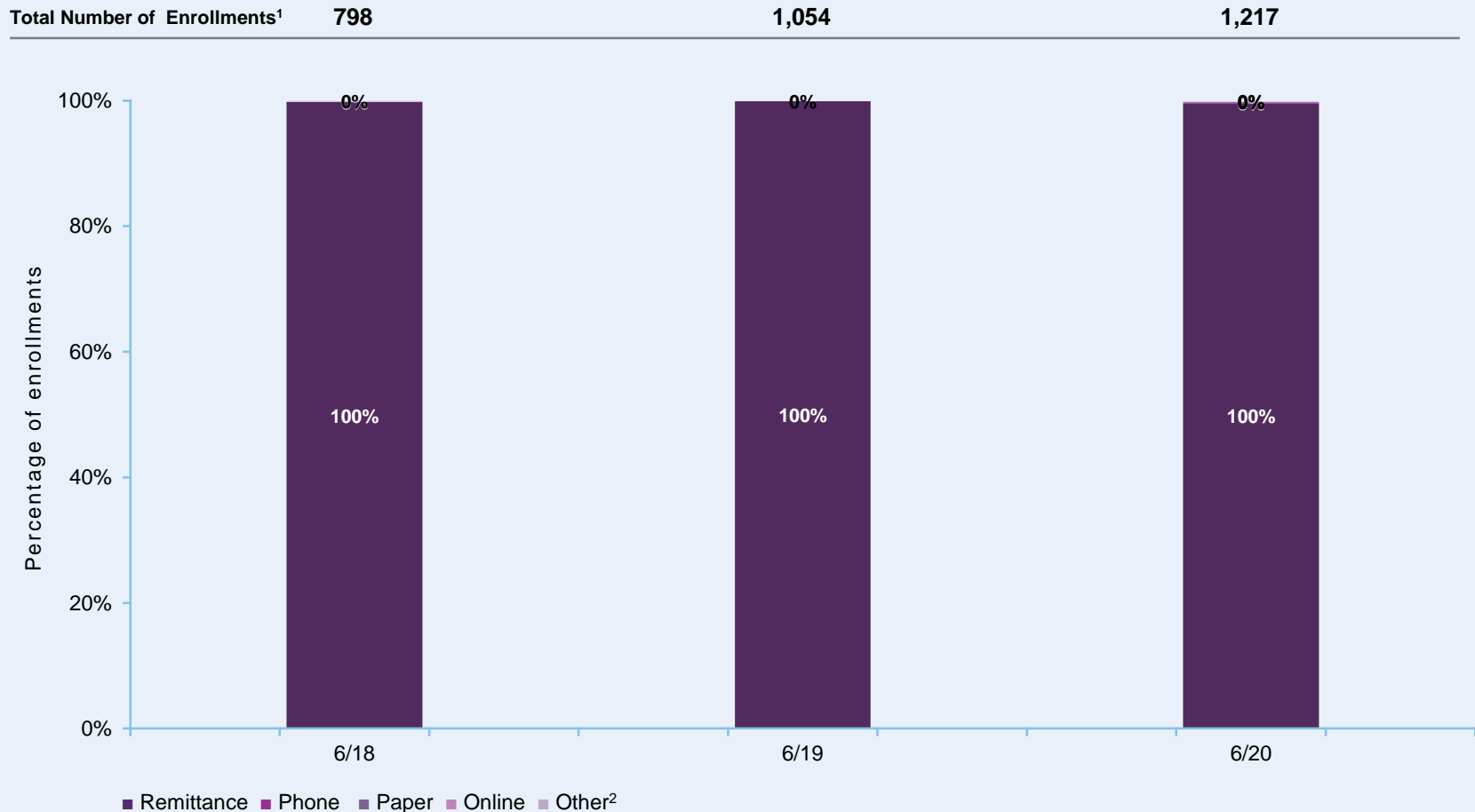


This report is as of the period ending 06/30/2020 and reflects the trailing 12 months of activity unless otherwise noted. The report includes all TIAA plans except 457(f), 457(b) Private, Nonqualified Deferred Compensation, and Retirement Healthcare plans. 1. This counts the total number of participants enrolled in this plan. If a participant is additionally enrolled in another plan, they will also be included in the total number of enrollments on that other plan's "Enrollment Summary" slide. 2. "Other" includes the following enrollment categories: Internet/Admin, Negative, Enhanced Administrative Services (EAS) and Unknown. Page 126 of 365

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Employee summary: Enrollment trends

Enrollment by method

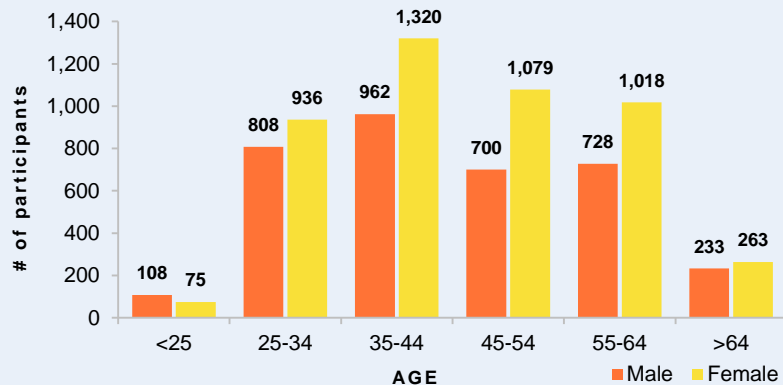


This report is as of the period ending 06/30/2020 and reflects the trailing 12 months of activity unless otherwise noted. The report includes all TIAA plans except 457(f), 457(b) Private, Nonqualified Deferred Compensation, and Retirement Healthcare plans. 1. This counts the total number of participants enrolled in this plan. If a participant is additionally enrolled in another plan, they will also be included in the total number of enrollments on that other plan's "Enrollment Summary" slide. 2. "Other" includes the following enrollment categories: Internet/Admin, Negative, Enhanced Administrative Services (EAS) and Unknown. Page 127 of 365

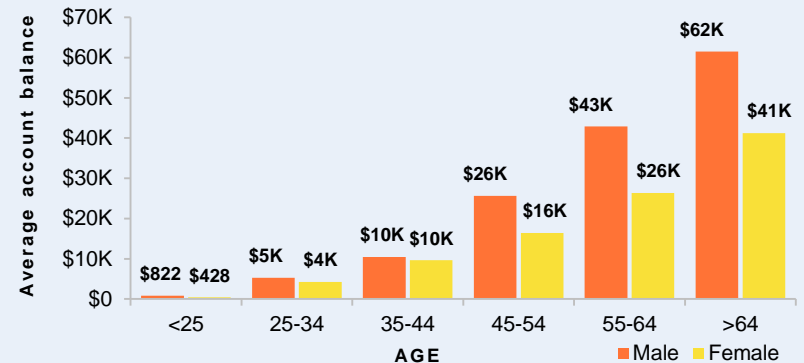
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Employee summary: Gender and age¹

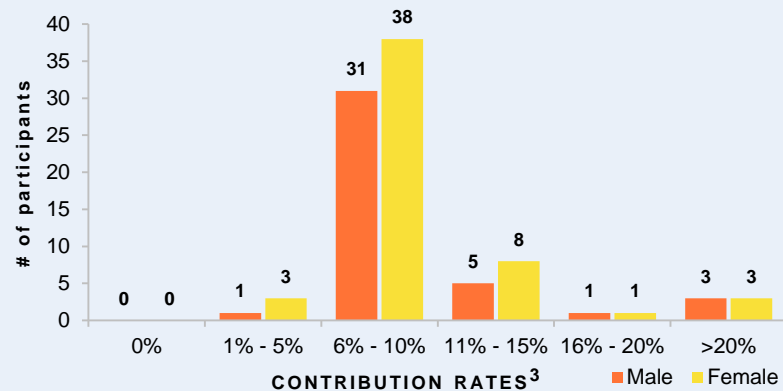
Demographics by Age and Gender



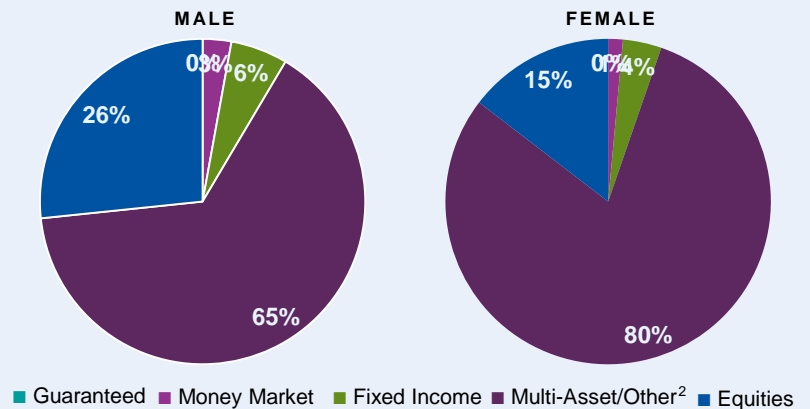
Average Account Balance by Age and Gender



Employee Contribution Rates by gender



Diversification by Gender

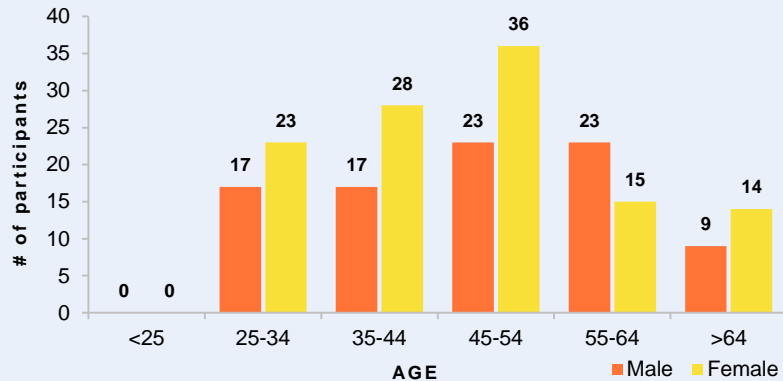


This report is as of the period ending 06/30/2020 and reflects the trailing 12 months of activity unless otherwise noted. The report includes all TIAA plans except 457(f), 457(b) Private, Nonqualified Deferred Compensation, and Retirement Healthcare plans. 1. Data reflected is for all participant statuses except Employee Contribution Rates by Gender which applies additional filters. Does not include 292 participants with no age or gender on file. 2. Multi-Asset/Other includes Lifecycle, Real Estate, and Brokerage. 3. Contribution data reflects the trailing 12 months of data.

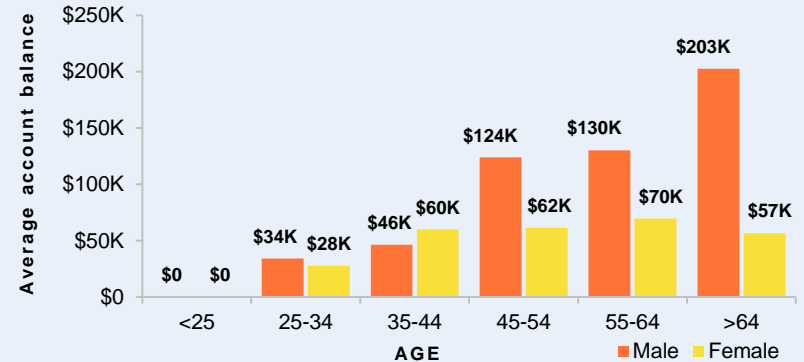
Page 128 of 365

Employee summary: Gender and age¹

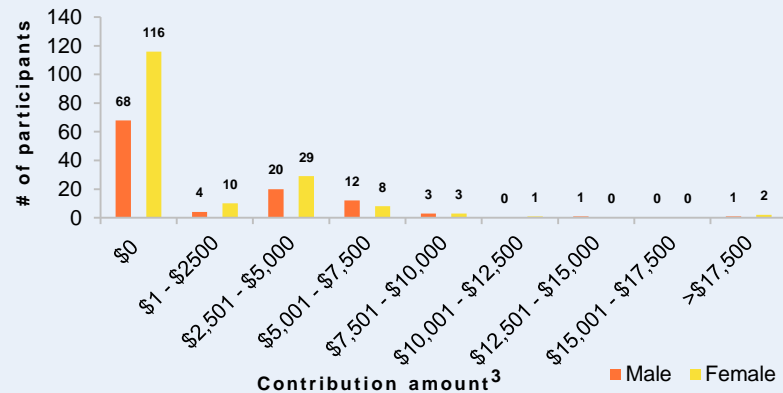
Demographics by Age and Gender



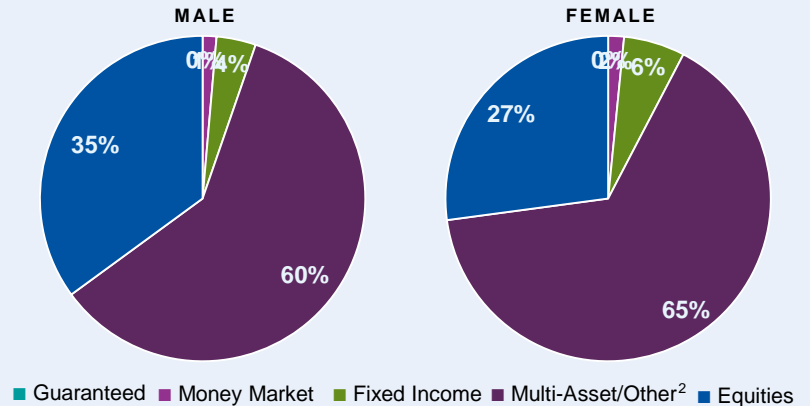
Average Account Balance by Age and Gender



Employee Contribution Amounts by Gender



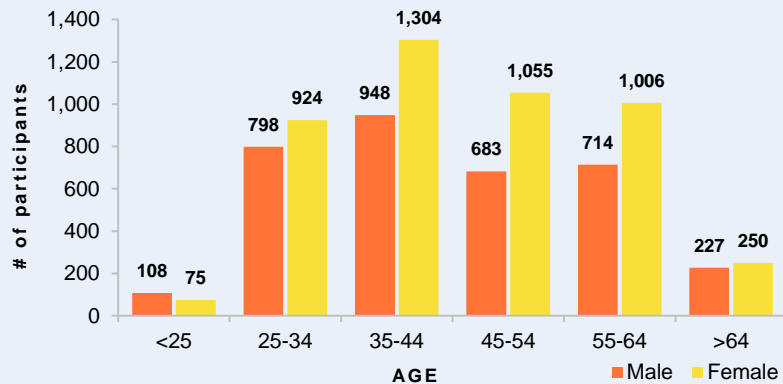
Diversification by Gender



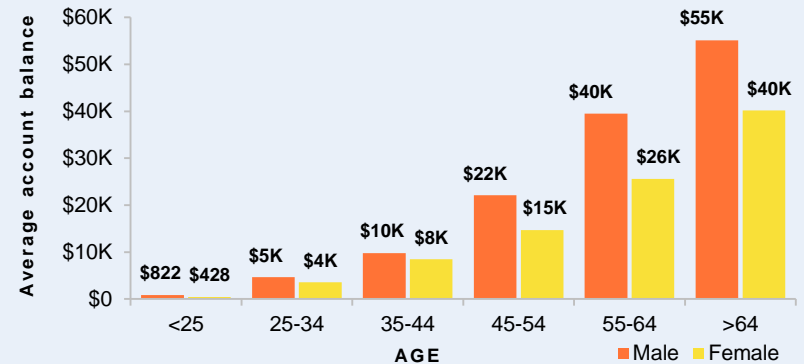
This report is as of the period ending 06/30/2020 and reflects the trailing 12 months of activity unless otherwise noted. The report includes all TIAA plans except 457(f), 457(b) Private, Nonqualified Deferred Compensation, and Retirement Healthcare plans. 1. Data reflected is for all participant statuses except Employee Contribution Amounts by Gender which includes only active or leave status. Does not include 2 participants with no age or gender on file. 2. Multi-Asset/Other includes Lifecycle, Real Estate, and Brokerage. 3. Contribution data reflects the trailing 12 months of data.

Employee summary: Gender and age¹

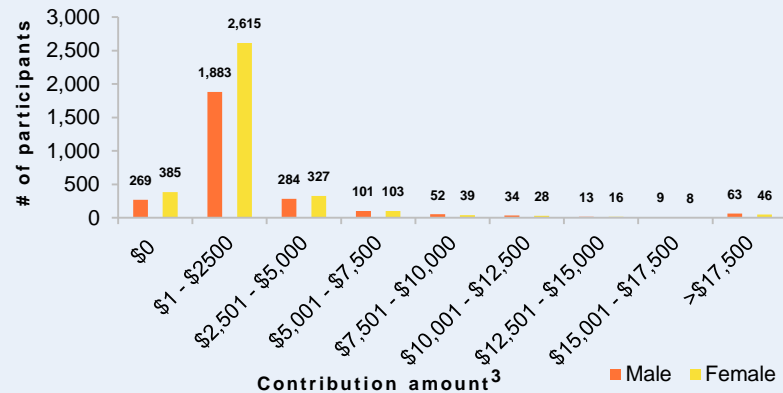
Demographics by Age and Gender



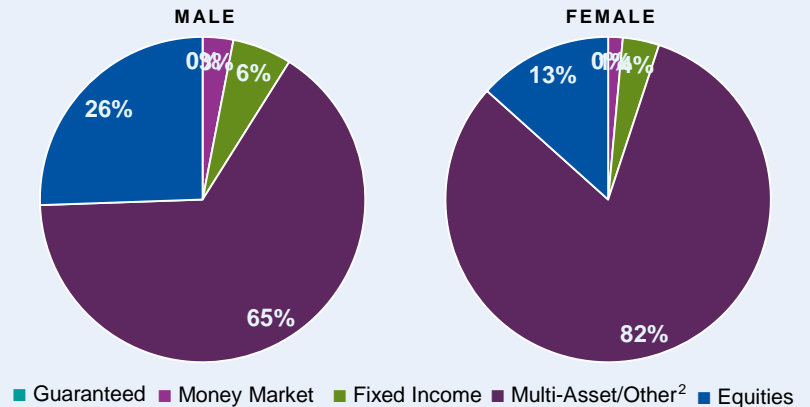
Average Account Balance by Age and Gender



Employee Contribution Amounts by Gender



Diversification by Gender



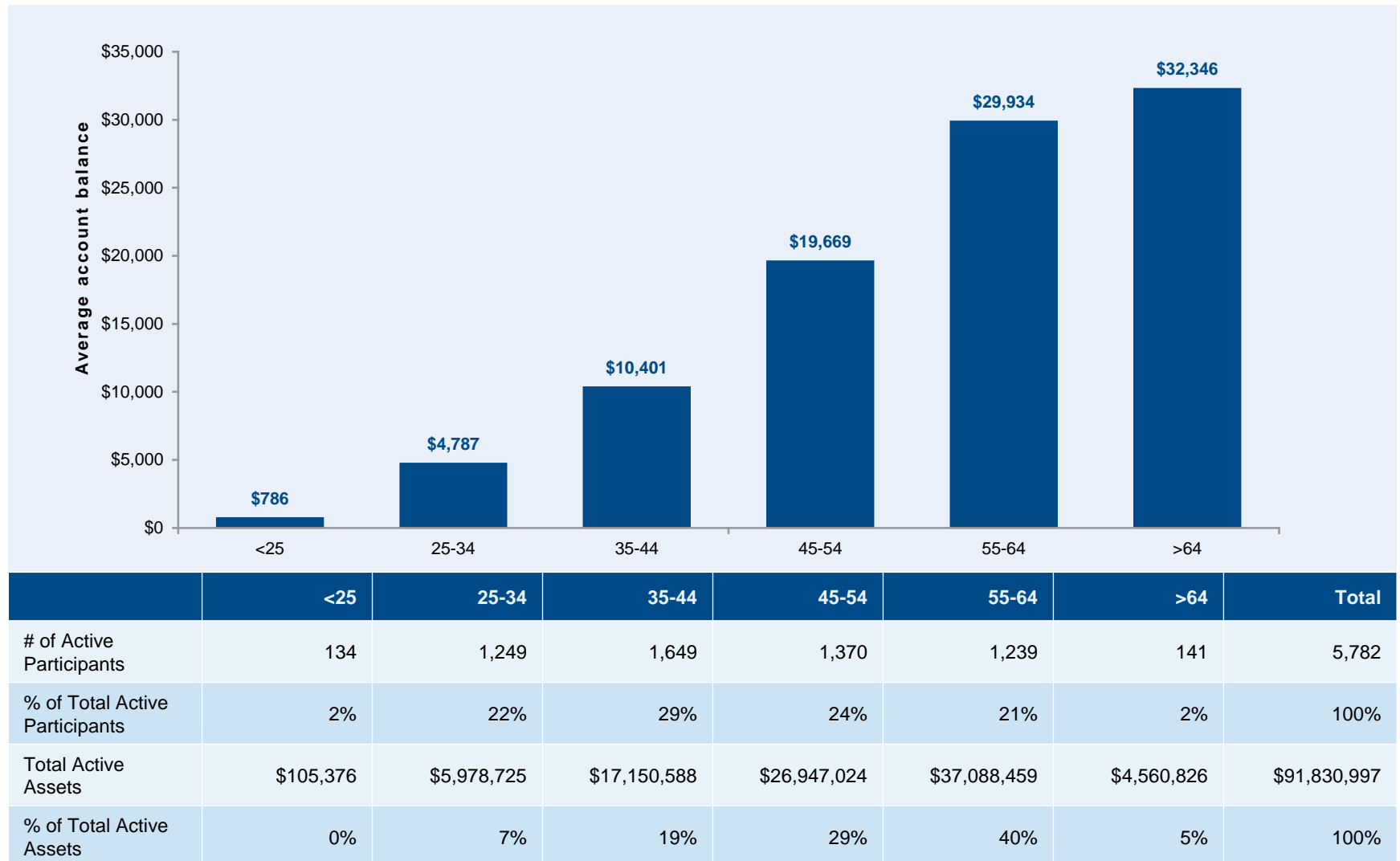
This report is as of the period ending 06/30/2020 and reflects the trailing 12 months of activity unless otherwise noted. The report includes all TIAA plans except 457(f), 457(b) Private, Nonqualified Deferred Compensation, and Retirement Healthcare plans. 1. Data reflected is for all participant statuses except Employee Contribution Amounts by Gender which includes only active or leave status. Does not include 290 participants with no age or gender on file. 2. Multi-Asset/Other includes Lifecycle, Real Estate, and Brokerage. 3. Contribution data reflects the trailing 12 months of data.

Active participants: Average account balance by age



This report is as of the period ending 06/30/2020 and reflects the trailing 12 months of activity unless otherwise noted. The report includes all TIAA plans except 457(f), 457(b) Private, Nonqualified Deferred Compensation, and Retirement Healthcare plans.

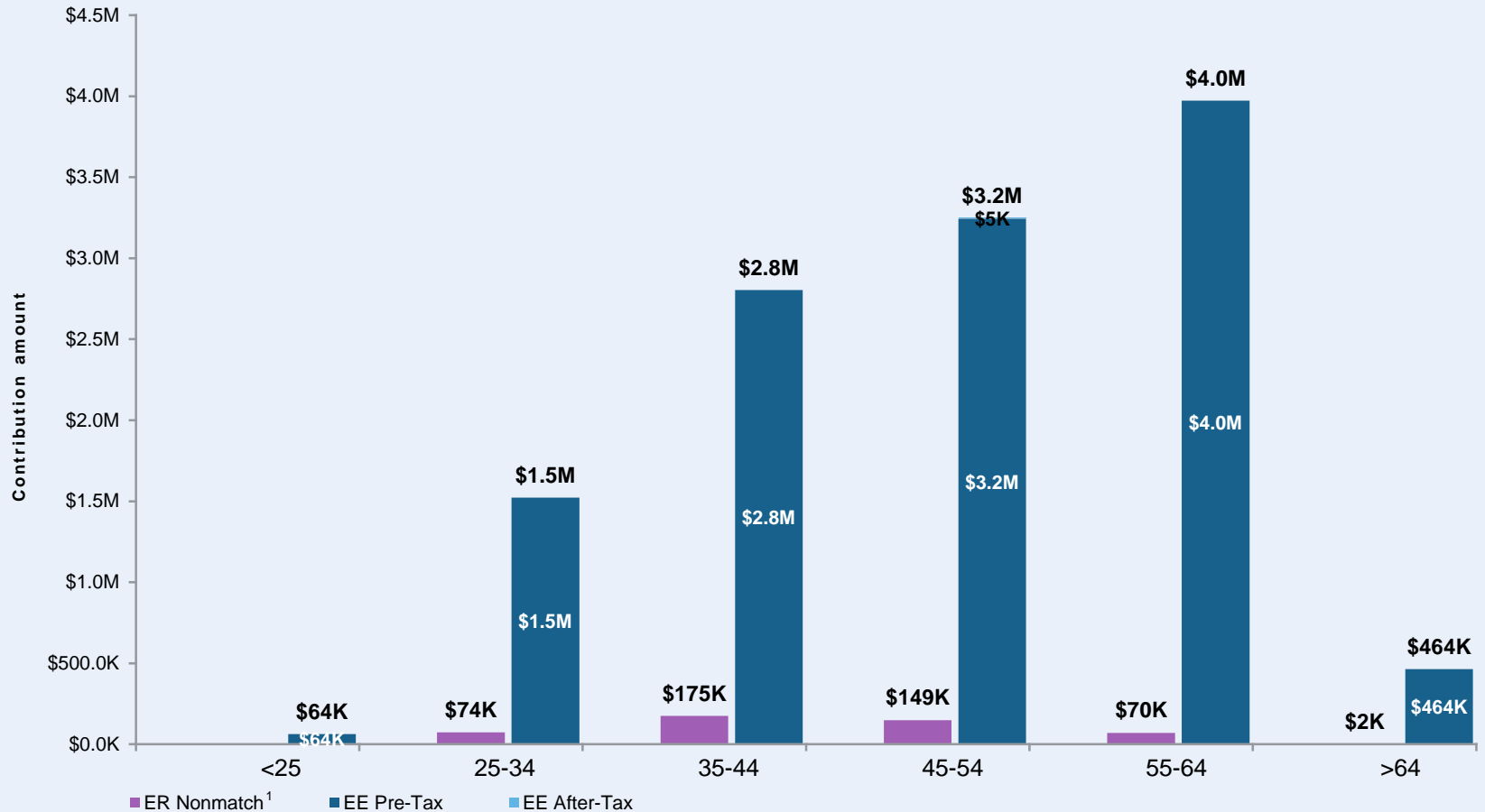
Active participants: Average account balance by age



This report is as of the period ending 06/30/2020 and reflects the trailing 12 months of activity unless otherwise noted. The report includes all TIAA plans except 457(f), 457(b) Private, Nonqualified Deferred Compensation, and Retirement Healthcare plans.

Active participants: Contribution amounts by age

Employer (ER) & employee (EE) contributions



This report is as of the period ending 06/30/2020 and reflects the trailing 12 months of activity unless otherwise noted. The report includes all TIAA plans except 457(f), 457(b) Private, Nonqualified Deferred Compensation, and Retirement Healthcare plans. 1. ER Nonmatch includes all employer contributions other than match contributions.

Page 133 of 365

Active participants: Contribution amounts by age

Employer (ER) & employee (EE) contributions

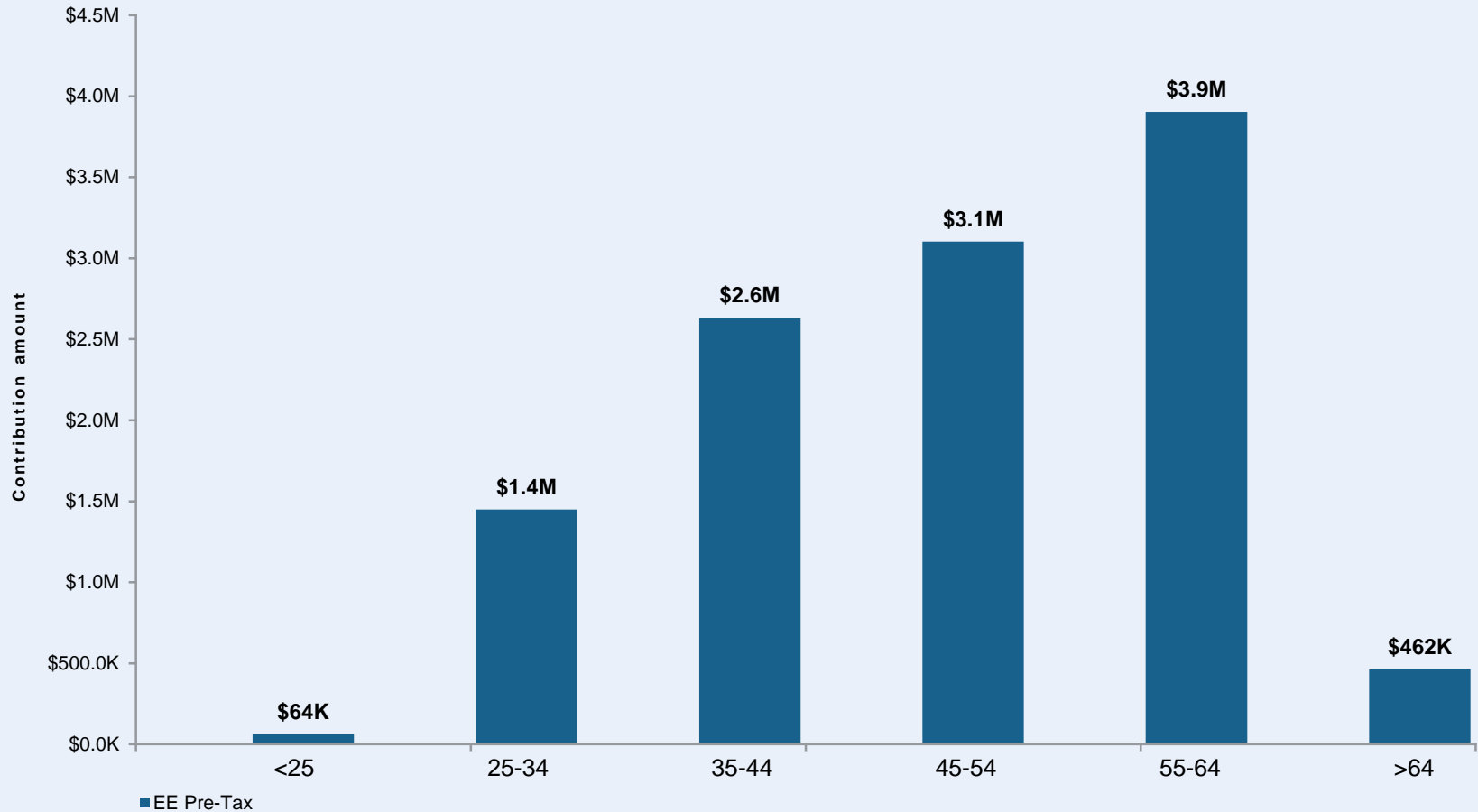


This report is as of the period ending 06/30/2020 and reflects the trailing 12 months of activity unless otherwise noted. The report includes all TIAA plans except 457(f), 457(b) Private, Nonqualified Deferred Compensation, and Retirement Healthcare plans. 1. ER Nonmatch includes all employer contributions other than match contributions.

Page 134 of 365

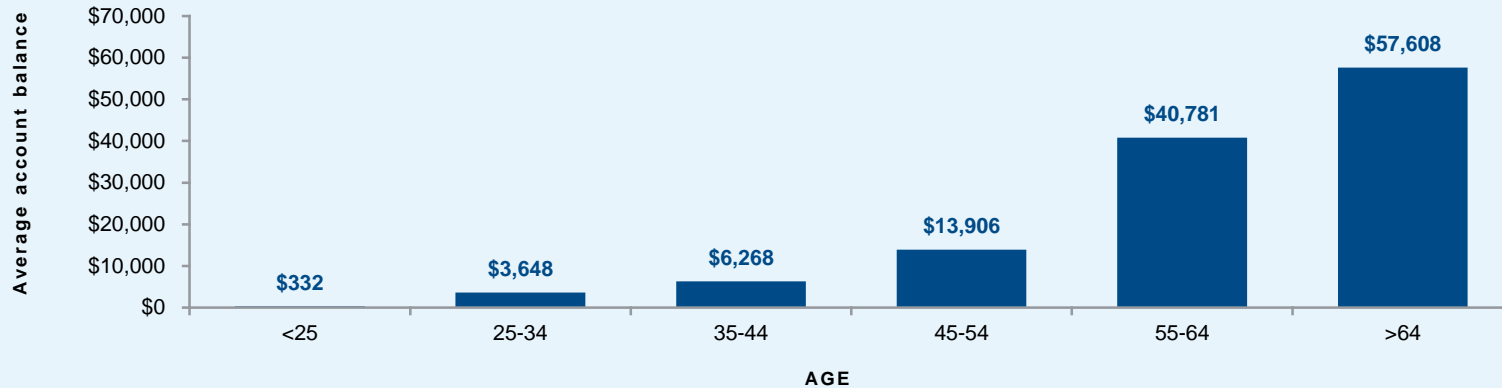
Active participants: Contribution amounts by age

Employer (ER) & employee (EE) contributions



This report is as of the period ending 06/30/2020 and reflects the trailing 12 months of activity unless otherwise noted. The report includes all TIAA plans except 457(f), 457(b) Private, Nonqualified Deferred Compensation, and Retirement Healthcare plans.

Terminated participants: Summary



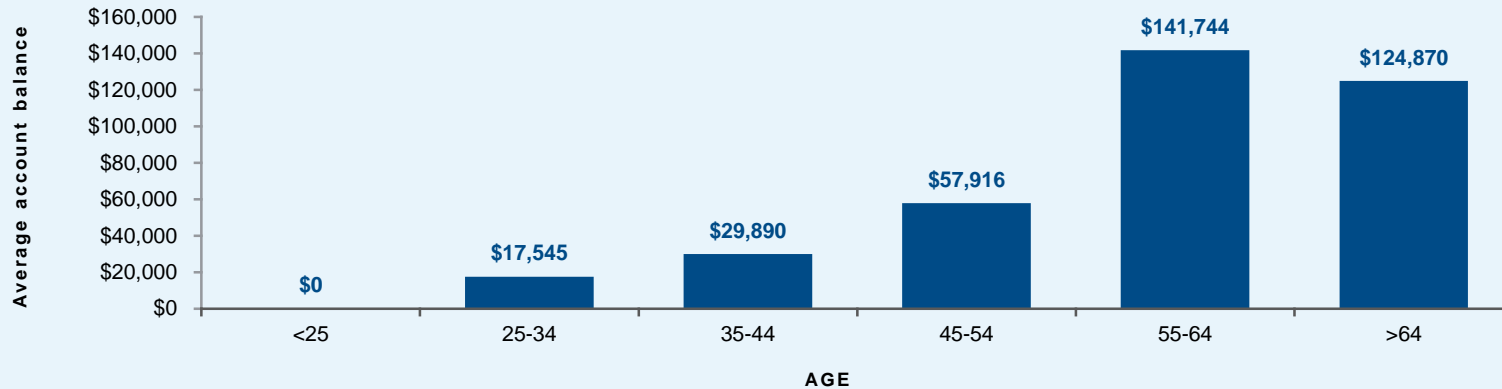
| Age | <25 | 25-34 | 35-44 | 45-54 | 55-64 | >64 | Total |
|---|----------|-------------|-------------|-------------|--------------|--------------|--------------|
| Total Terminated Participants | 43 | 443 | 596 | 398 | 510 | 364 | 2,354 |
| Terminated Participants as % of All Participants in Age Range | 23% | 25% | 25% | 21% | 28% | 70% | 28% |
| Total Terminated Assets | \$14,274 | \$1,616,243 | \$3,735,487 | \$5,534,465 | \$20,798,487 | \$20,969,176 | \$52,668,131 |
| Terminated Assets as % of All Plan Assets in Age Range | 12% | 19% | 16% | 15% | 35% | 81% | 34% |
| # of Participants with <\$1,000 balance | 40 | 154 | 139 | 92 | 64 | 16 | 505 |
| # of Participants with >= \$1,000 and < \$5,000 balance | 3 | 230 | 321 | 177 | 179 | 78 | 988 |

This report is as of the period ending 06/30/2020 and reflects the trailing 12 months of activity unless it is otherwise noted. The report includes all TIAA plans except 457(f), 457(b) Private, Nonqualified Deferred Compensation, and Retirement Healthcare plans. This slide includes participants with a status of "Terminated" in at least one plan, and some of these participants may have a status as active in other plans.

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North Dakota Public Employees | 8/27/20 | 16

Terminated participants: Summary

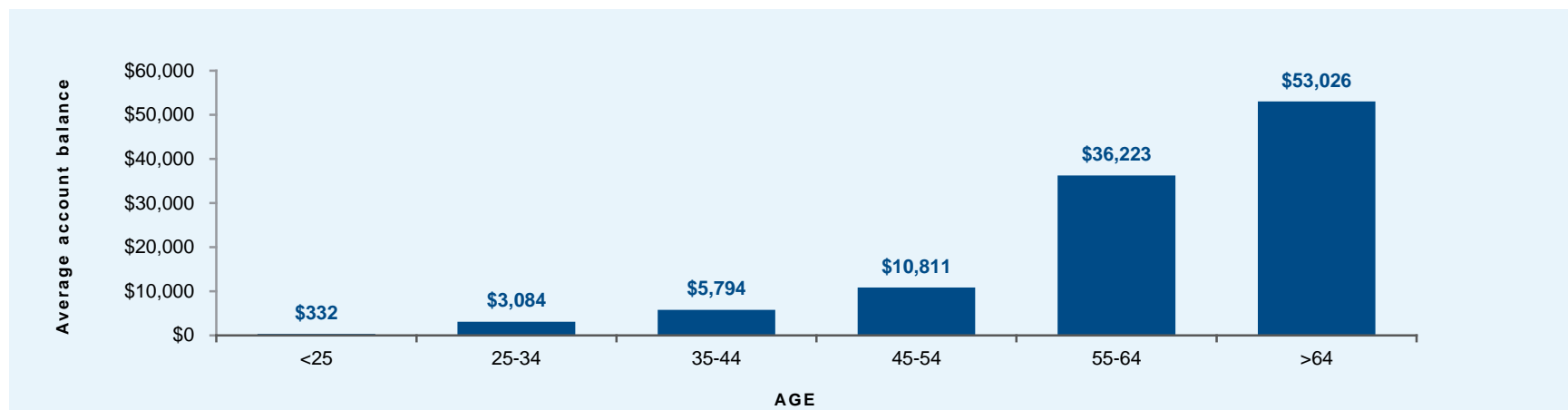


| Age | <25 | 25-34 | 35-44 | 45-54 | 55-64 | >64 | Total |
|---|-----|-----------|-----------|-------------|-------------|-------------|-------------|
| Total Terminated Participants | 0 | 16 | 11 | 25 | 21 | 21 | 94 |
| Terminated Participants as % of All Participants in Age Range | 0% | 40% | 24% | 42% | 55% | 88% | 45% |
| Total Terminated Assets | \$0 | \$280,716 | \$328,785 | \$1,447,912 | \$2,976,614 | \$2,622,272 | \$7,656,299 |
| Terminated Assets as % of All Plan Assets in Age Range | 0% | 23% | 13% | 29% | 74% | 99% | 49% |
| # of Participants with <\$1,000 balance | 0 | 2 | 1 | 0 | 1 | 0 | 4 |
| # of Participants with >= \$1,000 and < \$5,000 balance | 0 | 0 | 1 | 2 | 0 | 0 | 3 |

This report is as of the period ending 06/30/2020 and reflects the trailing 12 months of activity unless it is otherwise noted. The report includes all TIAA plans except 457(f), 457(b) Private, Nonqualified Deferred Compensation, and Retirement Healthcare plans. This slide includes participants with a status of "Terminated" in at least one plan, and some of these participants may have a status as active in other plans.

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Terminated participants: Summary



| Age | <25 | 25-34 | 35-44 | 45-54 | 55-64 | >64 | Total |
|---|----------|-------------|-------------|-------------|--------------|--------------|--------------|
| Total Terminated Participants | 43 | 433 | 588 | 378 | 492 | 346 | 2,280 |
| Terminated Participants as % of All Participants in Age Range | 23% | 25% | 25% | 21% | 28% | 69% | 27% |
| Total Terminated Assets | \$14,274 | \$1,335,528 | \$3,406,701 | \$4,086,553 | \$17,821,873 | \$18,346,903 | \$45,011,832 |
| Terminated Assets as % of All Plan Assets in Age Range | 12% | 18% | 16% | 13% | 32% | 79% | 32% |
| # of Participants with <\$1,000 balance | 40 | 152 | 138 | 92 | 63 | 16 | 501 |
| # of Participants with >= \$1,000 and < \$5,000 balance | 3 | 234 | 321 | 177 | 179 | 78 | 992 |

This report is as of the period ending 06/30/2020 and reflects the trailing 12 months of activity unless it is otherwise noted. The report includes all TIAA plans except 457(f), 457(b) Private, Nonqualified Deferred Compensation, and Retirement Healthcare plans. This slide includes participants with a status of "Terminated" in at least one plan, and some of these participants may have a status as active in other plans.

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Employee Engagement

Focus on outcomes-based
education and advice








Segmentation overview

Segmentation identifies employee needs, then provides education and advice based on their attitudes and preferences.



Segmentation year in review as of 6/30/2020

| Life stage | |  Dollar Stretcher |  Life Builder |  Accumulator |  Transitioner |  Established |
|----------------|---|--|---|---|--|---|
| | Count ¹ | 2,280 | 1,678 | 1,527 | 701 | 201 |
| Communications | Financial Foundations campaigns | 1,614 | 1,381 | 1,297 | 627 | 155 |
| | Onboarding Early Engagement program | 535 | 285 | 188 | 57 | 7 |
| | Offboarding Stay Smart® for Life program | 440 | 93 | 105 | 291 | 161 |
| | Supplemental campaigns | 1,229 | 911 | 729 | 301 | 80 |
| Engagement | # secure web ID | 832 | 916 | 899 | 464 | 116 |
| | Secure web logins | 512 | 595 | 630 | 323 | 85 |
| | Inbound phone calls: transactional | 134 | 88 | 95 | 58 | 29 |
| Actions | In-person advice | 39 | 55 | 46 | 54 | 19 |
| | Online advice | 102 | 155 | 166 | 51 | 14 |
| | Increased contributions | 1,290 | 1,003 | 872 | 330 | 66 |
| | Started employee contributions | 565 | 316 | 226 | 72 | 7 |
| | Reallocated/rebalanced | 478 | 275 | 211 | 77 | 16 |
| | Consolidations ² | 22 | 20 | 28 | 27 | 2 |
| | Updated beneficiary | 132 | 128 | 98 | 67 | 15 |
| | New enrollments | 497 | 260 | 184 | 61 | 6 |
| Outcomes | Average assets | \$5,954 | \$13,800 | \$38,927 | \$68,332 | \$57,541 |
| | Average assets (compared to peers) ³ | \$10,490 | \$27,043 | \$112,340 | \$253,677 | \$366,433 |

1. All counts represent participants that have a balance > \$0 and have made contributions in the last 12 months. 2. Consolidations equals the number of participants who transfer balances from other service providers into TIAA retirement accounts. 3. The peer benchmark represents a group of institutions that have accepted assets in the not-for-profit market with total plan assets between 100M and 500M..

Investment Solutions

Provide participants with relevant choices and lifetime income options



Assets & contributions by asset class year-over-year

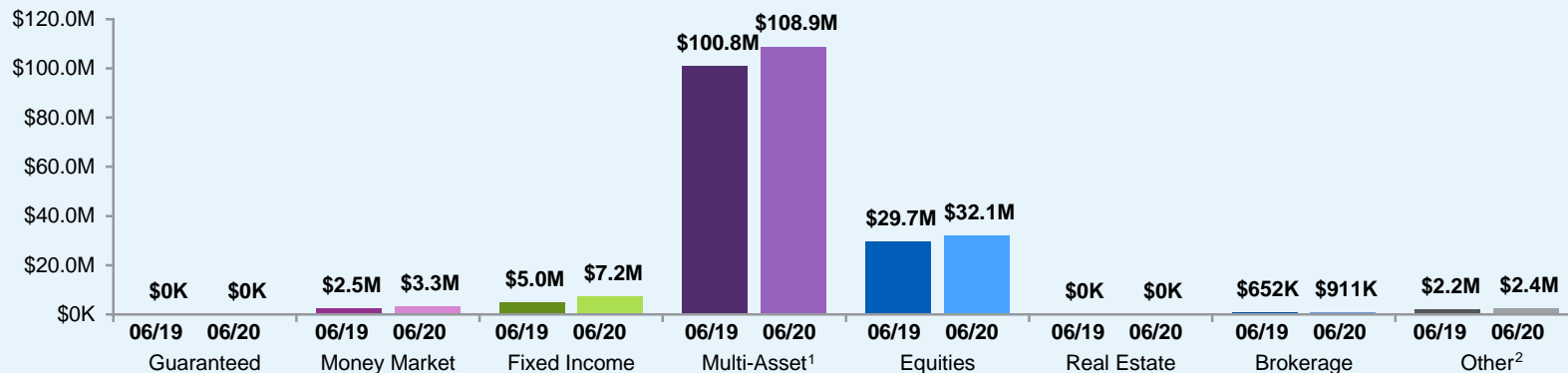
\$154,762,027

Total assets

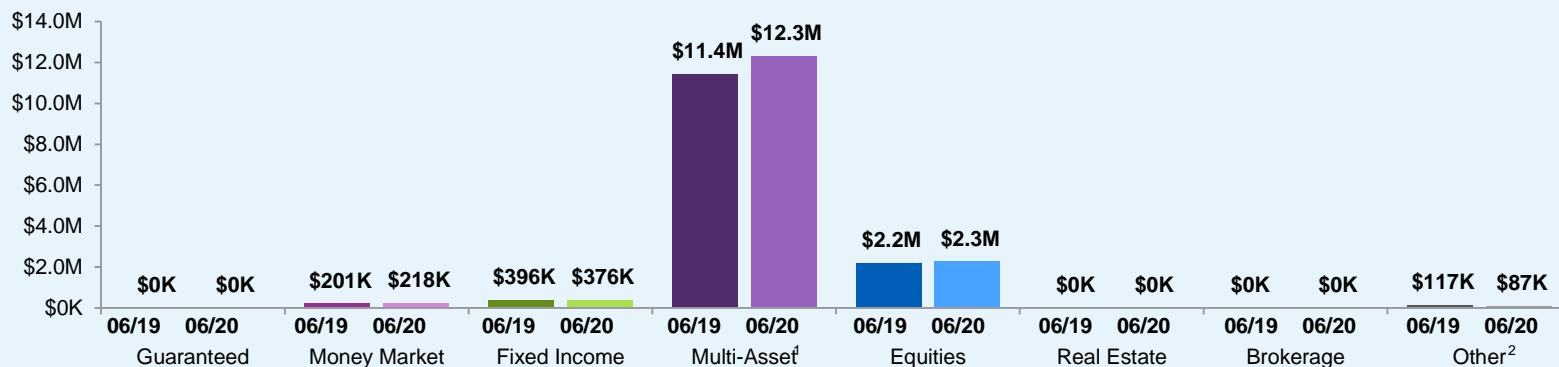
\$15,254,958

Total contributions

Assets



Contributions



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Plan assets & contributions by asset class year-over-year

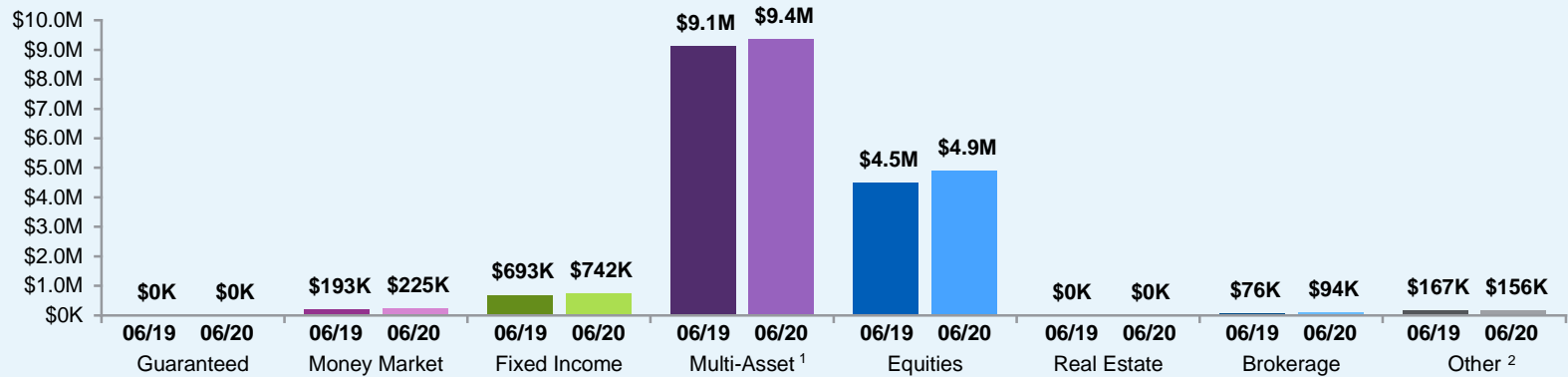
\$15,484,841

Total plan assets

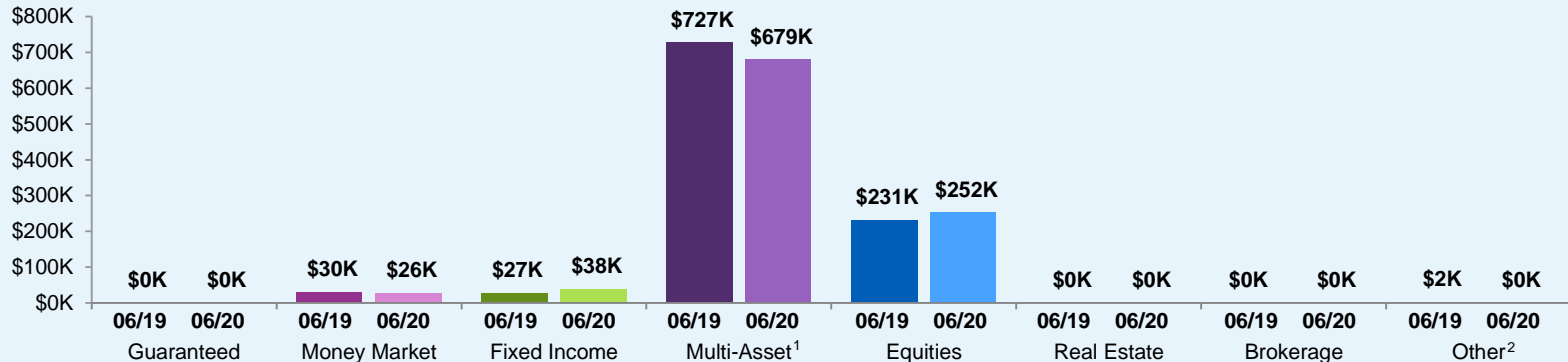
\$996,309

Total contributions

Assets



Contributions



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Plan assets & contributions by asset class year-over-year

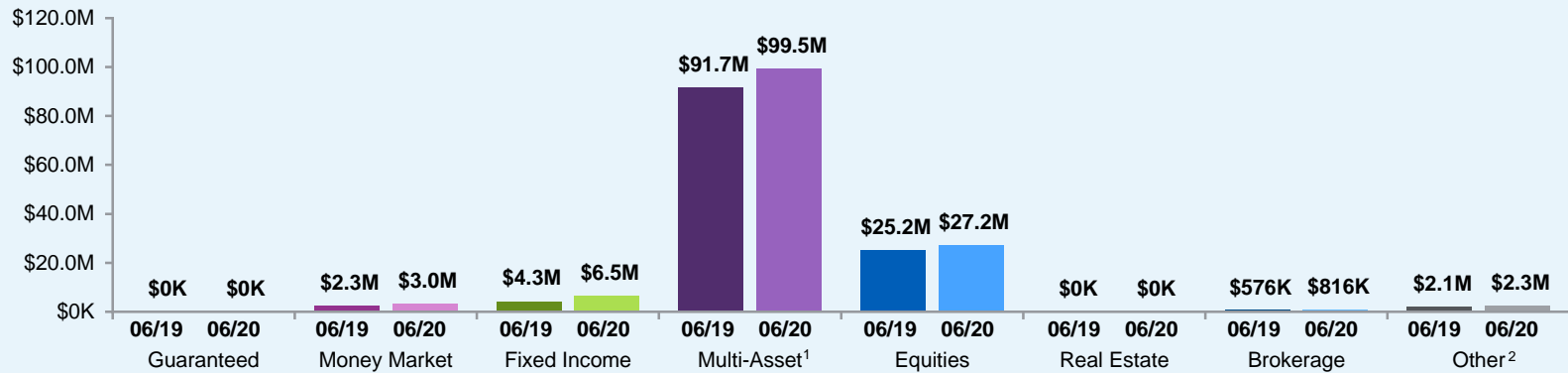
\$139,277,186

Total plan assets

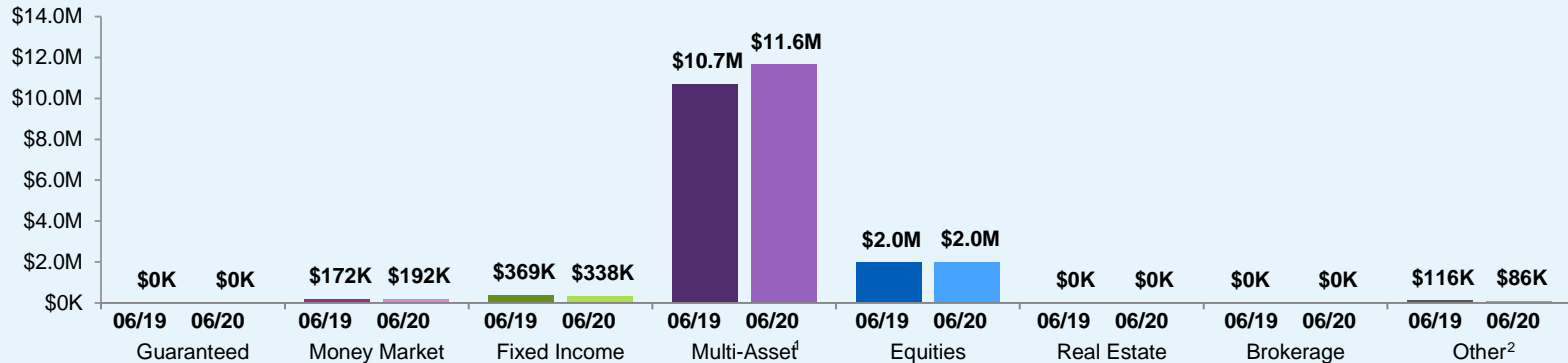
\$14,258,649

Total contributions

Assets



Contributions



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Investment/account utilization by assets

Top 5 investments by Assets

| | Participant Count | Total Assets | Balance % of Total | |
|---------------------------------|-------------------|--------------|--------------------|--------|
| ■ TIAA-CREF Lifecycle 2025-Rtmt | 930 | \$22,409,759 | 14.48% | 14.48% |
| ■ TIAA-CREF Lifecycle 2020-Rtmt | 604 | \$17,897,879 | 11.56% | 11.56% |
| ■ TIAA-CREF Lifecycle 2030-Rtmt | 864 | \$16,808,380 | 10.86% | 10.86% |
| ■ TIAA-CREF Lifecycle 2035-Rtmt | 892 | \$12,864,402 | 8.31% | 8.31% |
| ■ TIAA-CREF Lifecycle 2045-Rtmt | 1,205 | \$9,705,357 | 6.27% | 6.27% |
| Total as a % of total assets | | \$79,685,777 | 51.49% | |

Bottom 5 investments by Assets

| | Participant Count | Total Assets | Balance % of Total | |
|----------------------------------|-------------------|--------------|--------------------|-------|
| ■ Northern Small Cap Value Fund | 164 | \$713,183 | 0.46% | 0.46% |
| ■ MassMutual Pre Inf Prt Inc Ser | 126 | \$636,646 | 0.41% | 0.41% |
| ■ Templeton Global Bond AdvClass | 146 | \$605,994 | 0.39% | 0.39% |
| ■ DFA US SmallCap Portfolio Inst | 187 | \$442,320 | 0.29% | 0.29% |
| ■ TIAA-CREF Lifecycle 2060-Rtmt | 334 | \$307,382 | 0.20% | 0.20% |
| Total as a % of total assets | | \$2,705,525 | 1.75% | |

■ Guaranteed
■ Money Market
■ Fixed Income
■ Multi-Asset
■ Equities
■ Real Estate
■ Other¹

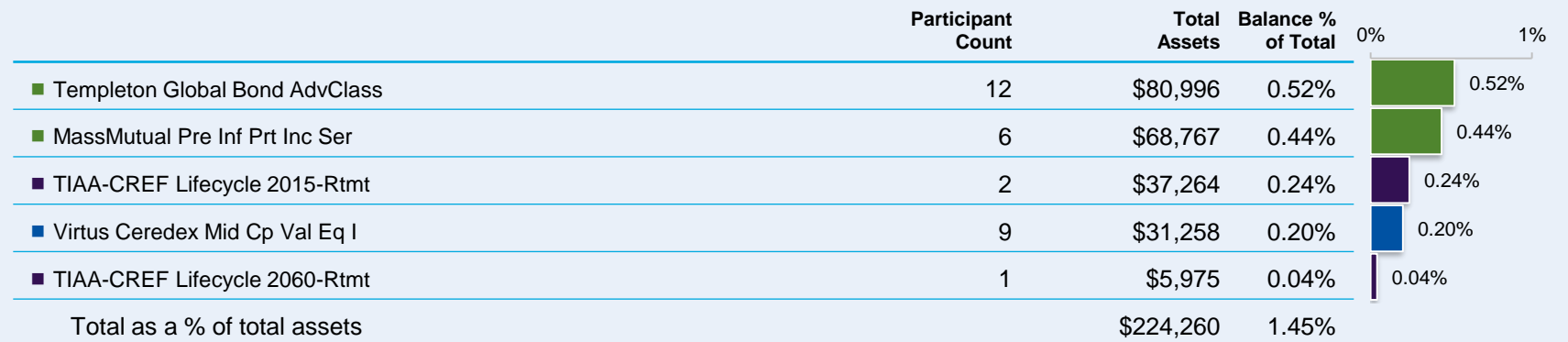
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Investment/account utilization by assets

Top 5 investments by Assets



Bottom 5 investments by Assets

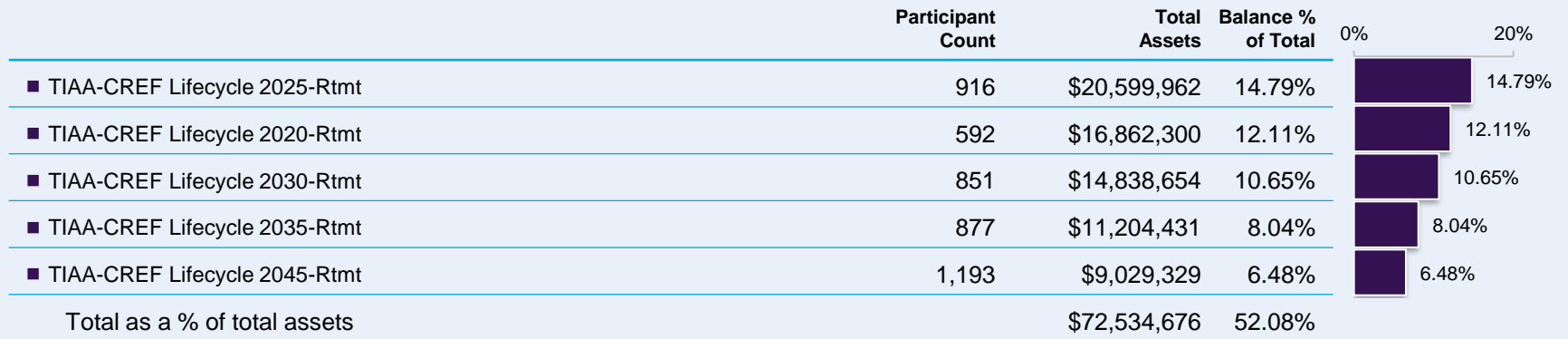


■ Guaranteed
 ■ Money Market
 ■ Fixed Income
 ■ Multi-Asset
 ■ Equities
 ■ Real Estate
 ■ Other¹

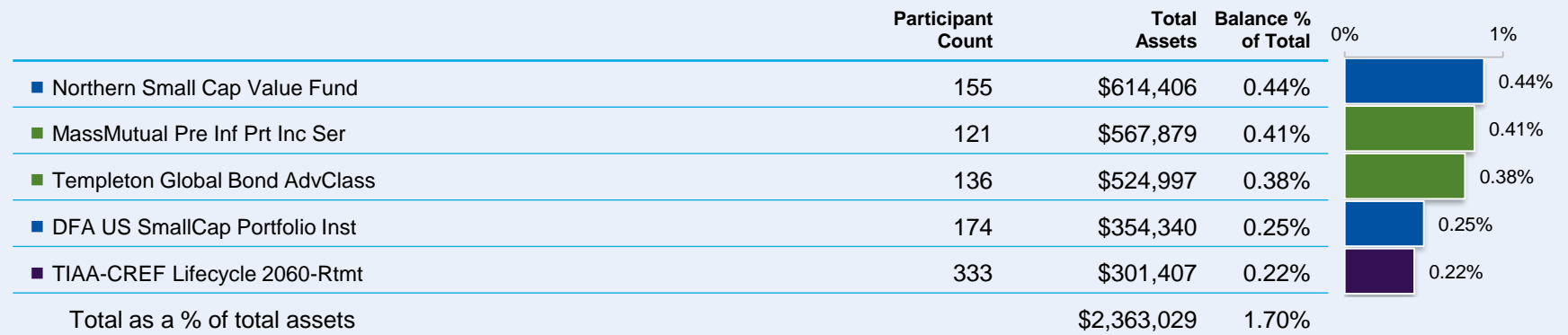
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Investment/account utilization by assets

Top 5 investments by Assets



Bottom 5 investments by Assets



■ Guaranteed ■ Money Market ■ Fixed Income ■ Multi-Asset ■ Equities ■ Real Estate ■ Other¹

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Investment/account utilization by contributions

Top 5 Investments by Contributions

| | Participant Count | Total Assets | Balance % of Total | |
|---------------------------------|-------------------|--------------|--------------------|--------|
| ■ TIAA-CREF Lifecycle 2025-Rtmt | 727 | \$2,408,309 | 15.79% | 15.79% |
| ■ TIAA-CREF Lifecycle 2030-Rtmt | 698 | \$1,813,860 | 11.89% | 11.89% |
| ■ TIAA-CREF Lifecycle 2020-Rtmt | 441 | \$1,594,511 | 10.45% | 10.45% |
| ■ TIAA-CREF Lifecycle 2045-Rtmt | 929 | \$1,396,667 | 9.16% | 9.16% |
| ■ TIAA-CREF Lifecycle 2035-Rtmt | 712 | \$1,393,005 | 9.13% | 9.13% |
| Total as a % of total assets | | \$8,606,353 | 56.42% | |

Bottom 5 Investments by Contributions

| | Participant Count | Total Assets | Balance % of Total | |
|----------------------------------|-------------------|--------------|--------------------|-------|
| ■ PGIM Jennison Mid Cap Growth Z | 73 | \$37,587 | 0.25% | 0.25% |
| ■ Templeton Global Bond AdvClass | 97 | \$29,019 | 0.19% | 0.19% |
| ■ AMG Managers Fairpointe MdCp I | 46 | \$19,721 | 0.13% | 0.13% |
| ■ TIAA-CREF Lfcyle Rtmt Inc-Rtmt | 7 | \$7,142 | 0.05% | 0.05% |
| ■ Baird Core Plus Bond Investor | 33 | \$4,637 | 0.03% | 0.03% |
| Total as a % of total assets | | \$98,105 | 0.64% | |

■ Guaranteed
■ Money Market
■ Fixed Income
■ Multi-Asset
■ Equities
■ Real Estate
■ Other¹

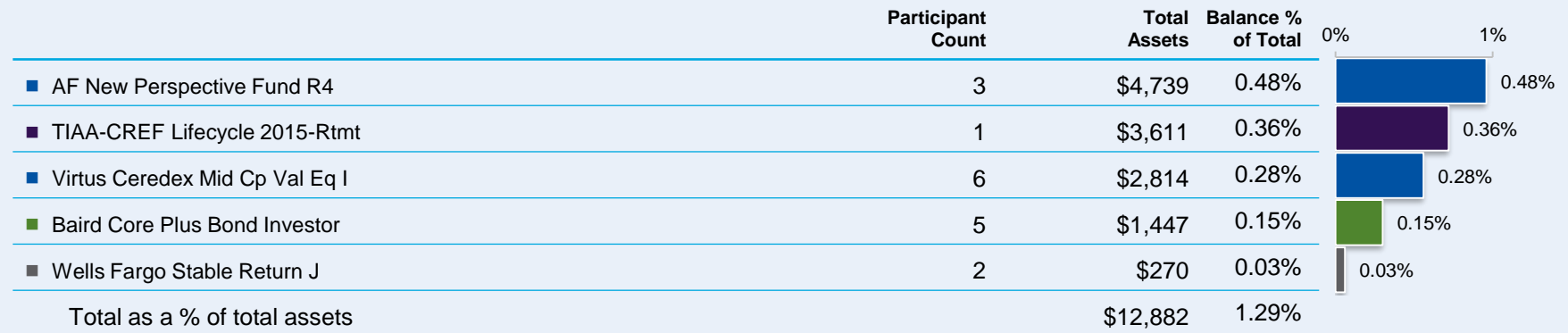
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Investment/account utilization by contributions

Top 5 Investments by Contributions



Bottom 5 Investments by Contributions

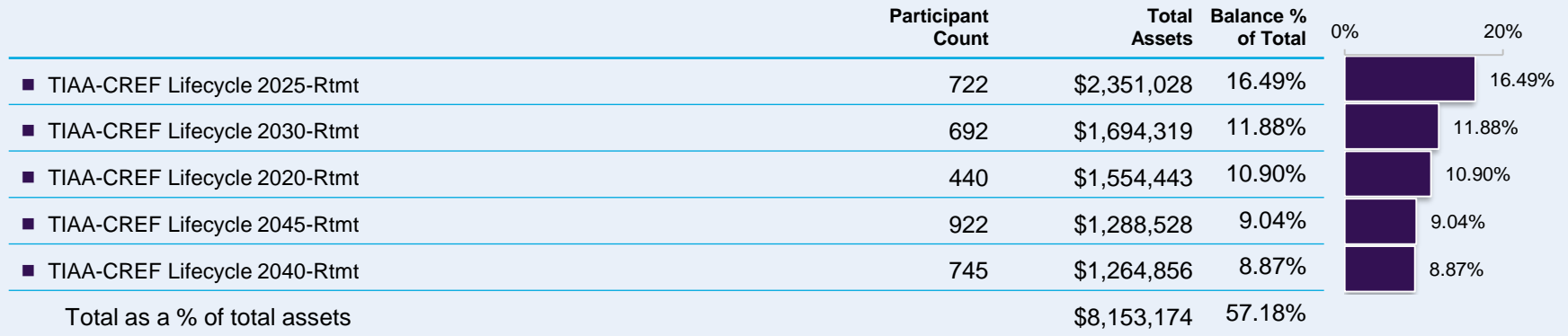


■ Guaranteed
 ■ Money Market
 ■ Fixed Income
 ■ Multi-Asset
 ■ Equities
 ■ Real Estate
 ■ Other¹

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Investment/account utilization by contributions

Top 5 Investments by Contributions



Bottom 5 Investments by Contributions



■ Guaranteed ■ Money Market ■ Fixed Income ■ Multi-Asset ■ Equities ■ Real Estate ■ Other¹

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Assets & contributions by investment/account option category

| | Total number of participants invested | Contribution amount | Contribution percentage of total | Asset amount | Asset percentage of total |
|--------------------------------|---------------------------------------|---------------------|----------------------------------|--------------------|---------------------------|
| MONEY MARKET | | | | | |
| Vanguard Treasury MoneyMkt Inv | 107 | \$218,353 | 1.43% | \$3,273,233 | 2.12% |
| Money Market Total | | \$218,353 | 1.43% | \$3,273,233 | 2.12% |
| FIXED INCOME | | | | | |
| Baird Core Plus Bond Investor | 66 | \$4,637 | 0.03% | \$1,099,685 | 0.71% |
| MassMutual Pre Inf Prt Inc Ser | 126 | \$44,841 | 0.29% | \$636,646 | 0.41% |
| PGIM High Yield Z | 136 | \$76,254 | 0.50% | \$1,207,638 | 0.78% |
| PIMCO Total Return Admin Class | 0 | \$44,697 | 0.29% | \$0 | 0.00% |
| Templeton Global Bond AdvClass | 146 | \$29,019 | 0.19% | \$605,994 | 0.39% |
| Vanguard Ttl Bd Mkt Idx Adm | 190 | \$176,824 | 1.16% | \$3,648,403 | 2.36% |
| Fixed Income Total | | \$376,271 | 2.47% | \$7,198,366 | 4.65% |
| MULTI-ASSET | | | | | |
| TIAA-CREF Lfcyle Rtmt Inc-Rtmt | 14 | \$7,142 | 0.05% | \$1,006,549 | 0.65% |

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Assets & contributions by investment/account option category

| | Total number of participants invested | Contribution amount | Contribution percentage of total | Asset amount | Asset percentage of total |
|--------------------------------|---------------------------------------|---------------------|----------------------------------|--------------|---------------------------|
| MULTI-ASSET (Continued) | | | | | |
| TIAA-CREF Lifecycle 2010-Rtmt | 80 | \$128,356 | 0.84% | \$1,620,128 | 1.05% |
| TIAA-CREF Lifecycle 2015-Rtmt | 241 | \$270,140 | 1.77% | \$7,669,243 | 4.96% |
| TIAA-CREF Lifecycle 2020-Rtmt | 604 | \$1,594,511 | 10.45% | \$17,897,879 | 11.56% |
| TIAA-CREF Lifecycle 2025-Rtmt | 930 | \$2,408,309 | 15.79% | \$22,409,759 | 14.48% |
| TIAA-CREF Lifecycle 2030-Rtmt | 864 | \$1,813,860 | 11.89% | \$16,808,380 | 10.86% |
| TIAA-CREF Lifecycle 2035-Rtmt | 892 | \$1,393,005 | 9.13% | \$12,864,402 | 8.31% |
| TIAA-CREF Lifecycle 2040-Rtmt | 966 | \$1,321,333 | 8.66% | \$9,595,665 | 6.20% |
| TIAA-CREF Lifecycle 2045-Rtmt | 1,205 | \$1,396,667 | 9.16% | \$9,705,357 | 6.27% |
| TIAA-CREF Lifecycle 2050-Rtmt | 1,213 | \$1,180,706 | 7.74% | \$6,618,204 | 4.28% |

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| | Total number of participants invested | Contribution amount | Contribution percentage of total | Asset amount | Asset percentage of total |
|--------------------------------|---------------------------------------|---------------------|----------------------------------|----------------------|---------------------------|
| MULTI-ASSET (Continued) | | | | | |
| TIAA-CREF Lifecycle 2055-Rtmt | 751 | \$656,594 | 4.30% | \$2,386,053 | 1.54% |
| TIAA-CREF Lifecycle 2060-Rtmt | 334 | \$143,406 | 0.94% | \$307,382 | 0.20% |
| Multi-Asset Total | | \$12,314,029 | 80.72% | \$108,889,001 | 70.36% |
| EQUITIES | | | | | |
| AF New Perspective Fund R4 | 183 | \$65,467 | 0.43% | \$1,009,246 | 0.65% |
| AMG Managers Fairpointe MdCp I | 0 | \$19,721 | 0.13% | \$0 | 0.00% |
| Brown Capital Mgmt Sml Co Inv | 142 | \$157,282 | 1.03% | \$3,347,185 | 2.16% |
| Cohen & Steers Realty Shares | 305 | \$82,506 | 0.54% | \$950,836 | 0.61% |
| Columbia Mid Cap Index Fund A | 285 | \$99,260 | 0.65% | \$1,360,937 | 0.88% |
| DFA US SmallCap Portfolio Inst | 187 | \$67,289 | 0.44% | \$442,320 | 0.29% |
| Franklin Growth Fund Advisor | 151 | \$93,087 | 0.61% | \$2,324,678 | 1.50% |

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Assets & contributions by investment/account option category

| | Total number of participants invested | Contribution amount | Contribution percentage of total | Asset amount | Asset percentage of total |
|--------------------------------|---------------------------------------|---------------------|----------------------------------|--------------|---------------------------|
| EQUITIES (Continued) | | | | | |
| Hartford Dividend & Growth R5 | 208 | \$87,596 | 0.57% | \$1,217,257 | 0.79% |
| Inves Oppen Developing Mkts Y | 308 | \$113,494 | 0.74% | \$1,224,851 | 0.79% |
| Northern Small Cap Value Fund | 164 | \$73,725 | 0.48% | \$713,183 | 0.46% |
| PGIM Jennison Mid Cap Growth Z | 100 | \$37,587 | 0.25% | \$748,448 | 0.48% |
| T Rowe Price Equity Income | 207 | \$75,047 | 0.49% | \$965,440 | 0.62% |
| T. Rowe Price Cap Apprec Adv | 137 | \$102,286 | 0.67% | \$1,757,344 | 1.14% |
| Vanguard Dividend Growth Inv | 196 | \$158,572 | 1.04% | \$2,712,416 | 1.75% |
| Vanguard Inst Idx Inst | 368 | \$595,415 | 3.90% | \$7,352,651 | 4.75% |
| Vanguard Ttl Intl Stk Idx Adm | 356 | \$317,843 | 2.08% | \$3,184,163 | 2.06% |

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Assets & contributions by investment/account option category

| | Total number of participants invested | Contribution amount | Contribution percentage of total | Asset amount | Asset percentage of total |
|--------------------------------|--|------------------------|--|---------------------|---------------------------------|
| EQUITIES (Continued) | | | | | |
| Virtus Ceredex Mid Cp Val Eq I | 192 | \$51,927 | 0.34% | \$867,716 | 0.56% |
| Wells Fargo Growth Adm | 78 | \$61,589 | 0.40% | \$1,893,687 | 1.22% |
| Equities Total | | \$2,259,692 | 14.81% | \$32,072,358 | 20.72% |
| BROKERAGE | | | | | |
| TIAA-CREF Self Directed Acct | 19 | \$0 | 0.00% | \$910,659 | 0.59% |
| Brokerage Total | | \$0 | 0.00% | \$910,659 | 0.59% |
| OTHER² | | | | | |
| Wells Fargo Stable Return J | 207 | \$86,613 | 0.57% | \$2,418,410 | 1.56% |
| Other Total | | \$86,613 | 0.57% | \$2,418,410 | 1.56% |

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Assets & contributions by investment/account option category

| | Total number of participants invested | Contribution amount | Contribution percentage of total | Asset amount | Asset percentage of total |
|--------------------------------|--|------------------------|--|------------------|---------------------------------|
| MONEY MARKET | | | | | |
| Vanguard Treasury MoneyMkt Inv | 11 | \$26,253 | 2.64% | \$224,680 | 1.45% |
| Money Market Total | | \$26,253 | 2.64% | \$224,680 | 1.45% |
| FIXED INCOME | | | | | |
| Baird Core Plus Bond Investor | 9 | \$1,447 | 0.15% | \$165,045 | 1.07% |
| MassMutual Pre Inf Prt Inc Ser | 6 | \$6,164 | 0.62% | \$68,767 | 0.44% |
| PGIM High Yield Z | 10 | \$6,295 | 0.63% | \$285,606 | 1.84% |
| PIMCO Total Return Admin Class | 0 | \$9,567 | 0.96% | \$0 | 0.00% |
| Templeton Global Bond AdvClass | 12 | \$5,094 | 0.51% | \$80,996 | 0.52% |
| Vanguard Ttl Bd Mkt Idx Adm | 9 | \$9,886 | 0.99% | \$141,167 | 0.91% |
| Fixed Income Total | | \$38,452 | 3.86% | \$741,581 | 4.79% |
| MULTI-ASSET | | | | | |
| TIAA-CREF Lifecycle 2010-Rtmt | 8 | \$0 | 0.00% | \$389,070 | 2.51% |

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Assets & contributions by investment/account option category

| | Total number of participants invested | Contribution amount | Contribution percentage of total | Asset amount | Asset percentage of total |
|--------------------------------|--|------------------------|--|--------------|---------------------------------|
| MULTI-ASSET (Continued) | | | | | |
| TIAA-CREF Lifecycle 2015-Rtmt | 2 | \$3,611 | 0.36% | \$37,264 | 0.24% |
| TIAA-CREF Lifecycle 2020-Rtmt | 17 | \$40,067 | 4.02% | \$1,035,579 | 6.69% |
| TIAA-CREF Lifecycle 2025-Rtmt | 19 | \$57,281 | 5.75% | \$1,809,796 | 11.69% |
| TIAA-CREF Lifecycle 2030-Rtmt | 18 | \$119,542 | 12.00% | \$1,969,727 | 12.72% |
| TIAA-CREF Lifecycle 2035-Rtmt | 24 | \$128,882 | 12.94% | \$1,659,970 | 10.72% |
| TIAA-CREF Lifecycle 2040-Rtmt | 16 | \$56,477 | 5.67% | \$589,633 | 3.81% |
| TIAA-CREF Lifecycle 2045-Rtmt | 17 | \$108,139 | 10.85% | \$676,028 | 4.37% |
| TIAA-CREF Lifecycle 2050-Rtmt | 25 | \$107,008 | 10.74% | \$746,804 | 4.82% |
| TIAA-CREF Lifecycle 2055-Rtmt | 17 | \$58,405 | 5.86% | \$452,860 | 2.92% |

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Assets & contributions by investment/account option category

| | Total number of participants invested | Contribution amount | Contribution percentage of total | Asset amount | Asset percentage of total |
|--------------------------------|--|------------------------|--|--------------------|---------------------------------|
| MULTI-ASSET (Continued) | | | | | |
| TIAA-CREF Lifecycle 2060-Rtmt | 1 | \$0 | 0.00% | \$5,975 | 0.04% |
| Multi-Asset Total | | \$679,411 | 68.19% | \$9,372,706 | 60.53% |
| EQUITIES | | | | | |
| AF New Perspective Fund R4 | 12 | \$4,739 | 0.48% | \$246,976 | 1.59% |
| AMG Managers Fairpointe MdCp I | 0 | \$4,924 | 0.49% | \$0 | 0.00% |
| Brown Capital Mgmt Sml Co Inv | 18 | \$18,895 | 1.90% | \$718,569 | 4.64% |
| Cohen & Steers Realty Shares | 20 | \$16,221 | 1.63% | \$229,777 | 1.48% |
| Columbia Mid Cap Index Fund A | 20 | \$11,042 | 1.11% | \$149,465 | 0.97% |
| DFA US SmallCap Portfolio Inst | 16 | \$9,577 | 0.96% | \$87,980 | 0.57% |
| Franklin Growth Fund Advisor | 15 | \$13,950 | 1.40% | \$428,543 | 2.77% |
| Hartford Dividend & Growth R5 | 13 | \$10,978 | 1.10% | \$211,793 | 1.37% |

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Assets & contributions by investment/account option category

| | Total number of participants invested | Contribution amount | Contribution percentage of total | Asset amount | Asset percentage of total |
|--------------------------------|--|------------------------|--|--------------|---------------------------------|
| EQUITIES (Continued) | | | | | |
| Inves Oppen Developing Mkts Y | 22 | \$21,165 | 2.12% | \$184,978 | 1.19% |
| Northern Small Cap Value Fund | 12 | \$12,327 | 1.24% | \$98,777 | 0.64% |
| PGIM Jennison Mid Cap Growth Z | 6 | \$6,061 | 0.61% | \$84,514 | 0.55% |
| T Rowe Price Equity Income | 11 | \$4,821 | 0.48% | \$125,566 | 0.81% |
| T. Rowe Price Cap Apprec Adv | 13 | \$13,826 | 1.39% | \$391,398 | 2.53% |
| Vanguard Dividend Growth Inv | 15 | \$22,682 | 2.28% | \$224,747 | 1.45% |
| Vanguard Inst Idx Inst | 22 | \$46,342 | 4.65% | \$890,579 | 5.75% |
| Vanguard Ttl Intl Stk Idx Adm | 20 | \$22,358 | 2.24% | \$325,158 | 2.10% |
| Virtus Ceredex Mid Cp Val Eq I | 9 | \$2,814 | 0.28% | \$31,258 | 0.20% |

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Assets & contributions by investment/account option category

| | Total number of participants invested | Contribution amount | Contribution percentage of total | Asset amount | Asset percentage of total |
|------------------------------|--|------------------------|--|--------------------|---------------------------------|
| EQUITIES (Continued) | | | | | |
| Wells Fargo Growth Adm | 10 | \$9,198 | 0.92% | \$465,933 | 3.01% |
| Equities Total | | \$251,922 | 25.28% | \$4,896,009 | 31.62% |
| BROKERAGE | | | | | |
| TIAA-CREF Self Directed Acct | 2 | \$0 | 0.00% | \$94,299 | 0.61% |
| Brokerage Total | | \$0 | 0.00% | \$94,299 | 0.61% |
| OTHER² | | | | | |
| Wells Fargo Stable Return J | 12 | \$270 | 0.03% | \$155,565 | 1.00% |
| Other Total | | \$270 | 0.03% | \$155,565 | 1.00% |

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|--------------------------------|--|------------------------|--|--------------------|---------------------------------|
| MONEY MARKET | | | | | |
| Vanguard Treasury MoneyMkt Inv | 99 | \$192,100 | 1.35% | \$3,048,553 | 2.19% |
| Money Market Total | | \$192,100 | 1.35% | \$3,048,553 | 2.19% |
| FIXED INCOME | | | | | |
| Baird Core Plus Bond Investor | 60 | \$3,190 | 0.02% | \$934,640 | 0.67% |
| MassMutual Pre Inf Prt Inc Ser | 121 | \$38,677 | 0.27% | \$567,879 | 0.41% |
| PGIM High Yield Z | 127 | \$69,959 | 0.49% | \$922,033 | 0.66% |
| PIMCO Total Return Admin Class | 0 | \$35,130 | 0.25% | \$0 | 0.00% |
| Templeton Global Bond AdvClass | 136 | \$23,925 | 0.17% | \$524,997 | 0.38% |
| Vanguard Ttl Bd Mkt Idx Adm | 182 | \$166,938 | 1.17% | \$3,507,236 | 2.52% |
| Fixed Income Total | | \$337,819 | 2.37% | \$6,456,785 | 4.64% |
| MULTI-ASSET | | | | | |
| TIAA-CREF Lfcyle Rtmt Inc-Rtmt | 14 | \$7,142 | 0.05% | \$1,006,549 | 0.72% |

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Assets & contributions by investment/account option category

| | Total number of participants invested | Contribution amount | Contribution percentage of total | Asset amount | Asset percentage of total |
|--------------------------------|--|------------------------|--|--------------|---------------------------------|
| MULTI-ASSET (Continued) | | | | | |
| TIAA-CREF Lifecycle 2010-Rtmt | 73 | \$128,356 | 0.90% | \$1,231,058 | 0.88% |
| TIAA-CREF Lifecycle 2015-Rtmt | 240 | \$266,529 | 1.87% | \$7,631,980 | 5.48% |
| TIAA-CREF Lifecycle 2020-Rtmt | 592 | \$1,554,443 | 10.90% | \$16,862,300 | 12.11% |
| TIAA-CREF Lifecycle 2025-Rtmt | 916 | \$2,351,028 | 16.49% | \$20,599,962 | 14.79% |
| TIAA-CREF Lifecycle 2030-Rtmt | 851 | \$1,694,319 | 11.88% | \$14,838,654 | 10.65% |
| TIAA-CREF Lifecycle 2035-Rtmt | 877 | \$1,264,123 | 8.87% | \$11,204,431 | 8.04% |
| TIAA-CREF Lifecycle 2040-Rtmt | 955 | \$1,264,856 | 8.87% | \$9,006,032 | 6.47% |
| TIAA-CREF Lifecycle 2045-Rtmt | 1,193 | \$1,288,528 | 9.04% | \$9,029,329 | 6.48% |
| TIAA-CREF Lifecycle 2050-Rtmt | 1,198 | \$1,073,697 | 7.53% | \$5,871,400 | 4.22% |

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Assets & contributions by investment/account option category

| | Total number of participants invested | Contribution amount | Contribution percentage of total | Asset amount | Asset percentage of total |
|--------------------------------|--|------------------------|--|---------------------|---------------------------------|
| MULTI-ASSET (Continued) | | | | | |
| TIAA-CREF Lifecycle 2055-Rtmt | 742 | \$598,189 | 4.20% | \$1,933,193 | 1.39% |
| TIAA-CREF Lifecycle 2060-Rtmt | 333 | \$143,406 | 1.01% | \$301,407 | 0.22% |
| Multi-Asset Total | | \$11,634,618 | 81.60% | \$99,516,295 | 71.45% |
| EQUITIES | | | | | |
| AF New Perspective Fund R4 | 172 | \$60,727 | 0.43% | \$762,270 | 0.55% |
| AMG Managers Fairpointe MdCp I | 0 | \$14,797 | 0.10% | \$0 | 0.00% |
| Brown Capital Mgmt Sml Co Inv | 125 | \$138,386 | 0.97% | \$2,628,616 | 1.89% |
| Cohen & Steers Realty Shares | 288 | \$66,286 | 0.46% | \$721,059 | 0.52% |
| Columbia Mid Cap Index Fund A | 269 | \$88,218 | 0.62% | \$1,211,472 | 0.87% |
| DFA US SmallCap Portfolio Inst | 174 | \$57,712 | 0.40% | \$354,340 | 0.25% |
| Franklin Growth Fund Advisor | 138 | \$79,136 | 0.56% | \$1,896,135 | 1.36% |

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Assets & contributions by investment/account option category

| | Total number of participants invested | Contribution amount | Contribution percentage of total | Asset amount | Asset percentage of total |
|--------------------------------|--|------------------------|--|--------------|---------------------------------|
| EQUITIES (Continued) | | | | | |
| Hartford Dividend & Growth R5 | 197 | \$76,618 | 0.54% | \$1,005,464 | 0.72% |
| Inves Oppen Developing Mkts Y | 290 | \$92,329 | 0.65% | \$1,039,873 | 0.75% |
| Northern Small Cap Value Fund | 155 | \$61,398 | 0.43% | \$614,406 | 0.44% |
| PGIM Jennison Mid Cap Growth Z | 94 | \$31,526 | 0.22% | \$663,935 | 0.48% |
| T Rowe Price Equity Income | 199 | \$70,226 | 0.49% | \$839,874 | 0.60% |
| T. Rowe Price Cap Apprec Adv | 126 | \$88,460 | 0.62% | \$1,365,947 | 0.98% |
| Vanguard Dividend Growth Inv | 183 | \$135,891 | 0.95% | \$2,487,669 | 1.79% |
| Vanguard Inst Idx Inst | 352 | \$549,073 | 3.85% | \$6,462,073 | 4.64% |
| Vanguard Ttl Intl Stk Idx Adm | 340 | \$295,485 | 2.07% | \$2,859,005 | 2.05% |

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Assets & contributions by investment/account option category

| | Total number of participants invested | Contribution amount | Contribution percentage of total | Asset amount | Asset percentage of total |
|--------------------------------|--|------------------------|--|---------------------|---------------------------------|
| EQUITIES (Continued) | | | | | |
| Virtus Ceredex Mid Cp Val Eq I | 184 | \$49,113 | 0.34% | \$836,458 | 0.60% |
| Wells Fargo Growth Adm | 68 | \$52,391 | 0.37% | \$1,427,754 | 1.03% |
| Equities Total | | \$2,007,770 | 14.08% | \$27,176,349 | 19.51% |
| BROKERAGE | | | | | |
| TIAA-CREF Self Directed Acct | 18 | \$0 | 0.00% | \$816,361 | 0.59% |
| Brokerage Total | | \$0 | 0.00% | \$816,361 | 0.59% |
| OTHER² | | | | | |
| Wells Fargo Stable Return J | 197 | \$86,342 | 0.61% | \$2,262,844 | 1.62% |
| Other Total | | \$86,342 | 0.61% | \$2,262,844 | 1.62% |

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Plan Management

Manage risk, drive efficiency
and maximize value



Revenue credit account (RCA) summary

| | 2020 Revenue Credit: |
|--------------------------|----------------------|
| Plan Changes Implemented | |
| | |
| Credit Utilization | |
| | |

| | |
|--|-----------------|
| Calendar year 2020 RCA funds used to pay qualified plan expenses | \$175.82 |
| Calendar year 2020 RCA funds returned as plan service credits | \$0.00 |
| Revenue credit account balance as of 8/5/2020 | \$175.04 |

Data as of 6/30/2020

Revenue credit account (RCA) summary

| | 2020 Revenue Credit: |
|--------------------------|----------------------|
| Plan Changes Implemented | |
| | |
| Credit Utilization | |
| | |

| | |
|--|----------|
| Calendar year 20XX RCA funds used to pay qualified plan expenses | \$176.56 |
| Calendar year 2020 RCA funds returned as plan service credits | \$0.00 |
| Revenue credit account balance as of 8/5/2020 | \$175.04 |

Data as of 6/30/2020

Appendix



Glossary

| Term | Definition |
|---|--|
| Active Participants | Participants with a status of “Active” or “Leave” that have a balance greater than zero and have made a contribution in the last 12 months. |
| Advice | Specific investment recommendations, either in person, online or over the phone, that are tailored to individual circumstances, including variables such as age, current savings rates, plan investments and tolerance for risk. |
| Annuitants | Persons receiving benefits under a TIAA annuity contract. |
| Average Annual Payout | The average annual amount that all annuitants are receiving for income generated from an institution’s plan(s). |
| Average Projected Monthly Payout | The average monthly amount that participants may receive in their retirement years for income generated from the institution’s plan(s). |
| Average Guaranteed Income | Sources of income that are expected to continue for the participant’s lifetime (e.g., Social Security, TIAA Traditional, Defined Benefits). |
| Average Projected Monthly Income | The average after-tax retirement income your participants are projected to receive from your TIAA plan(s). |
| Consolidations | The number of participants who transfer balances from other service providers into TIAA retirement accounts. |
| Contributing Participants | Participants that have made a contribution in the last 12 months. |
| Contribution Rate | Annual contributions as a percentage of annual salary. |
| Defaulted Loans | Loans for which the participant missed the expected repayment and failed to pay the total overdue amount prior to the end of the calendar quarter following the calendar quarter in which the payment was due. |

Glossary

| Term | Definition |
|---------------------------------|---|
| Defaulted Participants | Participants who have not made an investment allocation election and whose contributions have been directed to the plan's default investment. |
| Distributions | Includes, but is not limited to, the following categories: Loan, Hardship, In-Service, Terminated & Other. "Other" includes: Annuity Settlement Options, Death Benefits, Plan Loan Defaults, Withdrawals due to Opt-Out Option & Test Failure. In-Service and Terminated may include one or more of these categories: Voluntary Termination, Withdrawal, Death, Beneficiary, Installment Payment, Age 70.5 Minimum Distribution, QDRO, Hardship, Disability, Unforeseen Emergency, Full Withdrawal, Unknown, IRA Recharacterization, Excess Aggregate Contribution, Excess Contribution, Excess Deferral, Excess Annual Addition. |
| Early Engagement | A communication program that supports participants through their online account setup, plan review and goal setting and gives them an overview of the resources available to them at TIAA. |
| In Range | <p>Participants who are on target to cover their essential retirement expenses such as housing, food and healthcare but aren't yet on target to replace the income needed to maintain their current standard of living in retirement. The target income replacement rates for participants in this group vary by their current salary (pretax) and are listed below:</p> <ul style="list-style-type: none"> • Current salary <\$50K: Targeted to replace 80% - 100% of after-tax income in retirement • Current salary \$50K - \$100K: Targeted to replace 60% - 85% of after-tax income in retirement • Current salary >\$125K: Targeted to replace 50% - 70% of after-tax income in retirement |
| Income Replacement Ratio | The percentage of current salary that is estimated to be replaced during retirement, calculated using multiple variables (e.g., contribution rate, investments, salary). This is a way to visualize how ready your employees are for retirement. |
| Lifetime Income | An arrangement that provides fixed or variable income payments for the life of the annuitant. |
| Needs Action | <p>Participants who aren't yet on target to cover essential expense needs in retirement such as housing, food and healthcare. The target income replacement rates for participants in this group vary by their current salary (pretax) and are listed below:</p> <ul style="list-style-type: none"> • Current salary <\$50K: Targeted to replace <80% of after-tax income in retirement • Current salary \$50K - \$100K: Targeted to replace <60% of after-tax income in retirement • Current salary >\$125K: Targeted to replace <50% of after-tax income in retirement |

Glossary

| Term | Definition |
|---|--|
| On Track | <p>Participants who are on target to meet or exceed the income replacement rate needed to maintain their current standard of living in retirement. The target income replacement rates for participants in this group vary by their current salary (pretax) and are listed below:</p> <ul style="list-style-type: none"> • Current salary <\$50K: Targeted to replace >100% of after-tax income in retirement • Current salary \$50K - \$100K: Targeted to replace >85% of after-tax income in retirement • Current salary >\$125K: Targeted to replace >70% of after-tax income in retirement |
| Other Enrollments | All other enrollments not classified as remittance, phone, paper or online. |
| Participant-Directed Contributions | Contributions that have been invested per the participant's investment allocation election. |
| Participation Rate | Participation Rate is calculated by dividing the (number of eligible and participating) by (number of eligible and participating + number of eligible and not participating). |
| Peer Benchmark | A group of institutions at TIAA who provide a measure of comparison to your plan based on comparable plan asset size and market segment (K-12, Higher Education, Healthcare & Government). |
| Readiness Influencers | Plan features and participant behaviors that may contribute to a participant's retirement readiness and income replacement ratio. |
| Rebalanced | Total number of participants who reallocated their account balances during the last 12 months. |
| Remittance | Participant enrollment information, including investment election specifications, provided to TIAA by the plan sponsor. |
| Retirement Readiness | Measures the degree to which a participant is on track to retire with sufficient lifetime income while maintaining a desired standard of living. |
| Terminated Participants | Participants with an employee status of "Terminated." |

Glossary

| Term | Definition |
|----------------------------|--|
| Total Annual Payout | The total annual amount that all annuitants are receiving for income generated from an institution's plan(s). |
| Total Participants | Includes participants with an ending balance and at least one contribution during the evaluation period. In addition, other filters are applied to remove participants whose Ibbotson results could disproportionately skew the outcomes of the larger population. |

Income replacement ratio methodology and assumptions

Participant-related salary, contribution, retirement age and advice assumptions:

- Participant compensation is based on data submitted by the employer. The participant's gross annual income is used for various calculations, including retirement income replacement ratio, estimated Social Security benefits, and estimated federal and state taxes.
- Participant contributions are aggregated for a 12-month period for participants with a balance at the beginning of the period. For participants without a beginning balance, the contribution amount from the last month of the 12-month period is annualized. IRS contribution limits are applied and adjusted for participants eligible for catch-up provisions. Morningstar Investment Management LLC shifts any contribution amount above the annual limit to after-tax contributions for modeling purposes.
- All retirement plan contributions are considered to be dedicated solely for retirement. Assets will not be liquidated for use prior to retirement, and all contributions will end at the Target Retirement Age (TRA).
- The TRA value is defaulted to 67 for most plan participants. Participants aged 66 or higher have a TRA that is set two years from the current age. Life expectancy values are estimated by Morningstar and are based on participant age and gender.
- The participant's balance is aggregated for all selected plans. Amounts are designed as pretax and Roth contributions, as appropriate.
- The participant's asset allocation, for the purposes of this analysis, is categorized into simplified asset classes (i.e., stable value, equities, real estate, fixed income, multi asset and money market).
- The advice provided Morningstar consists of model portfolios composed of target allocations for the asset classes. Based on the target retirement goals, Morningstar will recommend a specific tolerance level designed to adjust over time based on Morningstar's proprietary methodology which customizes a risk level trajectory for the participant.
- The hypothetical advice target for the model is a 100% replacement ratio.
- The Morningstar tool's advice is based on statistical projections of the likelihood that an individual will achieve their retirement goals. The projections rely on financial and economic assumptions of historical rates of return of various asset classes that may not reoccur in the future, volatility measures and other facts, as well as information the individual provides. Morningstar's advice engine includes tax-rate assumptions, mortality tables, and Social Security estimates.

Retirement income replacement ratio calculation assumptions:

- TIAA measures retirement income replacement ratios by calculating the projected stream of distributions from participants' assets and estimated Social Security benefits in current dollars as a percentage of employees' current salaries.
- Using the participant's actual salary and/or compensation, TIAA leverages the advice engine from Morningstar an independent expert retained by TIAA, to perform a sophisticated, Monte Carlo analysis (500 total simulations) to project the retirement income replacement ratio.
- The results indicate the participant's 70% probability of achieving the retirement goal. A lower probability of success is associated with better (and less likely) estimated income. Your participants can also model different outcomes for themselves by going online to **[TIAA.org/retirementadvisor](https://www.tiaa.org/retirementadvisor)** (online Retirement Advisor tool).
- Data provided represents inputs into the Morningstar advice engine for plan management purposes. If a participant uses Retirement Advisor online or has an advice session with a consultant, estimated retirement income is not replaced with any of the information used in the Plan Outcome Assessment report calculations.
- The plan-level retirement income replacement ratio is determined by calculating the average retirement income replacement ratio of all participants in the plan analysis. All actively contributing participants are included in the analysis, unless the participant has annual compensation of less than \$5,000, has contributed less than \$300 in the previous 12-month period, has a current balance less than \$100, or is less than 18 or greater than 81 years of age.
- **IMPORTANT:** Projections, and other information generated through the TIAA Plan Outcome Assessment and the Morningstar tool regarding the likelihood of various investment outcomes, are hypothetical, do not reflect actual investment results, and are not a guarantee of future results. The projections are dependent in part on subjective and proprietary assumptions, including the rate of inflation and the rate of return for different asset classes, and these rates are difficult to accurately predict. The projections also rely on financial and economic historical assumptions that may not reoccur in the future, volatility measures and other facts. Results may vary with each use and over time.

Important information

This material is for informational or educational purposes only and does not constitute investment advice under ERISA. This material does not take into account any specific objectives or circumstances of any particular investor, or suggest any specific course of action. Investment decisions should be made based on the investor's own objectives and circumstances.

TIAA.org

You should consider the investment objectives, risks, charges and expenses carefully before investing. Please call 877-518-9161 or log on to TIAA.org for underlying product and fund prospectuses that contain this and other information. Please read the prospectuses carefully before investing.

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Memorandum

TO: NDPERS Board

FROM: Derrick Hohbein & Rebecca Fricke

DATE: September 8, 2020

SUBJECT: De Minimis & Internal Review Policies

Discussion took place during the May and August 2020 Audit Committee meetings in regards to the De Minimis Policy that was adopted by the Board in September 2016, as well as an internal review policy that was adopted by staff. Because the internal review policy may impact what a member's benefit is when they separate employment, the Audit Committee felt that policy should go before the full Board for review and approval.

De Minimis Policy:

The Board adopted the current De Minimis Policy at the September 2016 Board meeting. This policy was established to direct NDPERS staff how to handle the various retirement account errors due to wages, service credit, account contributions or interest as they occur. The original De Minimis Policy (Attachment A) requires staff to make all corrections to a member's account for any corrections that impact a member by \$5 or more.

Overpayments:

NDAC 71-02-04-10, in summary, states that NDPERS must attempt to collect all overpayments unless the cost of recovering the amount of the overpayment is estimated to exceed the overpayment, in which case the repayment is considered to be unrecoverable. Because adjustments usually involve staff from three different divisions in order to accomplish, staff recommended to the

audit committee that we increase the de minimis threshold on overpayments from \$5 to \$50. The Audit Committee agreed with this recommendation.

Underpayments:

NDAC 71-02-04-11, in summary, states that an "underpayment" means a payment of money by the Public Employees Retirement System that results in a person receiving a lower payment than the person is entitled to under the provisions of the retirement plan of membership.

Recognizing the importance of making member account balances as accurate as possible, staff recommended to the Audit Committee increasing the de minimis threshold on underpayments from \$5 to \$25, which the Audit Committee agreed with.

Attachment B refers to an email we received from Segal Consulting when we first discussed this matter back in 2014. At that time, they provided that they considered reasonable thresholds to be \$75 for an underpayment and \$100 for an overpayment.

The full revised De Minimis Policy (Attachment C) is attached for your review and approval.

Internal Review Policy:

At the April 2017 Board Meeting staff brought a Retirement Contribution Policy before the Board for approval (Attachment D). As a result of this policy adoption, NDPERS developed a Final Average Salary (FAS) Review Procedure that includes verbiage stating, "if wages outside of FAS for employees in question require adjustment or if other employees require adjustments, the employer has the option to self-correct through Employer Self Service and receive a refund of contributions, if applicable. The employer is required to correct the error in wage reporting prospectively."

This policy is consistent with the procedures that were approved by the Board in early 2017, however, the procedures approved by the Board were specific to overtime pay while the current internal procedures are applied to any issues that would affect wages.

The Audit Committee recommended revising the final average salary review process to include correcting any active or deferred member account where the FAS process would not reasonably catch errors (i.e. annualization of wages vs actual wage reporting). Recognizing the business process change over time, they felt like requiring adjustments to members that have already withdrawn their accounts or retired was not equitable to that population.

Attachment E has the full internal review policy that was reviewed and approved by the Audit Committee.

Board Action Requested:

Review and approve the revised De Minimis Policy and Internal Review Policy.



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Memorandum

TO: NDPERS Board

FROM: Sharon Schiermeister

DATE: September 15, 2016

SUBJECT: De Minimis Policy

NDPERS has retirement account adjustments due to various reasons. These adjustments may include errors found in reported wages, service credit, or interest calculations. Adjustments to reported wages and service credit may affect a member's ongoing monthly retirement benefits. Adjustments to account balance and accumulated interest affect a member's minimum guarantee or the amount available for a lump sum refund.

Currently, NDPERS attempts to correct and process any adjustments to member accounts. However, if the adjustment is small and requires reissuing or reclaiming a check for a minimal amount, this can be costly to correct. In some instances, the member disregards cashing a reissued check or paying a balance due. In reviewing guidelines and policies by other state retirement plans, NDPERS has found that often a De Minimis policy is in place to avoid this issue.

Administrative rules provide the following guidance for benefit overpayments and underpayments:

71-02-04-10 (2) Erroneous payment of benefits – Overpayments states:

A person who receives an overpayment is liable to refund those payments upon receiving a written explanation and request for the amount to be refunded. All overpayments must be collected using the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in like capacity and familiar with such matters would use in the conduct of an enterprise of like character and with like gains. If the cost of recovering the amount of the overpayment is estimated to exceed the overpayment, the repayment is considered to be unrecoverable.

71-02-04-11(2) Erroneous payment of benefits – Underpayments states:

If an underpayment occurs, the amount of the lump sum payment must be paid within sixty days of the discovery of the error.

According to NDAC 71-02-04-10, NDPERS does have the option to write off benefit overpayments as unrecoverable if the cost exceeds the amount to be recovered. However, there is no such option for benefit underpayments. Staff is requesting consideration to implement a policy that will provide guidelines for de minimis adjustments to a member's retirement account.

Proposed De Minimis adjustment policy for NDPERS:

Minimum Guarantee:

- Errors that result in either a positive or negative adjustment of \$5.00 or less to a member's minimum guarantee will not be corrected

Recurring Monthly Retirement Payments:

- Errors that result in either a positive or negative adjustment that impact final average salary and/or Service Credit will always be made, regardless of amount
- Errors that impact the benefit calculation for a deceased payee will always be made, regardless of amount

One-Time Refunds/Rollovers

- Errors that result in either a positive or negative adjustment of \$5.00 or less will not be corrected
- Errors that result in a positive adjustment of greater than \$5.00 will be corrected and payment issued to the member according to 71-02-04-11
- Errors that result in a negative adjustment of greater than \$5.00 will be corrected and pursued for collection from the member according to 71-02-04-10. If the member does not respond within 30 days after initial correspondence and the amount of the adjustment is less than \$200, the receivable will be written off as uncollectible. If the adjustment is \$200 or more, it will be turned over to the Attorney General's office for collection.

Board Action Requested: Adopt a De Minimis adjustment policy

Steffes, MaryJo V.

From: Walker, Melanie <mwalker@segalco.com>
Sent: Wednesday, October 8, 2014 6:31 PM
To: Steffes, MaryJo V.
Subject: RE: Deminimus Overpayments / Underpayments

Mary Jo,

Below is our response to your questions about correcting small amounts of overpayments or underpayments to participants in a defined benefit plan. Please let me know if you have additional questions.

Question 1: Are there federal law obligations setting de minimus payments as unrecoverable? (including account balance minimum guarantee, interest, wage adjustments, refunds)

Answer 1: There is no federal law that is directly applicable to the situations you described because these are not IRS qualification failures (such as exceeding IRS dollar limits), but rather are a mistake of fact by the plan in honoring a legal promise or contract between the participant and the plan. However, there is guidance from the IRS that relates to correcting qualification failures under the Employee Plan Compliance Resolution System (EPCRS). The EPCRS guidance states that generally a mistake must be fully corrected, and the fact that a correction is inconvenient or burdensome is not enough to relieve the plan of the need to fully correct an error. However, full correction may not be required in certain situations if it is unreasonable or not feasible. Thus, correcting small benefits or recovering small overpayments may be an exception to the requirement of full correction.

The EPCRS guidance indicates that if a corrective distribution to a participant is \$75 or less, the plan is not required to make the corrective distribution if the reasonable direct costs of processing and delivering the distribution would exceed the amount payable. That guidance also states that if the total amount of an overpayment is \$100 or less, the plan is not required to seek the return of the overpayment from the recipient nor required to notify the individual that the payment is not eligible for rollover or other favorable tax treatment. Please note that this guidance applies only to IRS corrections, so that your plan cannot legally rely on this guidance. However, I think that using the EPCRS to guide your own correction process helps demonstrate that your actions are reasonable.

Question 2: Are we able to set a threshold for de minimus payments? (Ex: \$5.00, \$25.00, etc.) If so, is it an option to set the threshold based upon a percentage versus a flat dollar amount to make it more equitable for the member?

The EPCRS guidance does provide some information on dollar amount thresholds for de minimus payments (\$75 for underpayment, \$100 for overpayment). However, you must still determine what is a reasonable correction threshold amount for your own plan's circumstances. The EPCRS guidance does not mention using thresholds based on a percentage, but does indicate that any correction method must not discriminate in favor of highly compensated employees.

I hope this is helpful.

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De minimis Policy Update

NDPERS has retirement account adjustments due to various reasons. These adjustments may include errors found in reported wages, service credit, or interest calculations. Adjustments to reported wages and service credit may affect a member's ongoing monthly retirement benefits. Adjustments to account balance and accumulated interest affect a member's minimum guarantee or the amount available for a lump sum refund.

Currently, NDPERS attempts to correct and process any adjustments to member accounts. However, if the adjustment is small and requires reissuing or reclaiming a check for a minimal amount, this can be costly to correct. In some instances, the member disregards cashing a reissued check or paying a balance due. In reviewing guidelines and policies by other state retirement plans, NDPERS has found that often a de minimis policy is in place to avoid this issue.

Administrative rules provide the following guidance for benefit overpayments and underpayments:

71-02-04-10 (2) Erroneous payment of benefits – Overpayments states:

A person who receives an overpayment is liable to refund those payments upon receiving a written explanation and request for the amount to be refunded. All overpayments must be collected using the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in like capacity and familiar with such matters would use in the conduct of an enterprise of like character and with like gains. If the cost of recovering the amount of the overpayment is estimated to exceed the overpayment, the repayment is considered to be unrecoverable.

71-02-04-11(2) Erroneous payment of benefits – Underpayments states:

If an underpayment occurs, the amount of the lump sum payment must be paid within sixty days of the discovery of the error.

According to NDAC 71-02-04-10, NDPERS does have the option to write-off benefit overpayments as unrecoverable if the cost exceeds the amount to be recovered. However, there is no such option for benefit underpayments. Staff is requesting consideration to implement a policy that will provide guidelines for de minimis adjustments to a member's retirement account.

Proposed de minimus adjustment policy for NDPERS:

Minimum Guarantee:

- Errors that result in a positive adjustment of \$25.00 or less to a member's minimum guarantee will not be corrected.
- Errors that result in a negative adjustments of \$50 or less to a member's minimum guarantee will not be corrected.

Recurring Monthly Retirement Payments:

- Errors that are discovered within the member's retirement account setup that result in either a positive or negative adjustment that impact final average salary and/or Service Credit will always be made, regardless of amount

One-Time Refunds/Rollovers

- Errors that result in a positive adjustment of greater than \$25.00 will be corrected and payment issued to the member according to 71-02-04-11
- Errors that result in a negative adjustment of greater than \$50.00 will be corrected and pursued for collection from the member according to 71-02-04-10. If the member does not respond within 30 days after initial correspondence and the amount of the adjustment is less than \$200, the receivable will be written off as uncollectible. If the adjustment is \$200 or more, it will be turned over to the Attorney General's office for collection. If the member does not respond to the Assistant Attorney General's correspondence, the Assistant Attorney General working on the case will determine if the cost to pursue litigation exceeds the potential reclamation and will provide staff direction if they will continue to pursue the claim or if they recommend that NDPERS can write-off the amount as unrecoverable. The PERS Executive Director will make a final determination based on this guidance.



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Memorandum

TO: NDPERS Board

FROM: Sharon Schiermeister

DATE: April 19, 2017

SUBJECT: Retirement Contribution Policy

At the March 2017 board meeting, the Board was provided with proposed policies for overtime pay and written agreements to help address inconsistencies in how salary is being reported for retirement contribution purposes (Attachment 1). The Board directed staff to distribute the proposed policies to participating employers to gather their feedback.

Process

State Employers. We provided the Office of Management and Budget with the draft policies and asked if they would be providing feedback on behalf of the state agencies, or if we should distribute the policies to each agency for individual feedback. They determined that they would review the policies and provide feedback, so we did not send the draft policies out to each state agency.

Political Subdivision Employers. Information was mailed to each employer on April 6 explaining the policies and asking them to complete a brief survey by April 18 (Attachment 2). To help explain the information and respond to questions, staff hosted webinars on April 11 and April 13, which included a recording that was made available on the website. Approximately 90 employers participated in the webinars. Follow-up emails were sent out directing employers to the website to view the recorded webinar and encouraging them to complete the survey.

Feedback

State Employers. OMB expressed deep concerns with making a change to our current overtime policy and they are not open to changing the definition of overtime currently used by the State as it relates to retirement. Anything over 40 hours per week is considered overtime, whether it is paid at straight time or time and one-half, and retirement is not paid on overtime. They did not provide any feedback on the proposed written agreement policy, as this generally does not occur within state agencies.

Political Subdivision Employers. We received survey responses from 160 employers out of 356. Attachment 3 is summary of the survey results. The results show:

- 86% of the employers who responded did not have concerns with the current overtime policy and their payroll system was able to administer this definition
- 39% of the employers who responded would utilize written agreements
- 92% thought the proposed implementation date of July 1, 2017 for written agreements was feasible
- 87% did not have concerns with the proposed written agreement policy

Overtime Pay Policy

The feedback received from the State and political subdivision employers who completed the survey indicates strong support to maintain our current interpretation of overtime pay. Therefore, staff would recommend that the following policy be adopted:

- a. Define overtime to include hours worked over 40 in a week that are paid at more than the regular hourly rate (time and one-half), and also hours over 40 in a week that are paid at the regular hourly rate. For public safety officers, overtime would be defined as hours worked over the regularly scheduled work period that are paid either at the regular hourly rate or time and one-half.
- b. Upon becoming aware of overtime reported in error for a member, either at the time of contribution reporting through the salary variance process or at the time of retirement when final average salary (FAS) is being reviewed, corrections would be made to that member's account as follows:
 - i. Remove overtime wages and related contributions for all months that were reported in error for that member
- c. If an employer notifies PERS of a reporting error which was not identified through our salary variance or FAS review process, the employer would be advised to correct the error going forward; however, the employer has the option to initiate corrections using PERSLink Employer Self Service (ESS). The employer would also be advised that corrections may be required in the future if a member's salary is questioned as part of the salary variance or FAS review process.

Written Agreements Policy

The feedback received from the political subdivision employers who completed the survey indicates strong support to change our current definition of written agreement. Therefore, staff would recommend the following policy to address the inconsistency we have seen in this area:

- a. Define 'written agreement' to be "a document that includes the work to be performed by the employee and is signed by both the employee and the employer".
- b. Make the definition effective 7/1/2017 to allow us to communicate the change to our employers
- c. Upon becoming aware of wages being reported in error for a member under this policy, either at the time of contribution reporting through the salary variance

process or at the time of retirement when final average salary (FAS) is being reviewed, corrections would be made to that member's account as follows:

- i. Remove ineligible wages and contributions for that member, back to 7/1/2017
 - ii. Variances prior to 7/1/2017 resulting from written agreement interpretation would not be corrected
- d. If an employer notifies PERS of a reporting error which was not identified through our salary variance or FAS review process, the employer would be advised to correct the error going forward; however, the employer has the option to initiate corrections using PERSLink Employer Self Service (ESS). The employer would also be advised that corrections may be required in the future if a member's salary is questioned as part of the salary variance or FAS review process.
- e. After 7/1/2017, if PERS becomes aware that an employer is not reporting wages and contributions for eligible wages pursuant to the written agreement clarification, they will be required to be reported from 7/1/2017 forward.

Board action requested:

Adopt policies for overtime pay and written agreements.

Policy for Using Manual Benefit Recalculation Spreadsheet effective 9/8/2020

- **Required** if audit finding requires account recalculation and adjustment for a member that received a **pop-up benefit after initial retirement** Or if an error was found through random audit that requires adjustment to J&S and/or pop-up Single Life benefit amount. The system cannot recalculate benefit amount for member back to initial retirement effective date or pop-up date so benefit must be manually calculated. Audit will secondarily review.
- **Required** if member's retirement effective date is prior to October 1, 2010. The system cannot recalculate benefit amount requiring **pre-PERSLink information**. Audit will secondarily review.
- **Required** when underpayment of benefits (due to missing underpayment or random audit) occurs and **simple interest is due** to member. The system does not calculate simple interest owed to member as this is based upon NDAC 71-02-04-11. Audit will verify and sign off correct interest amount to be paid member.
- **Required** when account adjustment for member is due to **audit finding**. MOU must be used to recover overpayment and if simple interest must be applied to underpayment. Internal audit will secondarily review adjusting entry to ensure amount being collected or paid is accurate.
- **Required** if change in YOS or reported contributions requires **retirement effective date change** and payee account is cancelled to setup a new payee account. Audit will secondarily review.
- **Not required** if member (and beneficiary) effective date of benefits began on or after October 1, 2010. With YOS or FAS change, PERSLink should be able to recalculate overpayment amount or underpayment amount when no interest is due.

FAS Review Procedures effective 9/8/2020

1. Only salaries within the FAS (highest 36) that have a variance of 15% or more (positive or negative) are sent to the employer for review. Exception: salary spikes for employees that have a consistent non-monthly payroll cycle variance (i.e. biweekly/semi-monthly payroll cycles) will not need to be verified.
2. If salaries in FAS require adjustments, the high 36 salaries initially questioned must be compared to the adjusted salaries. Secondary review of FAS is required to verify if additional salaries (not previously included in FAS) are now included in the FAS and have a variance of 15% or more.
3. Based upon employer response:
 - a. **If response is only to salaries in question**, any required adjustments will be sent to accounting to correct ineligible wages.
Example: 5 of 36 salaries in FAS were questioned and employer responded to these 5 salaries questioned. Counselor sends salary adjustments to accounting for correction, if needed.
 - b. **If response speaks to salaries outside of salaries questioned**, all 36 salaries in the FAS calculation will be sent to employer for review of ineligible wages.
Example: 5 of 36 salaries in FAS were questioned and employer responded stating that OT was reported for other months. Counselor sends all 36 salaries in FAS to the employer for review and accounting will correct, if needed.
4. Benefits division will provide the salary adjustment details for the specific months questioned in the following format to the accounting division:

| Year | Month | Wages & Salary | Correct Wages | Adjustment | Comment |
|------|-------|----------------|---------------|------------|---|
| 2017 | 2 | \$3,000.00 | \$2,886.00 | (\$114.00) | OT, bonus to annualize, retro pay time frame, etc |

5. Salary adjustments will be processed by accounting. After adjustment, accounting staff will initial and date corrections made to member account and add required documentation to FileNet. The employer will receive a refund of contributions for any removal of wages they submit and will be billed for any additional wages they are adding, plus interest.
6. **If wages outside of FAS for employee in question require adjustment or if other employees require adjustments**
 - a. If the error is something that is reasonably expected to be caught in our normal FAS or years of service review processes performed by the benefits division, the employer has the option to self-

correct historical wages for all of its members through ESS and receive a refund of contributions, if applicable. The employer is required to correct the error in wage reporting prospectively.

Example: Employer indicates that OT was reported for the last 10 years, employer has the option to self-correct historical wages for all of its members, as NDPERS is only adjusting the wages in question that directly affect a specific member's retirement benefit calculation, and will be required to correct their reporting prospectively.

- b. If the error is something that is not reasonably expected to be caught in our normal processes, this requires additional follow up from PERS staff. Accounting will be notified of the situation and will have a query run for all active and deferred employees under the organization. Accounting will work with the employer to correct all wages that are identified with the problem and have either an active or suspended retirement plan in the system. The employer is required to correct the error in wage reporting prospectively.

Example: Employer indicates that wages have always been annualized. Because we look for salary spikes when someone retires, annualization of wages wouldn't be caught under our normal circumstances. PERS Staff will work to correct all active and deferred accounts that were associated with this organization and who have a similar error in reporting. The employer will be required to correct the error in wage reporting prospectively.

Secondary Payee Account Review Procedures effective 9/8/2020

Disability to Normal

- FAS for disability benefit will not be reviewed at time retiree is converted to Normal Retirement (meets age 65 or "Rule"). Expectation is that FAS was verified at time of initial retirement.
- At conversion, if Normal Retirement benefit is larger, YOS will be reviewed to verify accuracy of new calculation based upon YOS.
- Verify effective date of Normal Retirement

Return to Work

- Initial benefit for retirement will not be reviewed
- Nov 1, 2017 – March 31, 2018 - At time retiree applies for subsequent retirement, FAS and YOS will be reviewed for secondary benefit. If adjustments to FAS or YOS for subsequent retirement also affect the initial retirement benefit, both amounts will be corrected.
- Effective April 1, 2018 –NDAC for RTW was amended at this time and only YOS and FAS earned during the RTW period will be reviewed.

Pop-ups

- Wages and YOS for initial benefit will not be reviewed at time retirees' spouse passes away and retiree has pop-up to Single Life option. Expectation is that this was verified at time of initial retirement.
- Verify pop-up is at the Single Life amount, including any early retirement or other reduction factors applicable at member's retirement and benefit factor increases that have occurred since the member's retirement.
- Verify death certificate is on file.
- Verify effective date of benefit eligibility.

J & S Survivor Benefits

- Wages and YOS for initial benefit will not be reviewed at time retiree passes away and the existing benefit passes to the spouse. Expectation is that this was verified at time of initial retirement.
- Verify death certificate indicates member was married and lists surviving spouse's name (maiden name), if applicable.
- Verify surviving spouse's birth certificate is on file and accurate for the setup of new stream of benefit payments.
- Verify beneficiary information
- Verify effective date of benefit eligibility
- Verify J&S benefit and factors to calculate spousal benefit.

Term Certain Benefits

- Wages and YOS for initial benefit will not be reviewed at time payee passes away and the existing benefit passes to beneficiary. Expectation is that this was verified at time of initial retirement.
- Verify amount due to beneficiary, if the payee dies before the term period expires or if there is any original minimum guarantee remaining



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Memorandum

TO: NDPERS Board

FROM: Rebecca

DATE: September 8, 2020

SUBJECT: Deloitte Consulting – Employee Benefit Programs Committee Study on Carving out Pharmacy

Attached for the Board's review is the Legislative Employee Benefit Programs Committee Study on Carving Out Pharmacy. This study was prepared at the request of the Committee as required by HB 1374. The study provides pros and cons related to the pharmacy benefits being carved out of the bundled medical and pharmacy arrangement that NDPERS currently has.

Deloitte will be providing their findings to the Committee at their September 9th meeting. Following this presentation, we will plan to have Deloitte provide a summary to the Board at a future meeting.

State of North Dakota House Bill No.
1374, Section 3:

Public Employees Retirement System
Prescription Drug Coverage Study

Final Report

August 6, 2020

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1 Executive Summary

This study highlights some of the advantages and disadvantages of North Dakota Public Employees Retirement System (NDPERS) entering into a separate prescription drug contract under the uniform group insurance program.

In the current uniform group insurance program, prescription drug coverage is provided to participants as part of the medical plan. Section 54-52.1-04.2 of the North Dakota Century Code (Century Code) allows for prescription drug benefits to be provided through a traditional health insurance plan or through a self-insurance health plan. NDCC 54-52.1-02 allows the Board to establish a separate subgroup in the uniform group insurance program for prescription drug benefits thereby unbundling it from the medical plan. In this context, “unbundled” means the pharmacy benefits may be separated or “carved-out” from the medical benefits contract and administered under a distinct pharmacy benefits contract that may be awarded to a different insurer or administrator than the medical insurance plan.

Section 3 of House Bill No. 1374 requires that the Legislative Management study the feasibility and desirability of the Public Employees Retirement System entering a separate contract for prescription drug coverage under the uniform group insurance program. Deloitte Consulting LLP[†] was engaged to analyze considerations of unbundling the pharmacy benefit management from the uniform group insurance program.

Scope of Review

To aid in the evaluation of changes to the uniform group insurance program, the scope of this review was limited to identifying considerations relating to a carve-out for prescription drug coverage under the uniform group insurance program. As described above, the meaning of “carve-out” in the context of this study is the

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separation of the prescription drug benefit contract from the medical benefit contract under the uniform group insurance program. The scope does not include an evaluation of carving-out the administration of the prescription drug benefit from the uniform group insurance program and assuming administration of the prescription drug benefit “in-house” (like North Dakota Medicaid).

This study does not attempt to quantify the financial outcome of a carve-out for prescription drug coverage because the financial outcomes of doing so are dependent on the insurance market and the interests and capabilities of the insurers and administrators that participate. NDPERS is currently engaged in a procurement for the uniform group insurance program for the 2021-23 biennium and the results of that procurement will provide essential information into the availability, feasibility, and desirability of a carve-out prescription drug program.

This study does not judge whether the uniform group insurance program should pursue a carve-out prescription drug program. Rather, it describes the different considerations that the State of North Dakota (“State”) may evaluate to determine if a carve-out program is in the best interest of the State and its eligible plan members.

Study Format

The study reviews the market forces and structural constraints that will factor into any decision the State makes to pursue a carve-out prescription drug program. These topics are summarized into the following five primary sections, with considerations for a prescription drug carve-out included within each section.

In addition, the study provides an overview of the uniform group insurance program and findings from the State’s previous assessments of self-insurance arrangements.

- **Competitive Dynamics in the North Dakota Health Insurance Market**
Provides an overview of the competitive landscape of the North Dakota health insurance market and insurers participating in the state. It also reviews two factors in North Dakota that may have an impact on prescription drug proposals, including 1) North Dakota’s pharmacy ownership law; and 2) North Dakota Century Code statutes that require prescription drug financial disclosures.
- **Prescription Drug Market Trends and Management Strategies**
Explores prescription drug trends contributing to rising drug costs in the United States and in North Dakota. The section identifies management

strategies that may be considered in the prescription drug contract to control prescription drug expenditures.

- **Fully-Insured and Self-Insured Contracts**

Describes the characteristics and differences between fully-insured and self-insured contracts and how changes to the insurance model may affect a carve-out prescription drug plan.

- **Prescription Drug Contracts**

Reviews how prescription drug contract pricing is structured and the different contract options available in the market. North Dakota Century Code requirements for prescription drug financial disclosures and audit requirements are particularly important to any prescription drug contract, regardless of the funding arrangement.

- **Pharmacy Benefit Managers and Carve-Out Trends**

Reviews the evolution of the pharmacy benefit manager (“PBM”) landscape and the major competitors in the market. It identifies trends in carving-out prescription drug benefits and why market consolidation may incentivize medical and pharmacy benefit integration.

Summary of Considerations of a Carve-Out Prescription Drug Plan Program

The considerations for transitioning from the fully-insured uniform group insurance program to a carve-out prescription drug program will be based on the availability and feasibility of different options. The competitive procurement process that is underway for the uniform group insurance program will highlight the relative importance of each consideration in the context of the alternatives available to NDPERS. A summary of the considerations outlined in this study that will merit evaluation include, but are not limited to:

- **A carve-out prescription drug plan would likely require a change to self-insurance for prescription drugs.** Fully-insured carve-out prescription drug benefits are not commonly available in the market.

The competitive procurement will determine the insurance options available for the 2021-23 biennium. If the State determines that a self-insured plan is not in

the best interest of the State and the State's eligible members, then a carve-out prescription drug plan may not be available.

- **Carving-out the pharmacy benefit allows for greater flexibility to procure benefits arrangements determined to be in the best interest of the State.** Under the current arrangement, the NDPERS Board selects the insurer that presents the best overall value for medical and pharmacy, even though the best value for medical and pharmacy may not necessarily be the same provider. Carving-out the prescription drug benefit gives the Board the flexibility to select the best value for each benefit.
- **Contracting for a carve-out pharmacy benefit under a self-insured plan allows for more choice in administrators.** The insurance market in North Dakota is concentrated and most commercially insured business in the state is administered by Blue Cross Blue Shield of North Dakota (BCBSND) or Sanford Health Plan. There are many pharmacy benefit managers that administer self-insured benefit programs that do not offer fully-insured options or medical benefits.
- **Carving-out the prescription drug benefit allows for more control of aspects of the prescription drug plan.** As described by consulting firm Pharmacy Benefits Consultants (PBC) in their testimony to the Health Care Reform Review Committee, carving-out the prescription drug benefit will give the Board more control over the prescription drug contract, formulary, and clinical management programs.
- **Self-insured, carve-out, prescription drug programs allow for greater visibility into costs.** Most fully-insured arrangements do not provide detailed cost data and financial information because the insurer assumes all the risk. Self-insured arrangements offer a higher degree of control and visibility into the underlying cost components of the contract. North Dakota Century Code statutes mandate access to prescription drug financial information regardless of the insurance arrangement. Due to the Century Code requirements, some insurers may not offer fully-insured insurance options, or compliant fully-insured options, for the uniform group insurance program.
- **A self-insured, carve-out prescription drug plan would eliminate the downside risk protection of the modified fully-insured contract.** The modified fully-insured arrangement with gain-sharing offers the advantage of

fixed monthly premiums and no risk of loss should claims exceed premiums. A self-insured plan would require that the State assume all claims risk (or purchase stop loss insurance to insure against large claim losses).

- **A self-insured, carve-out prescription drug plan would result in more claims volatility than the modified fully-insured contract.** Prescription drug costs continue to rise, driven by the prevalence of chronic conditions and specialty drugs that treat high-cost, complex conditions. Additionally, market events such as COVID-19 could have a dramatic impact on claims costs. NDPERS' size will help minimize the volatility associated with large claims or unpredictable risk, however, claims under a self-insured contract will fluctuate more than a fixed premium agreement.
- **Reserve funding may need to be increased.** In a self-insured, carve-out prescription drug arrangement, the State will need to build a reserve fund for fluctuations in claims, costs, and expenses. Under current statute, the balance amount would need to be between two and four months of expected claims.

Depending on the funding required, and the availability of funds, higher premiums may be necessary to build the reserve.

- **Stop loss insurance may introduce new costs to the plan.** Under a self-insured plan, stop loss insurance could be purchased to mitigate some of the risk of large claims. Given NDPERS' size and tolerance for risk, stop loss insurance may not be necessary. If the State implements a self-insured, carve-out, prescription drug plan while maintaining a fully-insured medical plan, stop loss coverage options may be limited or unavailable.
- **Direct or indirect carve-out costs.** It is common for insurers and administrators to charge "carve-out" fees as a disincentive to carving-out the prescription drug benefit. Fees can include, but are not limited to, increased medical premiums, higher medical administrative service fees, file feed charges, and implementation fees.
- **A carve-out may add administrative complexity for NDPERS.** Carving-out the prescription drug benefit to a separate vendor may create the need to add resources, including additional NDPERS personnel, to manage the third-party. A carve-out prescription drug plan typically requires a separate contract, separate

account and customer service teams, separate invoicing and financial requirements, separate reporting systems, and separate programs and services.

Carving-out also likely requires additional administrative tasks such as sharing additional claims and eligibility files, coordinating plan documents, monitoring, and reconciling separate financial reporting. NDPERS also supports a variety of wellness and disease management programs that are reliant on data and collaboration with the medical and prescription drug insurer that would need to be replicated in a carve-out arrangement. These additional administrative needs would likely result in NDPERS requiring additional staff.

- **Accumulator integration for high-deductible plans would require additional coordination.** Plan designs that feature combined medical and prescription drug deductibles and out-of-pocket maximums (most frequently high-deductible health plans) require careful tracking to accurately account for member out-of-pocket payments. In a carve-out prescription drug program, file feeds with claims information need to be exchanged regularly between the medical and prescription drug plan in order to track these accumulators. Most medical and prescription drug administrators have the ability to integrate these accumulator files but updates to member accumulators may be slower than if the medical and prescription drug benefits are combined under a single insurer.
- **A carve-out may impact clinical integration.** A carve-out contract could result in less clinical integration between the medical and prescription drug administrators. Insurers combine medical and pharmacy data to monitor for issues such as gaps in care; adherence; and fraud, waste, and abuse; track health outcomes; and identify potential risks. Less integration may create challenges in combining data efficiently and coordinating between medical and prescription drug to achieve clinical outcomes. Plan sponsors can mitigate some of the risk of reduced clinical integration by proactively engaging the medical and prescription drug administrators to support clinical integration through contractual, reporting, and service level agreements.
- **Delivering an integrated benefits experience to members may be more difficult in a carve-out arrangement.** Carving-out the prescription benefit has an impact on the plan member experience. Members may have different ID cards, different mobile applications and websites for each vendor, may need to contact different service teams, and may receive different communications. Members will need information on how their benefits work when they are

administered by different companies, as well as support for different administrative policies under each vendor agreement. It is also important to align benefit policies including coverage designs, rules, requirements, and payment procedures across medical and prescription drug programs. This is particularly important for patients that receive treatment that could be paid under the medical or the prescription drug benefit, like cancer.

2 Introduction

This study highlights some of the advantages and disadvantages of entering into a separate prescription drug contract under the uniform group insurance program.

In the current uniform group insurance program, which is created by North Dakota Century Code Section 54-52.1-02, prescription drug coverage is a subgroup of coverage that requires the group insurance program to have hospital benefits coverage, medical benefits coverage, and life insurance benefits coverage. Section 54-52.1-04(3) allows for health benefits coverage to be provided through a traditional health insurance plan, a health maintenance organization, or a self-insurance health plan. Section 54-52.1-04.2 further allows for prescription drug benefits to be provided through a traditional health insurance plan or through a self-insurance health plan.

NDCC 54-52.1-02 allows the board to establish a separate subgroup in the uniform group insurance program for prescription drug benefits thereby unbundling it from the medical plan. In this context, “unbundled” means the pharmacy benefits may be separated or carved-out from the medical benefits contract and administered under a distinct pharmacy benefits contract and may be awarded to a different insurer or administrator than the medical insurance contract. Section 3 of House Bill No. 1374 (passed May 2, 2019) requires that the Legislative Management study the feasibility and desirability of the Public Employees Retirement System entering a separate contract for prescription drug coverage under the uniform group insurance program.

2.1 Scope of Review

To aid in the evaluation of changes to the uniform group insurance program, the scope of this review was limited to identifying considerations relating to a carve-out for prescription drug coverage under the uniform group insurance program. As described above, the meaning of “carve-out” in the context of this study is the separation of the prescription drug benefit contract from the medical benefit contract under the uniform group insurance program. The scope does not include an evaluation of carving-out the administration of the prescription drug benefit from the uniform group insurance program and assuming administration of the prescription drug benefit “in-house” (like North Dakota Medicaid).

This study does not attempt to quantify the financial outcome of a carve-out for prescription drug coverage because the financial outcomes of doing so are

dependent on the insurance market and the interests and capabilities of the insurers and administrators that participate. NDPERS is currently engaged in a procurement for the uniform group insurance program for the 2021-23 biennium and the results of that procurement will provide essential information into the availability, feasibility, and desirability of a carve-out prescription drug program.

This study does not judge whether the uniform group insurance program should pursue a carve-out prescription drug program. Rather, it describes the different considerations that the State of North Dakota (“State”) may evaluate to determine if a carve-out program is in the best interest of the State and its eligible plan members.

2.2 Study Format

The study reviews the market forces and structural constraints that will factor into any decision the State makes to pursue a carve-out prescription drug program. These topics are summarized into the following five primary sections, with considerations for a prescription drug carve-out included within each section.

In addition, the study provides an overview of the uniform group insurance program and findings from the State’s previous assessments of self-insurance arrangements.

- **Competitive Dynamics in the North Dakota Health Insurance Market**
Provides an overview of the competitive landscape of the North Dakota health insurance market and insurers participating in the state. It also reviews two factors in North Dakota that may have an impact on prescription drug proposals, including 1) North Dakota’s pharmacy ownership law; and 2) North Dakota Century Code statutes that require prescription drug financial disclosures.
- **Prescription Drug Market Trends and Management Strategies**
Explores prescription drug trends contributing to rising drug costs in the United States and in North Dakota. The section identifies management strategies that may be considered in the prescription drug contract to control prescription drug expenditures.
- **Fully-Insured and Self-Insured Contracts**
Describes the characteristics and differences between fully-insured and self-insured contracts and how changes to the insurance model may affect a carve-out prescription drug plan.

- **Prescription Drug Contracts**

Reviews how prescription drug contract pricing is structured and the different contract options available in the market. North Dakota Century Code requirements for prescription drug financial disclosures and audit requirements are particularly important to any prescription drug contract, regardless of the funding arrangement.

- **Pharmacy Benefit Managers and Carve-Out Trends**

Reviews the evolution of the pharmacy benefit manager (“PBM”) landscape and the major competitors in the market. It identifies trends in carving-out prescription drug benefits and why market consolidation may incentivize medical and pharmacy benefit integration.

2.3 Data Reliance

The information included in this study relies on data provided by NDPERS, as well as publicly available data and industry studies. From the data provided by NDPERS, some of these data sources were developed by NDPERS, while others were prepared or created by third parties and delivered to NDPERS.

As part of the study, all data was reviewed for reasonableness, but an audit was not performed on the data. To the extent the data contains errors or anomalies that were unknown at the time the data was provided, the analysis may be affected by those issues.

2.4 Disclaimer

The medical and prescription drug insurance market continues to rapidly evolve, and changes to market participants, insurer strategies, products offered, technology, or regulation could have a material impact on the feasibility and desirability of entering into a separate prescription drug contract.

3 Background

3.1 Uniform Group Insurance Program

In 1963, North Dakota's Legislative Assembly enacted Chapter 52-12 which authorized state agencies, individually or together, to enter into a group medical, hospitalization, and life insurance plan on behalf of employees. House Bill No. 1093 (1971) created Chapter 54-52.1 which established the uniform group insurance program and placed the program under the authority of the NDPERS Board (the Board).¹

Between 1971 and 1983, the uniform group insurance program operated under a fully-insured contract administered by Blue Cross Blue Shield of North Dakota (BCBSND).¹

In 1983, the Board determined that the uniform group insurance plan would be less costly under a self-insured basis, compared to the fully-insured premium quotes available, and approved the change to a self-insured program. BCBSND continued to administer the benefits under the new financial arrangement. In 1984, claims and expenses exceeded premium income and revenue and by 1987, the fund balance used for the uniform group insurance program was overbudget by \$4.7 million dollars with outstanding claims payable of an additional \$4.6 million dollars.¹

As a result of the funding challenges and a competitive fully-insured proposal from BCBSND, the Board approved a change back to the fully-insured arrangement in 1989 that ended the self-insured program. Under the terms of the new fully-insured contract, NDPERS and BCBSND entered into a risk sharing arrangement by which NDPERS and BCBSND agreed to share equally in losses up to \$6 million dollars if claims exceed the established premium for the uniform group insurance program. Under this loss-sharing provision, losses over \$6 million dollars would be retained by BCBSND. If the claims were lower than expected, the arrangement included a gain-sharing or return of premium provision where BCBSND and NDPERS agreed to share equally in the first \$3 million dollars that was not needed to pay claims and then NDPERS retained additional premium exceeding \$3 million dollars.¹

In the 2014 competitive bid process, NDPERS awarded the contract for the 2015-17 biennium to Sanford Health Plan. In 2017, NDPERS negotiated the elimination of the loss-sharing provision of the modified fully-insured arrangement but retained the gain sharing provision.¹

On June 1, 2020, NDPERS began the competitive bid process for the 2021-23 biennium. The RFP included solicitations for both fully-insured and self-insured funding arrangements for the uniform group insurance program.

3.2 Previous Legislative Study on the Feasibility and Desirability of a Self-Insurance Plan

In the 2017-18 interim, the Health Care Reform Review Committee (the “Committee”) studied the public employees health insurance plan, including the feasibility and desirability of transitioning to a self-insurance plan.

The Committee received survey results of neighboring states including Idaho, Iowa, Minnesota, Montana, South Dakota, Wisconsin, and Wyoming to understand the differences in how health benefits are provided to public employees. Four of the seven states surveyed were self-insured; the other three states had a mix of fully-insured and self-insured arrangements.¹ The states also have different structures for their medical and prescription drug benefits programs (Figure 1). Idaho, Iowa, and South Dakota offer integrated medical and prescription drug benefits through the same insurer. Minnesota, Montana, and Wyoming are self-insured and carve-out the prescription drug benefit to third-party PBMs. At the time of the survey, Wisconsin offered 18 health plans including fully-insured HMOs as well as a self-insured PPO with prescription drug benefits carved-out.

Figure 1 – Health Benefit Program Structure in Neighboring States

| State | Funding | Prescription Drug Model | Medical insurer/administrator | Prescription Drug insurer/administrator |
|--------------|------------------------------|-----------------------------------|--------------------------------------|---|
| Idaho | Insured | Integrated | BCBS | |
| Iowa | Insured | Integrated | BCBS | |
| Minnesota | Self-Insured | Carve-out | BCBS / HealthPartners / PreferredOne | CVS Caremark |
| Montana | Self-Insured | Carve-out | Cigna | Navitus |
| South Dakota | Self-Insured | Integrated | Avera (formerly DakotaCare) | |
| Wisconsin | Insured & Self-Insured plans | Both integrated & carve-out plans | Various | |
| Wyoming | Self-Insured | Carve-out | Cigna | MedImpact |

As part of the study, the Committee heard testimony from BCBSND and Sanford Health Plan on their experience administering self-insured plans. Neither insurer noted significant concerns regarding North Dakota's statute governing self-insurance plans.¹

The Committee received testimony on the methodology to estimate self-insurance health plan costs compared to fully-insured plan costs, which included considerations related to the purchase of stop loss insurance, administration fees, and claims reserves. The requirements for claim reserves state that in the event of a transition from a fully-insured plan to a self-insured plan, the NDPERS Board must have in place a plan reasonably calculated to meet the funding requirements within sixty months.¹

The Committee also received testimony on pharmacy benefits under the uniform group insurance plan from pharmacy consulting firm Pharmacy Benefit Consultants (PBC). The testimony highlighted disadvantages under the existing fully-insured contract and advantages of carving-out and self-insuring the pharmacy benefit.² Disadvantages of combined medical and pharmacy benefits contracts identified by PBC included:³

- Devoid of specific prescription drug pricing terms and guarantees
- Devoid of contract terms related to core matters that impact drug cost
- Potentially hidden fees and revenues
- Potential conflicts of interest if the health plan owns subsidiary hospitals, pharmacies, or provider groups
- Potential overpayment of prescription drugs if the health insurer adjudicates the claims under the medical plan instead of the pharmacy plan

PBC noted that almost all contracts that carve-out pharmacy benefits are provided on a self-insured basis, and identified advantages to this model such as:³

- Ability to contract on a "pass-through" financial basis which brings transparency into costs and compensation
- Ability to eliminate ambiguities and loopholes in the pharmacy contract
- Ability to renegotiate rates on a more frequent basis
- Ability to control the formulary and drug coverage requirements
- Ability to control and customize clinical programs
- Ability to carve-out specialty drug procurement to other parties if a better price is available

Based on the findings of the study and related testimony, the Health Care Reform Review Committee recommended House Bill No. 1028. This legislation updated the NDPERS self-insurance health plan law, including the clarification that prescription drug benefits may be unbundled and provided through a self-insurance health plan, and provides that NDPERS may transition to a self-insurance health plan if NDPERS determines the self-insurance health plan best serves the interests of the State and the State's eligible members.²

4 Characteristics of the North Dakota Health Insurance Market

This section reviews important characteristics of the North Dakota health insurance market that may influence competition and affect the availability of insurance options for the State.

4.1 North Dakota Health Insurance Market

North Dakota has a population of 762,000 with most residents concentrated in population centers around Bismarck, Fargo, and Grand Forks.⁴ The commercial health insurance market (non-Medicare/Medicaid segments) is primarily served by the two largest insurers in the state, BCBSND and Sanford Health Plan. Together they have over 70 percent market share. BCBSND administers insurance programs for almost half of the commercial enrollment and Sanford Health Plan serves almost a quarter of the commercial enrollment. Other insurers such as Aetna, Cigna, Health Care Service Corporation, HealthPartners, Medica, and UnitedHealth Group have a smaller presence in the state.⁵

NDPERS is North Dakota's largest employer group with over 60,000 members as of May 2020. NDPERS' membership predominantly lives and accesses healthcare in the state. In 2019, more than 75 percent of paid healthcare claims (Figure 2) and 90 percent of prescriptions were filled in North Dakota. Minnesota was the second largest market where members access healthcare, followed by South Dakota and Montana (Figure 3).^{6,20}

Figure 2 – NDPERS Paid Healthcare Claims by State

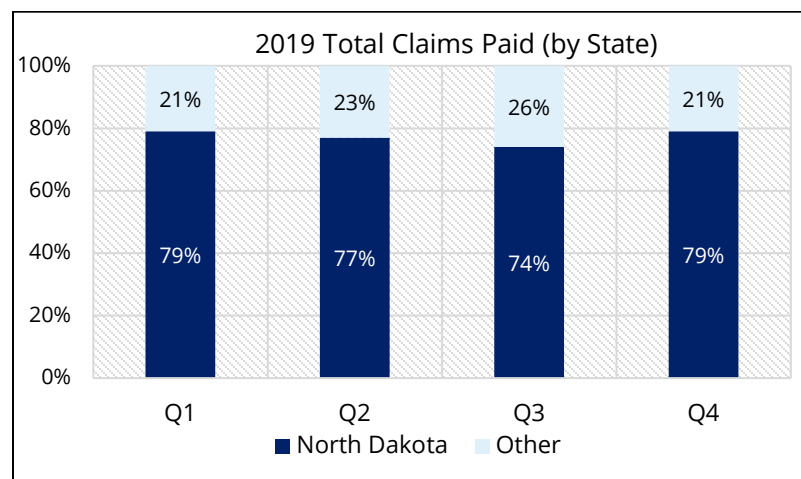
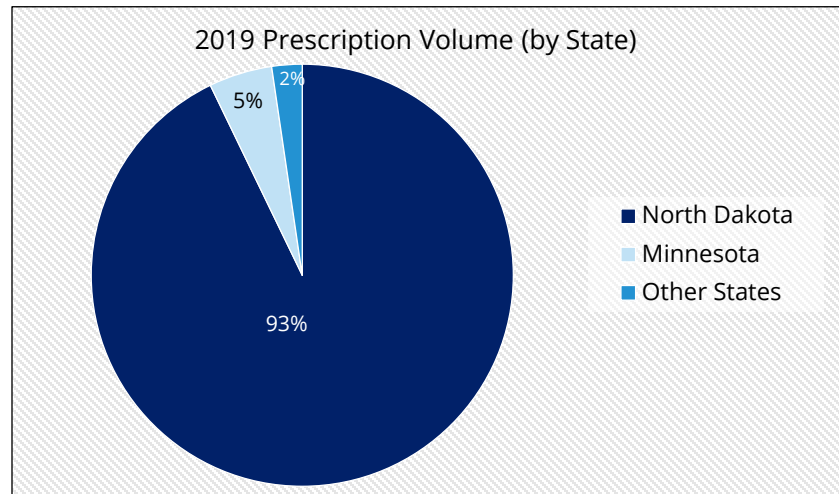


Figure 3 – NDPERS Paid Prescriptions by State



Commercial enrollment in North Dakota operates predominantly under fully-insured contracts (78 percent) while a minority of enrollment is self-insured (22 percent).⁵

4.2 North Dakota's Pharmacy Ownership Law

In 1963, North Dakota enacted what is commonly known as the Pharmacy Ownership Law which requires pharmacies to be majority-owned by a licensed pharmacist. The law states: *"The applicant for such permit is qualified to conduct the pharmacy, and is a licensed pharmacist in good standing or is a partnership, each active member of which is a licensed pharmacist in good standing; a corporation or an association, the majority stock in which is owned by licensed pharmacists in good standing; or a limited liability company, the majority membership interests in which is owned by licensed pharmacists in good standing, actively and regularly employed in and responsible for the management, supervision, and operation of such pharmacy"*⁷

This law is unique in the United States. The regulation has the effect of limiting corporate owned pharmacy chains like CVS, Walgreens, Wal-Mart Pharmacy, Rite Aid, and others from operating in the state with limited exceptions (CVS acquired six pharmacies from Osco Drug that were grandfathered when the law was passed and Thrifty White Pharmacy has an employee stock ownership plan that allows the company to meet the regulation).⁸

There have been efforts to overturn the law, the latest in 2014, but none have succeeded.⁹ Supporters of repeal suggest that opening the market to large national

chains would improve access and lower prices through competition. Opponents argue that overturning the law would be damaging to local pharmacies.¹⁰

4.3 North Dakota Century Code 54-52.1-04.16

In 2019, House Bill No. 1374 was passed which added a new section to Chapter 54-52.1 of the North Dakota Century Code. Section 54-52.1-04.16 Prescription drug coverage – Performance audits states:

1. *Except for Medicare part D, prescription drug coverage, the board may not enter or renew a contract for prescription drug coverage unless the contract authorizes the board during the term of the contract to conduct a performance audit of the prescription drug coverage and any related pharmacy benefits management services. The contract must provide:*
 - a. *The board must have full access to data regarding: (1) The total dollars paid to the pharmacy benefits manager by the carrier and the board; (2) The total amount of dollars paid to the pharmacy benefits manager by the carrier which were not subsequently paid to a licensed pharmacy in the state; and (3) Payments made to all pharmacy providers.*
 - b. *The board must have full access to data regarding the average reimbursement, by drug ingredient cost, dispensing fee, and any other fee paid by a pharmacy benefits manager to licensed pharmacies with which the pharmacy benefits manager shares common ownership or control or is affiliated.*
 - c. *The board must have full access to data regarding the average reimbursement, by drug ingredient cost, dispensing fee, and any other fee paid by a pharmacy benefits manager to pharmacies licensed in the state.*
 - d. *The board must have full access to data regarding any direct and indirect fees, charges, or recoupment, or any kind of assessments imposed by the pharmacy benefits manager on pharmacies licensed with which the pharmacy benefits manager shares common ownership or control or is affiliated.*
 - e. *The board must have full access to data regarding any direct and indirect fees, charges, or recoupment, or any kind of assessments imposed by the pharmacy benefits manager, on pharmacies licensed in the state.*
 - f. *The contract must provide that all drug rebates, financial incentives, fees, and discounts must be disclosed to the board.*
2. *The board shall use an independent auditor who has no conflict of interest with the carrier, pharmacy benefits manager, or board. The board's auditor, the insurance department, and the employee benefits programs committee may access any information the board may access under this section. All information accessed by the*

board, board's auditor, insurance department, or employee benefits programs committee which is trade secret is a confidential record. This subsection does not limit the information required to be disclosed to the board under subsection

- 3. If the board contracts directly with a pharmacy benefits manager or provides prescription drug coverage through a self-insurance plan, the contract must provide the pharmacy benefits manager shall disclose to the board and the board's auditor all rebates and any other fees that provide the pharmacy benefits manager with sources of income under the contract, including under related contracts the pharmacy benefits manager has with third parties, such as drug manufacturers.*
- 4. Anything the board has access to under this section, the insurance department and employee benefits programs committee has access to.¹¹*

The additions to the Century Code describe the audit rights, data disclosure requirements, and financial disclosures required to enter into, or renew, a contract for prescription drug coverage.

In fully-insured arrangements that include both medical and prescription drug coverage, the PBM acts as a subcontractor to the insurer to provide pharmacy benefit services. When the insurer provides fully-insured premium rates, and assumes all risk, they usually do not provide any disclosure of the terms of the financial relationship with the PBM or network pharmacies.

Unlike fully-insured contracts, self-insured arrangements allow the plan sponsor more control and greater visibility into the financial terms of the contract, as well as rights to receive data and audit performance against the terms of the contract.

Some insurers, PBMs and administrators may determine that they cannot meet the Century Code statutes, either because they do not offer arrangements that are compliant with the requirements or they are unwilling to disclose the information to NDPERS.

4.4 Prescription Drug Carve-out Considerations based on the North Dakota Health Insurance Market

- Competition in North Dakota is relatively concentrated, which may create barriers to entry for other insurers or administrators to compete for commercial business. High market share affords substantial bargaining power when negotiating with hospitals, physician groups, and pharmacies. This gives incumbent insurers or administrators an advantage in setting reimbursement rates which may contribute directly, or indirectly, to limiting competition.

- Insurers need to have a strong network of hospitals, physicians, and pharmacies in the state, and competitive reimbursement rates with those healthcare providers, to compete. Hospitals and physicians are more likely to participate in the networks of insurers with strong market share in the state and less likely to give preferred reimbursement terms to smaller insurers or new entrants.
- Unlike employers with membership spread across different markets, NDPERS' membership lives and accesses healthcare predominantly in the state. Therefore, the strength of the insurer networks and competitive network contracts are an important factor to NDPERS' costs.
- NDPERS' ability to procure for the current modified fully-insured contract with gain-sharing or other insurance arrangements is dependent on the insurance products offered by the insurers and administrators competing in the state.
- Contracting for a carve-out pharmacy benefit under a self-insured plan allows for more choice in administrators. However, there are many PBMs that administer self-insured benefit programs that do not offer fully-insured options or medical benefits.
- Transitioning to a carved-out prescription drug program could have an impact on local employment if the selected insurer or administrator is not based in the state or does not have employees in the state.
- The North Dakota Pharmacy Ownership Law has the effect of limiting pharmacy expansion of national pharmacy chains into the state and insulating independently owned pharmacies in the state from the pressures of competing with national chains.
- Insurers and PBMs manage retail pharmacy networks and negotiate prescription drug reimbursement rates and other services with retail pharmacies. Insurers and PBMs with subsidiary pharmacies, or preferred reimbursement rates with large national chains, may not have equivalent contracts with independent pharmacies in North Dakota, which may result in higher costs for NDPERS but also higher reimbursements to independent pharmacies in the state.

- If the State elects to carve-out the prescription drug program, pharmacies in North Dakota could be impacted by changes in reimbursement rates from the selected PBM.
- The Century Code statutes require specific financial disclosures related to the prescription drug benefits contract. These requirements may limit participation in uniform group insurance procurements to the extent that prescription drug benefits providers are unable, or unwilling, to meet the requirements.
- Insurers and PBMs willing and able to meet the requirements of Century Code statute 54-52.1-04.16 may or may not meet the other minimum requirements and/or preference criteria of NDPERS.
- The amendments to the Century Code included in House Bill No. 1374 were adopted after the last uniform group insurance program RFP in 2014. The responses to the RFP for the 2021-23 biennium will identify the willingness of insurers and administrators to comply with the Code's new requirements.

5 Prescription Drug Market Trends and Management Strategies

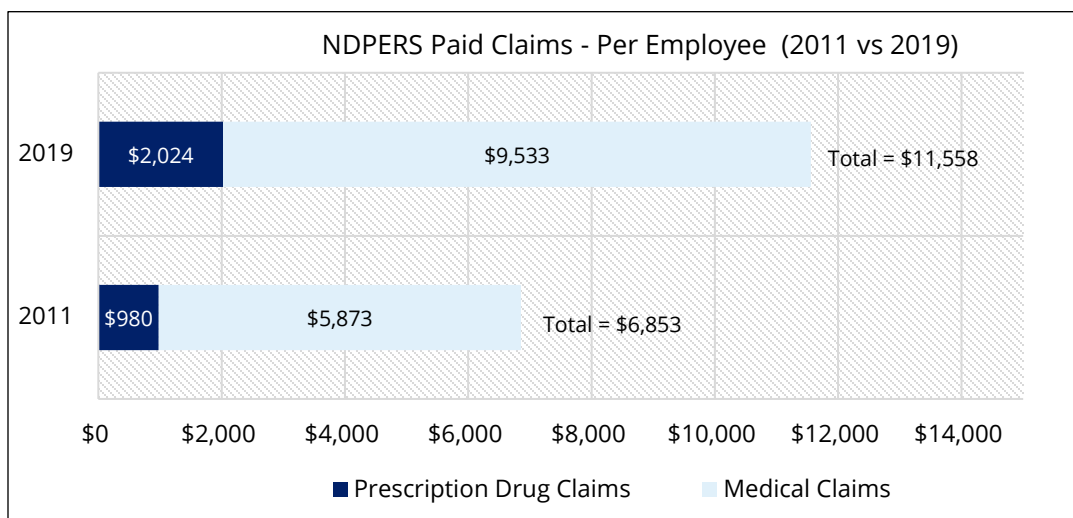
Prescription drugs are a primary driver of healthcare costs. This section explores trends impacting the costs of prescription drugs and related implications for plan sponsors related to cost and management.

5.1 Rising Healthcare Costs and the Impact of Prescription Drugs

Total healthcare spending in the United States has increased consistently over the last three decades. Between 2011 and 2019, average health benefit costs for Government employers increased 32 percent from \$11,251 to \$14,907 per employee per year.¹² NDPERS-paid claims, per employee (medical and pharmacy combined), increased by 69 percent over the same period. NDPERS-paid prescription drug claims, per employee, increased by 107 percent (before prescription drug rebates).¹³

Prescription drug costs continue to become a larger portion of total healthcare costs. In the NDPERS uniform group insurance program, prescription drug claims increased from 14 percent of healthcare claims in 2011 to 18 percent in 2019 (Figure 4).¹³ Nationally, prescription drugs are estimated to increase by 7 percent in 2020, driven primarily by specialty drugs which are expected to rise over 15 percent.¹⁴ The prevalence of chronic disease, expensive specialty drug products, and changes to employee benefit plan designs increase the cost of prescription drugs for plans and participants.

Figure 4 – NDPERS Medical and Rx Claims Per Employee



5.2 Chronic Disease

86 percent of healthcare costs are spent treating chronic disease in the US.¹⁵ In the United States, six in 10 adults have at least one chronic condition, and four in 10 have two or more.¹⁶ According to the 2018 North Dakota Health Profile, the leading causes of death in the state between 2012 and 2016 were cancer and heart disease. Other chronic diseases such as chronic obstructive pulmonary disease (COPD), diabetes, and hypertension were also leading causes of death (Figure 5).¹⁷

Figure 5

Age Adjusted Death Rate by Cause 2012-2016

| Cause of Death | Rate Per 100,000 |
|-------------------------|------------------|
| Cancer | 142.1 |
| Heart Disease | 140.3 |
| Unintentional Injury | 45.9 |
| Alzheimer's Disease | 41.2 |
| COPD | 35.2 |
| Stroke | 31.9 |
| Diabetes Mellitus | 20.6 |
| Suicide | 18.4 |
| Pneumonia and Influenza | 16.5 |
| Cirrhosis | 11.6 |
| Hypertension | 9.5 |
| All Causes | 674.8 |

A report by the North Dakota Department of Health documented chronic disease prevalence in the state, and found:¹⁸

- Two-thirds of North Dakota adults are overweight or obese
- Nearly one-third of North Dakota adults have been diagnosed with high blood pressure
- Almost one in twelve North Dakota adults has been diagnosed with diabetes

The incidence of chronic disease is a significant factor in overall healthcare costs, and multiple chronic conditions have a multiplying effect. Research suggests that a person with five or more chronic conditions uses twice as many prescription drugs on average per year than those with fewer conditions. Those with five or more chronic conditions make up only 12 percent of the population but over 40 percent of total healthcare spending.¹⁹

NDPERS has implemented a variety of programs to help plan members manage risk factors associated with chronic disease, and to support those already diagnosed with tools and resources to manage their chronic disease.

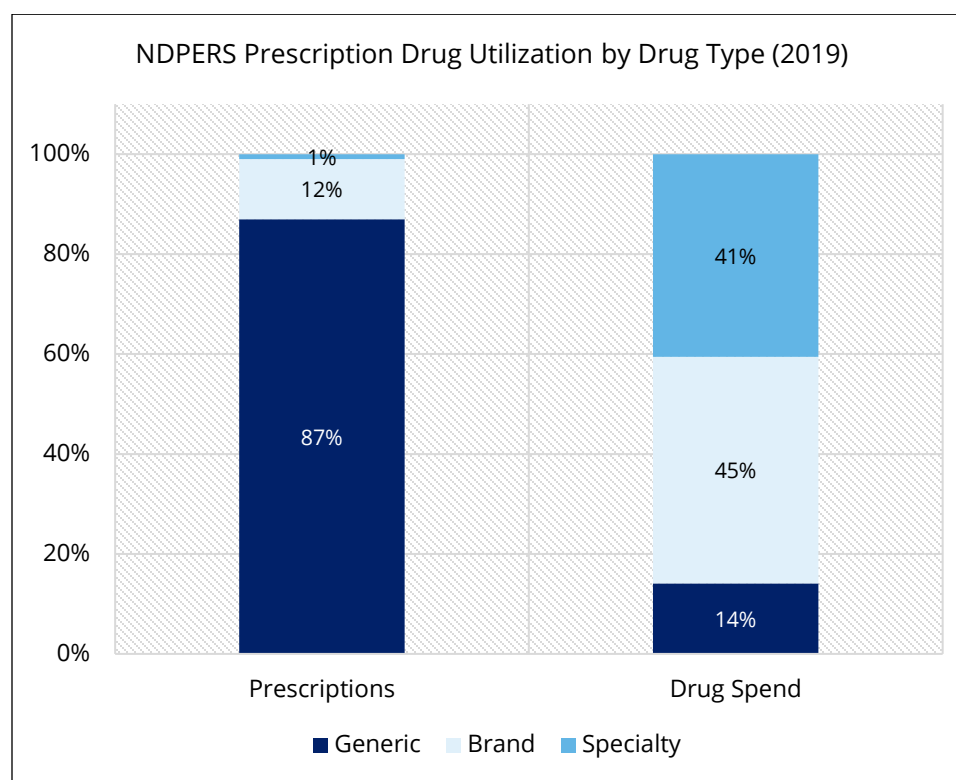
5.3 Specialty Drugs

Specialty drugs are the primary driver of rising prescription drug costs in the U.S. In 2019, specialty drug costs represented almost 50 percent of spending on outpatient prescription drugs despite being prescribed to less than 2 percent of patients.²⁰ The growth of specialty drugs, both in utilization and cost, has accelerated at a rapid pace. The number of specialty drugs on the market has increased by over 1,200 percent since the 1990s.²⁰ Total spending on specialty drugs in the U.S. is expected to be \$280 billion by 2021, triple the total spend only a decade earlier.²¹

Specialty drugs do not have a universally accepted definition but are generally considered to be biologically-derived, require careful handling, treat complex diseases or conditions, and very high cost. These drugs are frequently injectable or infused which may require them to be administered by a physician, pharmacist, or other healthcare professional. Indications that are treated by specialty drugs include cancer, inflammatory conditions, hepatitis, multiple sclerosis, growth deficiency, cystic fibrosis, and infectious disease, although the disease states and conditions targeted by specialty drug manufacturers is expanding rapidly and is not limited to only “complex” diseases.

NDPERS specialty drug utilization mirrors the broader market. In 2019, specialty drugs were less than 1 percent of total prescriptions, yet the cost of specialty drugs represented over 40 percent of NDPERS’ prescription drug spend (Figure 6).⁶ NDPERS specialty drug cost was \$3,822 per prescription in 2019 compared to \$279 per prescription for non-specialty brand drugs and \$12 per prescription for non-specialty generic drugs.²²

Figure 6



Almost 40 percent of NDPERS' specialty drug spend is related to inflammatory conditions and the rheumatological agents that treat conditions such as arthritis, plaque psoriasis, ankylosing spondylitis, Crohn's disease, and ulcerative colitis.⁶ Within the category, NDPERS' highest-cost drug is Humira, which represented about 70 percent of NDPERS' spend. Humira is the highest grossing drug in the world with nearly 20 billion in sales in 2018 and costs over \$5,500 dollars per month.²³

The second highest cost specialty category for NDPERS in 2019 was cancer.⁶ The 2018 North Dakota Community Health Profile ranks cancer as the leading cause of death in the state.¹⁷ Breast cancer and prostate cancer are the most commonly diagnosed conditions among women and men respectively in North Dakota.¹⁸ Cancer is one of the leading areas of focus for drug manufacturers. There are 44 potential cancer drug approvals in 2020, about 70 percent of which are intended for high-cost orphan drugs focused on very rare subsets of cancer.²⁴ One of the most highly anticipated new drugs is Enhertu, a breast cancer drug that costs \$13,000 dollars per month and was approved by the FDA in December 2019.²⁵ The introduction of expensive new treatments are expected to increase spending in oncology between 11 and 14 percent per year through 2023.²⁶

A new and expanding field is the introduction of gene therapies, which alter the gene function to address the genetic causes of rare diseases. These products offer the prospect of a curative treatment, but at a very high cost. Currently, only 6 diseases are treated with cell or gene therapy but there are more than 360 gene therapies in development.²⁷ Some examples of gene therapies on the market today include Spinraza, Zolgensma, and Kymriah.

- In 2016, the FDA approved Spinraza, the first drug approved for the treatment of spinal muscular atrophy, which is a rare genetic disorder that is often fatal.²⁸ Spinraza's cost is \$750,000 dollars in the first year and \$375,000 dollars per year after.²⁹
- In 2019, Zolgensma was approved by the FDA.³⁰ Zolgensma is a competitor product to Spinraza that costs over \$2 million dollars for a one-time treatment.³¹
- In 2017 a cell-based gene therapy was approved in the United States.³² The drug, Kymriah, modifies a patient's own cells to kill leukemia cells. Kymriah costs between \$373,000 and \$475,000 per patient.³³

This increased focus on specialty medications that treat rare conditions known as "orphan drugs" (defined as a disease affecting fewer than 200,000 people) will exert more cost pressure on plan sponsors and payers as more orphan drugs are introduced. These drugs are projected to cost more than \$150,000 per patient per year and account for 22 percent of all prescription drug sales by 2024.³⁴

A growing focus for plan sponsors is prescription drug spend that is incurred in medical settings such as hospitals or physicians' offices and billed through the medical plan instead of the pharmacy benefit. Express Scripts estimates that approximately 35 percent of specialty costs are billed through the medical benefit, and medical drug spend is expected to increase 33 percent from 2018 to 2023.³⁵ There are several challenges for plan sponsors in understanding and managing drug costs that are billed through the medical benefit, including billing and coding ambiguity, claims payment processes, and fewer programs that monitor safe and appropriate utilization.

5.4 Tools to Manage Appropriate Drug Utilization and Control Costs

Plan sponsors employ a variety of tools to help mitigate rising drug costs while ensuring appropriate access for plan members. Some of the tools are traditional approaches to managing cost and utilization such as benefit plan design, formulary

strategy, prior authorization, step therapy, and quantity limits, while other new approaches such as site-of-care management and value based pricings are evolving in response to new specialty drugs and increasing costs.

- **Benefit Plan Design:** Plan sponsors are shifting away from the three-tier copay plan design to designs that feature coinsurance or additional copay tiers, particularly for specialty drugs. Fifty-nine percent of plan sponsors in 2018 implemented a separate specialty cost-sharing tier for non-specialty drugs, up from 56 percent in 2017 and 52 percent in 2016.³⁶ High-deductible plans are also increasing in popularity; 47 percent of government plan sponsors offered a qualified high-deductible health plan in 2019 compared to just 18 percent in 2013.¹²
- **Formulary Strategy:** Formulary strategy is an important tool in controlling drug costs. Most pharmacy benefit managers have different formularies to meet different objectives, like providing broad access for members, incentivizing generics, or maximizing rebates. While self-insured plan sponsors have the option of curating a custom formulary, 70 percent of plan sponsors in 2018 chose to implement a formulary maintained by the pharmacy benefit manager.³⁷ Prescription drug exclusions have become a common strategy employed by PBMs to manage utilization, cost, and negotiate for price concessions with manufacturers. In fact, 79 percent of plan sponsors adopt drug lists that exclude select products.³⁷ Indication based formulary design is another strategy to mitigate waste by matching prescription products that have multiple indications to only specific disease states where the drug is proven to be most efficacious.
- **Prior Authorization, Quantity Limits, and Step Therapy:** Prior authorizations are the most common utilization management approach used by 94 percent of plan sponsors. Prior authorization requires patients to meet specific clinical criteria before drugs are dispensed, which promotes safety and appropriate utilization. Drug quantity limits are implemented by 92 percent of plan sponsors to eliminate waste and promote safe utilization.³⁷ Step therapy is a utilization management strategy intended to reduce costs for both patients and the plan by requiring a clinically appropriate, lower cost, prescription drug prior to the higher cost alternative. 86 percent of plan sponsors use step therapy in their prescription drug program.³⁷
- **Site-of-Care Management:** Prescription drug costs vary by site of care. Hospitals are significantly more costly than infusion centers or physicians'

offices; the patient's home is usually the most cost effective. UnitedHealth Group studied patients in their care and estimated a 33 to 52 percent reduction in average monthly costs across five conditions when treatment is administered in physicians' offices or at home, instead of the hospital.³⁸ While not all therapies can be shifted away from a hospital setting, the study shows that site-of-care management can not only reduce cost, it can do so without increasing the likelihood of adverse drug events or side effects.³⁸ COVID-19 may also accelerate a shift in the site-of-care management. Patients may be more accepting of receiving treatment in non-hospital sites and plan sponsors may be more willing to implement policies to manage site-of-care if their members are supportive of the strategy.

- **Patient Assistance Programs:** Most pharmacy benefit managers have resources to help match members to financial assistance available through manufacturers or charitable foundations. Some have programs designed to reduce member out-of-pocket cost or maximize the manufacturer assistance available throughout the year by adjusting benefit design, which can help to reduce cost for the member and the plan.
- **Value-Based Contracting:** Some emerging strategies for controlling costs use value-based contracting between pharmacy benefit managers and prescription drug manufacturers. These strategies attempt to link the cost of a drug to the outcomes it delivers. Value-based contracting is still in the early stages, but has had success in conditions where the health outcome can be directly linked to the drug, like Hepatitis C. Indication based formulary design is another emerging strategy, where prescription products with multiple indications are covered for specific indications that are shown to be the most efficacious, instead of included or excluded for all indications. For most management tools and strategies, coordination between the medical insurer/administrator and the prescription drug insurer/administrator improves the effectiveness of the programs and member experience.

For plan sponsors that elect to bundle medical and prescription drug benefits together, the coordination usually happens “behind the scenes”, where member information and claims data is shared between the medical insurer/administrator and the PBM. Interestingly, even in bundled arrangements, most medical insurer/administrators still contract with a third-party PBM for prescription drug administration, for example, Sanford Health Plan contracts with OptumRx and BCBSND contracts with Prime Therapeutics. Given this structure, the data sharing and coordination shares many similarities to a carve-out prescription drug

arrangement, although there may be more comprehensive systems, reporting, clinical, and customer service integration in a bundled arrangement.

In self-insured contracts, and particularly carve-out arrangements, there may be less incentive for coordination between medical and prescription drug providers since they do not assume any risk. Therefore, it is the responsibility of the plan sponsor to initiate data exchanges between the medical and prescription drug administrators and monitor that the information is being used to manage the plan.

5.5 Prescription Drug Carve-out Considerations based on Prescription Drug Market Trends and Utilization Management Strategies

- Rising drug costs will impact healthcare costs regardless of the insurance arrangement (fully-insured or self-insured); however, each funding arrangement is affected differently. A self-insured plan will experience claims volatility but may have more ability to implement programs and clinical controls to manage cost and utilization. A fully-insured plan will be insulated from volatility but may have less control over premium increases and mechanisms to control costs and manage utilization.
- The prevalence of chronic diseases such as diabetes, heart disease, and hypertension will continue to drive prescription drug utilization and cost. How plan participants manage these conditions will have a direct impact on prescription drug and total healthcare costs. The State will need to determine if a carve-out prescription drug program offers additional capabilities and resources for members with chronic conditions or if an integrated medical and prescription drug program allows for more effective management.
- Specialty drug costs are the biggest single contributor to increasing prescription drug prices. The specialty drug trend is significantly higher than non-specialty drugs due to increasing use of high-cost medications and the introduction of new products that treat complex and rare diseases. Managing specialty drug costs is dependent on competitive purchasing, comprehensive patient care programs, and a focus on adherence and minimizing waste. A carve-out prescription drug program may allow for more control over specialty drugs and create the flexibility to implement innovative strategies to manage cost and optimize care.

- Cost and utilization management programs are critical to managing appropriate use of prescription drugs and eliminating waste; however, the availability, maturity, and quality of these programs varies among insurers and administrators.
- NDPERS' plan design is established prior to each biennium and typically cannot change during the contract, which may affect the applicability of some utilization management programs and tools.

6 Fully-Insured and Self-Insured Contracts

This section reviews the various aspects of fully-insured and self-insured contracts and the corresponding considerations related to a carve-out prescription drug model.

6.1 Fully-Insured Contracts

In a fully-insured arrangement, the plan sponsor pays a fixed premium to transfer all risk to the insurer. The insurer's premium pays for claims, administration of the program, tax/government fees, profit, and risk margin. If claims or expenses are lower than the premium, the insurer earns a higher profit. If claims or expenses are higher than the premium, the insurer is responsible for the shortfall.

Fully-insured contracts are attractive to plan sponsors that want to transfer all risk to a third party. In doing so, they eliminate volatility of claims and protect the plan from high cost claims. Small and midsize companies (typically less than 1,000 employees) often prefer fully-insured contracts because of the unpredictability of claims in a small population. The level monthly premium is an attractive feature for budgeting and planning.

It is rare for employers with fully-insured programs to carve-out the prescription drug benefit. For plan sponsors with large memberships, like NDPERS, or sufficient risk tolerance, self-insuring the pharmacy benefit while maintaining a fully-insured medical plan could increase flexibility and control over benefit provisions, while reducing some of the taxes, fees, and risk charges of a fully-insured benefit.

The NDPERS' agreement is a fully-insured contract with partial risk sharing. Unlike most fully-insured programs that are renewed every year, NDPERS' fully-insured contract applies to each biennial period. Risk-sharing agreements are structured such that if claim costs exceed a pre-defined amount, the plan sponsor and the insurer will share in the additional expenses ("loss-sharing"). Likewise, if the costs are lower than the pre-defined amount, the savings will also be shared ("gain-sharing"). The purpose of risk sharing arrangements is to align the incentives of both the plan sponsor and the insurer to control costs. In 2017, NDPERS negotiated the elimination of the loss-sharing provision of the modified fully-insured arrangement, but retained the gain-sharing provision. This is a unique gain-sharing arrangement that insulates NDPERS from additional financial risk.

6.2 Self-Insured Contracts

In a self-insured arrangement, the plan sponsor retains the claims risk. The plan sponsor contracts a third-party administrator to provide administrative services for the plan such as claims adjudication, network access, and clinical management programs.

Self-insured plan sponsors establish reserves for unpaid claims liability and to provide additional protection against potential or unforeseen claims and/or expenses that may exceed expected plan costs.

Plan sponsors often elect to be self-insured because they have the financial resources and expertise to manage claims risk and self-insurance can offer the potential for cost savings and increased flexibility compared to a fully-insured arrangement. Some of the potential efficiencies in a self-insured arrangement include:

- 1. Administrative fees:** Self-insured plan sponsors may be able to procure lower administrative fees due to the elimination of the insurer's risk and retention fees.
- 2. Reduction in taxes:** Self-insured plan sponsors benefit from lower taxes. Most states impose a tax on health insurance premiums. In North Dakota, a 1.75 percent tax is assessed on the gross amount of premiums, assessments, membership fees, subscriber fees, policy fees, and service fees. A fully-insured plan would pay 1.75 percent on the total premium, while a self-insured plan would be responsible for 1.75 percent of the service fees, which can vary but usually represent approximately 5 percent of the total plan cost. While this is a meaningful consideration for most large employers that are considering transitioning from a fully-insured plan to a self-insured arrangement, NDPERS is exempt from state health insurance premium taxes. In addition to state health insurance premium taxes, the Affordable Care Act (ACA) introduced the Federal Affordable Care Act Health Insurer Tax in 2014 and only applied to fully-insured plans. The Tax was one of the mechanisms designed to fund the implementation of the ACA and the amount of the tax was assessed to each insurer based on their market share. Insurers pass the tax to customers by including the expense in the fully-insured premium. In most cases, the Health Insurer Tax represented between two percent and four

percent of premium. On December 20, 2019 the Health Insurer Tax was repealed for 2021 and beyond.³⁹

- 3. Plan coverage rules:** Self-insured plan sponsors have more flexibility in determining plan design and coverage rules. Self-insured plan sponsors are not required to comply with all state health insurance regulations and benefit mandates, although some still do.
- 4. Reserves:** Self-insured plan sponsors fund health insurance reserves, which can generate investment income and provide additional financial flexibility to the plan sponsor.
- 5. Underwriting assumptions:** Self-insured plan sponsors have more control over the claims underwriting assumptions such as changes to healthcare claims trend rates, administrative expenses, and risk margin when budgeting future costs compared to fully-insured rates that are set by the insurer.
- 6. Data transparency:** Self-insured plan sponsors often have higher visibility into the data and underlying cost drivers than insured plans.

There are also potential inefficiencies to self-insured contracts:

- 1. Uneven cash flow:** Fully-insured contracts offer the stability of a fixed premium. Self-insured plans must account for fluctuation of claims each month and there is risk that claims may be higher than the funding level.

In 2020, COVID-19 is a significant consideration for self-insured plan sponsors. Many employers in states with “stay at home” orders experienced a significant decrease in claims costs as a result of the postponement or elimination of elective healthcare. The impact of COVID-19 on 2021 claims is unknown, which poses a challenge for self-insured plans in determining appropriate plan funding and budgeting.

- 2. Additional incurred but not reported (IBNR) liability:** Self-insured plans must retain additional reserve funds to cover “incurred but not reported” claims liabilities.
- 3. Risk and funding:** Self-insured plans must determine the level of financial risk that is acceptable and be responsible for setting appropriate

funding levels/premium rates and reserve adjustments. This can include significant up-front costs to establish reserves at the start of a contract.

4. **Administrative requirements:** Self-insured plans accept additional administrative responsibilities such as developing and maintaining plan documents, managing fiduciary responsibility, and managing compliance activities such as discrimination testing.

6.3 Stop Loss Insurance

Stop loss insurance protects the plan from the financial impact of very high cost claims or an unexpected high volume of claims. There are two types of stop loss contracts: individual stop loss contracts and aggregate stop loss contracts.

1. **Individual stop loss:** Sometimes referred to as “specific” stop loss, this insurance arrangement protects the plan against individual catastrophic claims above an agreed-upon level. The level, which is referred to as the stop loss deductible (because the plan pays 100 percent of the claims up to that level), is based on the plan’s risk tolerance and ability to financially absorb fluctuating claims experience. The stop-loss insurer then covers 100 percent of the portion of the claim in excess of the deductible (or the majority of the excess, depending on the contract terms). Common stop loss deductibles range from \$200,000 to \$1 million dollars per individual. The price of individual stop loss is based on the deductible and the health risk in the population.

A common practice for stop loss insurers is to “laser” high-risk individuals. During the underwriting, the insurer will identify claimants with known high-risk, usually identified by a history of high claims or high-risk diagnoses, and exclude these individuals (or “laser” them) from the insurance coverage or set a higher deductible that applies specifically to them. This practice limits the effectiveness of stop loss insurance for high-risk members currently on the plan but decreases the premium rate.

2. **Aggregate stop loss:** This insurance contract limits the plan’s exposure to unpredictable variation in claims cost due to high incidence or volume of claims. The insured amount is set based on a percentage of expected claims, usually 125 percent of estimated cost. Aggregate stop loss is less frequently purchased than individual stop loss, especially for large plans

where the total claims experience is generally less variable than smaller plan sponsors.

Stop loss insurance is a product commonly offered by health insurers and other third-party stop loss insurers. Stop loss insurance contracts are typically agreed upon for one year at a time and it is unusual for an insurance provider to quote multi-year guarantees. This practice results in potential risk to self-insured employers because the claims experience from year-to-year has a direct impact on the stop loss rates and coverage availability. After one year of unfavorable claims experience, the plan sponsor may face a large increase in premiums or termination of the contract. Rising prescription drug costs and the introduction of high-cost gene therapies, orphan drugs, and other expensive prescription drugs are creating higher financial risk for plan sponsors and stop-loss insurance may be a tool to mitigate some of the risk. However, the prevalence of high-cost prescription drug utilization may also limit the availability or affordability of stop-loss coverage.

When the prescription drug coverage is carved-out from the medical benefit, some insurers will offer stop loss coverage on the medical claims only, others will accept data from the carve-out prescription drug vendor and provide stop loss coverage for both medical and pharmacy claims, and some insurers will not offer stop loss coverage unless they manage both the medical and pharmacy benefits.

If a plan elects to carve-out and self-insure the prescription drug benefit, but maintains a fully-insured medical plan, there are very few options in the market that will offer stop loss coverage for prescription drugs only. Stop loss coverage that only insures self-insured, carve-out, prescription drug plans is uncommon, though there are some insurers that offer aggregate stop loss insurance for prescription drugs.

6.4 Prescription Drug Carve-out Considerations based on Insurance Contract Funding Options

- Fully-insured carve-out prescription drug coverage is not commonly available in the market. A transition to a carve-out prescription drug program would likely necessitate a move from the fully-insured uniform group insurance program to a self-insured program.
- The procurement for the 2021-23 biennium will determine what insurance options, and which insurers and administrators, are available to the State.

- A self-insured, carve-out prescription drug plan would eliminate the downside risk protection that is a feature of the current NDPERS modified fully-insured contract. The modified fully-insured arrangement with gain-sharing offers the advantage of fixed monthly premiums and no risk of loss should claims exceed premium. A self-insured plan would require that the State assume all claims risk.
- NDPERS' size will help minimize the volatility associated with large claims or unpredictable risk but claims under a self-insured contract will fluctuate more than a fixed premium agreement. Prescription drug costs continue to rise, driven by the prevalence of chronic conditions and specialty drugs that treat high-cost, complex conditions. Market events such as COVID-19 could have a dramatic impact on claims costs.
- Most fully-insured arrangements do not have "gain-sharing" provisions like the NDPERS contract. The "gain-sharing" allows NDPERS to share in the upside if claims are lower than expected. The gains may be used to fund a reserve.
- A self-insured plan will require reserves to guard against claims fluctuations and to pay for "incurred but not reported" claims liabilities.
- A self-insured, carve-out, prescription drug program will likely require more administrative resources, including additional staff, from NDPERS to manage the additional insurer/administrator and meet the requirements associated with a self-insured, carve-out program.
- Self-insured plans are not required to follow the same insurance mandates and coverage rules as fully-insured plans. However, if NDPERS were to be self-insured, the plan must be regulated by the State Insurance Department and is required to follow the same mandates as fully-insured plans.
- Self-insured plans typically have greater visibility into data and the underlying cost drivers in the plan than fully-insured plans. North Dakota Century Code Section 54-52.1-04.16 mandates the same disclosures regardless of insurance arrangement.
- In a self-insured arrangement, NDPERS may evaluate stop-loss insurance to protect the plan against large losses. Century Code Section 54-52.1-04.2 authorizes NDPERS to purchase individual stop-loss, but does not authorize

aggregate stop-loss. High-cost prescription drugs that are currently available and in development are a risk to be assessed to determine if stop-loss insurance is an appropriate tool to transfer some of the risk. Stop-loss insurance may not be necessary for NDPERS given the size of the population, which will create stability in claims from month to month.

- NDPERS' stop-loss premium rate must align with the biennial period. Since most stop-loss periods are one year, the two-year requirement may impact the availability or desirability of the insurance.
- Availability of stop-loss coverage is dependent on the insurance arrangement and may not be available for prescription drug coverage only.
- There may be additional direct or indirect carve-out costs. It is common for insurers and administrators to charge "carve-out" fees as a disincentive to carving-out the prescription drug benefit. Fees range from increased medical premiums, higher medical administrative service fees, file feed charges, and implementation fees.

7 Prescription Drug Contracts

Understanding the financial components of a self-insured prescription drug contract is important, particularly when transitioning from a fully-insured contract to a self-insured model. This section describes the primary financial components in various types of contracts and explains the various ways by which PBMs are reimbursed.

7.1 Financial Terms

The complexity and interconnectedness of the prescription drug supply chain, including drug manufacturers, wholesalers, retail, mail, specialty pharmacies, prescribers, patients, and payers, is mirrored in the financial aspects of a self-insured pharmacy benefits contract. There are four primary financial categories that are included in most contracts between the plan sponsor and the PBM:

- 1. Prescription drug discounts:** Plan sponsors contract with PBMs for drug prices based on drug type (brand, generic, specialty) and the drug delivery channel (retail pharmacy, mail pharmacy, specialty pharmacy). Most commonly, the discounts are based on the Average Wholesale Price (AWP) benchmark which is intended to represent the average price paid by a retailer to purchase the drug from a wholesaler. Another important benchmark for generic drug pricing is the Maximum Allowable Cost list, or “MAC” list. This price benchmark, usually determined by the PBM, sets the maximum reimbursement price the PBM will pay for the drugs included on the list (the maximum allowable cost). The MAC list was originally designed as a cost containment tool to promote the purchase of the lowest-cost generic drug when it was available from multiple manufacturers. Most PBM MAC lists contain between 90 and 95 percent of generics on the market. There are no regulations or industry standard criteria that govern MAC list development and application, so PBMs have wide discretion on which products to include and how to set reimbursement rates. Most plan sponsors negotiate with PBMs for discounts that are based on AWP but include generic drugs that are reimbursed according to MAC pricing.

Specialty drug pricing in prescription drug contracts is usually structured differently than non-specialty drug pricing. Non-specialty drug pricing terms are usually guaranteed at the category level (brand, generic). Specialty drugs are usually priced on a drug-by-drug basis based on a comprehensive specialty drug list maintained by the administrator, where each drug product has a

distinct discount guarantee. Specialty drug lists are updated as new specialty drug products are introduced to the market or as financial contracts are negotiated with manufacturers. In some cases, pharmacy contracts may include an “overall effective discount” guarantee for specialty drugs which sets the minimum product discount for all products included on the specialty drug list.

Many PBMs own prescription drug mail fulfillment and dispensing centers as well as specialty pharmacies. PBMs offer incentives in the form of deeper discounts, lower fees, and other services (like specialized clinical programs) to drive volume to their owned pharmacies.

PBMs also offer strategies that are designed to drive volume to specific retail pharmacies. Narrow networks, where select pharmacies are excluded from the network, steer plan members to the “preferred” network pharmacies and in turn, the pharmacy offers preferred pricing. 90-day fill networks operate on the same principal, where select pharmacies dispense a 90-day prescription fill instead of the standard 30-day fill.

- 2. Dispensing fees:** Dispensing fees are paid to the pharmacies to compensate the pharmacy for the costs of dispensing each prescription. Over time, dispensing fees have dropped dramatically and in some cases have been eliminated entirely. Dispensing fees can vary depending on the PBM and the type of financial contract in place.
- 3. Administration fees:** Administration fees are assessed to the plan sponsor to compensate the PBM for administering the benefit program. The PBM may also charge administrative fees to administer value-added services like clinical management programs. It is common practice for PBMs to waive administration fees if the financial arrangement allows the PBM to retain margin in other areas of the contract, such as prescription drug discounts or manufacturer derived revenue/rebates. Alternatively, some PBMs offer higher administration fees in exchange for full pass-through of all other sources of revenue.
- 4. Manufacturer derived revenue/rebates:** Manufacturer derived revenue includes any revenue received by the PBM from prescription drug manufacturers as a result of administering the pharmacy benefit on behalf of the plan sponsor. The largest percentage of manufacturer derived revenue

comes in the form of formulary and market share rebates. PBMs negotiate with manufacturers for rebates as incentive for including the product on the PBM's drug list formulary. Rebates are not based solely on inclusion on the formulary, they are also dependent on factors which include, but are not limited to, formulary position (preferred or non-preferred), market share, clinical requirements, competitor products, and other factors. In addition to rebates, PBMs receive other types of income from manufacturers which may include, but are not limited to, rebate administration fees, data and service fees, bulk purchasing incentives, inflation protection/price protection payments, grants, educational, and program fees.

Most PBMs pay manufacturer derived revenue/rebates retrospectively on a quarterly basis to their plan sponsor clients. The PBM aggregates the prescription drug claims throughout the quarter, submits the claims to manufacturers, the manufacturers remit rebates and any other contractual payments, and then the PBM remits the payments back to the plan sponsor. This process usually results in a delay between the time the prescription drug claim is incurred to the time the rebate is paid of three to six months. Some PBMs offer an alternative structure called "point-of-sale" (POS) rebates. The specifics of each POS arrangement may vary, but the core function is that the value of the manufacturer rebate is applied to the cost of the drug at the point-of-sale. Applying the rebate at the point-of-sale is a cash-flow benefit for the plan sponsor and can reduce the cost of the drug for the member (if they are responsible for paying a percentage of the total cost instead of a copay).

The effectiveness of the pricing terms is largely dependent on other provisions of the contract such as definitions, formulary management, audit rights, data ownership, and performance guarantees which can serve to enhance the value of the pricing provisions or dilute them. In the testimony provided by Pharmacy Benefits Consultants in October 2019, they recommend specific provisions that should be included in the pharmacy contract:³

- Pinned down "Brand Drug" and "Generic Drug" definitions (use Medi-Span MONY information fields)
- Pinned down guarantees for "Brand Drugs" and "Generic Drugs", dispensed at (i) retail, (ii) retail 90, and (iii) mail pharmacies
- Pinned down "Specialty Drug" definition (cross-reference to exhibit list of 1,000+ Specialty Drugs)

- A “minimum discount guarantee” for every Specialty Drug dispensed from the PBM’s Specialty Drug pharmacy (1,000+guarantees)
- The Plan’s “right to renegotiate” Retail and Mail Guarantees annually, and Specialty Drug Guarantees quarterly
- “Pass-through Pricing” – not “Spread Pricing” – for all drugs (retail, retail 90, mail, and specialty)
- A “Pass-Through” of 100 percent of all manufacturer payments and price reductions (not just “Rebates”)
- The “Right to Obtain “Net Cost’ Information” on any drug (factoring in “Rebates” & all other passed-through monies)
- The “Right to Customize” the Formulary (to decide which drugs to exclude and include, and how to “tier” the drugs)
- The “Right to Customize” any program (prior authorizations, step therapies, quantity limits)
- Full Disclosure of all PBM-Manufacturer and PBM-Pharmacy Contracts
- No “Exclusivity” rights for PBMs (all pharmacies can dispense all drugs)
- The right for the plan to determine which drugs are dispensed from which pharmacies (based on access to information on pharmacy costs)
- The Plan’s “right to carve-out” any Specialty Drug (allow a retail or a 3rd Party Specialty Drug Pharmacy to dispense the drug, if the PBM’s Specialty Drug Pharmacy Guarantee is not competitive)
- A “Right to terminate, with or without cause, on 90 days’ notice”

7.2 Additional Components of Cost

Prescription drug costs are the result of many different inputs, and financial terms in the contract are only one factor in total cost. Other contributors to costs include:

- **Demographics:** The demographics of the population, including age, gender, occupation, geography, family size, education, and socioeconomic status, contribute to the health of the population.
- **Plan design:** Prescription drug plan design components like co-pays, deductibles, and out-of-pocket maximums govern how much members pay for prescriptions, but also influence important contributors to cost like drug adherence and clinical outcomes.

- **Formulary:** The prescription drug formulary is a critical input to prescription drug costs. The formulary steers utilization to preferred products and is a primary tool for PBMs to negotiate financial incentives in the supply chain.
- **Clinical management:** Clinical programs like prior authorization, step therapy, quantity limits, and utilization review are intended to support appropriate utilization and guard against waste.

7.3 Spread Pricing Contracts

The most common financial contract structure is known as spread-pricing (also referred to as “traditional pricing”). In this arrangement, the PBM retains the difference between the discount negotiated with the plan sponsor and the reimbursement paid to the pharmacy. In a spread-pricing contract, PBMs typically retain all or a portion of the manufacturer derived revenue/rebates. PBMs that own mail and specialty pharmacies may also retain the difference between their prescription drug acquisition cost and the discounted rate offered to plan sponsors. In spread pricing contracts, the PBM typically does not assess an administration fee.

In most spread contracts, PBMs do not disclose the amount of margin retained to clients.

7.4 Pass-Through Contracts

An alternative arrangement is the “pass-through” financial contract. Pass-through contracts offer a higher degree of visibility into drug costs for plan sponsors than spread contracts. This model eliminates spread-pricing in the retail pharmacy network so the PBM does not realize any margin between the reimbursement to the pharmacy and the discount to the plan sponsor. To replace the margin from the network, PBMs assess an administration fee that is paid by the plan sponsor. In a pass-through model, rebates are not retained by the PBM and instead paid to the plan sponsor.

In circumstances where PBMs own mail and specialty pharmacies, the PBM usually structures those assets as separate legal entities which allows them to “pass-through” the rate the PBM receives from the mail and specialty entities. However, the rate offered to plan sponsors does not represent the actual acquisition cost, which means that the PBM still retains margin, or “spread”, even in the pass-through arrangement.

7.5 Hybrid and Alternative Contracts

There is a broad spectrum of contract types and methodologies in the market. Often plan sponsors will negotiate for a “hybrid” contract that includes spread-pricing in the pharmacy network but passes all manufacturer derived revenue/rebates back to the plan. One such methodology relies on the national average drug acquisition cost (NADAC) which is produced by the Centers for Medicare and Medicaid Services (CMS) by surveying select pharmacies each month on drug pricing in order to set reimbursement rates. There may be benefits to alternative pricing systems like the potential for higher price transparency more aligned incentives as well as limitations like fewer insurers and administrators willing to use the methodology.

Less common, and less available, are alternative contract arrangements like “cost plus” methodologies where the plan sponsor is charged the acquisition cost for the prescription drug plus a fee to administer the claim.

7.6 Prescription Drug Carve-out Considerations based on Prescription Drug Pricing and Contracts

- Drug discounts, dispensing fees, administration fees and manufacturer revenue/rebates underpin all pharmacy contracts. In a fully-insured model, the insurer typically does not provide any detail on these underlying terms to the plan sponsor since all risk is assumed by the insurer. NDPERS may need to require non-standard financial disclosures from the insurer to meet Century Code statutes related to the pharmacy benefits program.
- Unlike most fully-insured arrangements that do not specify prescription drug terms, NDPERS fully-insured contract passes-through 100 percent of manufacturer rebates from Sanford Health Plan to NDPERS.
- The two most common contract arrangements, spread and pass-through, have different mechanisms by which the PBM is reimbursed. In a spread contract, the PBM earns a margin on the difference between the reimbursement rates negotiated with the pharmacies and the rates contracted with the plan sponsor. These margins, or spreads, are not usually disclosed. Since North Dakota requires comprehensive financial disclosure from PBMs, a pass-through arrangement may be more compliant with statutes.

- Century Code Section 54-52.1-04.16 financial disclosure requirements may dissuade some insurers or PBMs from participating in the procurement for the uniform group insurance program. Some insurers and administrators do not offer pass-through pricing arrangements, and others may not want to provide the required disclosures.
- A self-insured, carve-out, prescription drug contract may allow for greater visibility into the underlying cost components of the contract and control over specific contract such as pricing guarantees, definitions, audit rights, termination provisions and rights to control core elements of the program like clinical programs and formulary.

8 Pharmacy Benefit Managers and Carve-Out Trends

This section discusses the evolution of the PBM landscape and the major competitors in the market. It identifies trends in carving-out prescription drug benefits and why market consolidation may begin to reverse the trend back towards medical and pharmacy integration.

8.1 Pharmacy Benefit Managers

PBMs began in the 1960s and their primary role was to adjudicate prescription drug claims on behalf of health plans. Through the 1980s, PBMs primarily served to connect retail pharmacies to the health insurers. The primary source of revenue was claims processing fees.⁴⁰

By the 1990s, PBMs began offering more services, including mail service, administration of clinical programs, more sophisticated contracting with drug manufacturers and pharmacies. The 2000s marked a growth period for PBMs. Dominant market players began to emerge, and PBM clients began to demand more services than just low cost, volume discounts. Performance guarantees for pricing, accuracy, customer service, and clinical management became priorities for PBMs in order to attract new business. As PBMs continued to grow, health plans and self-insured plan sponsors carved-out the pharmacy benefit from the medical benefits to take advantage of scale and capabilities to better manage prescription drug costs.

Since 2010, the PBM market has evolved even more dramatically and the industry has experienced significant consolidation. Three companies have emerged with the largest scale; CVS Health, Express Scripts, and OptumRx maintain nearly 80 percent of the PBM market share.⁴¹

CVS Health is the largest PBM in the industry, responsible for over two billion prescriptions annually and operating more than 9,900 retail pharmacy locations.⁴² CVS Health purchased Aetna in 2018 for \$70 billion, creating a massive vertically integrated PBM and health plan.⁴² The resulting company serves over 100 million pharmacy members and serves 37 million people in its health benefits segment through traditional, voluntary and consumer-directed health insurance.⁴²

Express Scripts manages pharmacy benefits for more than 75 million pharmacy benefit members.⁴³ In the same year that saw the combination of CVS Health and Aetna, Express Scripts was acquired by Cigna for \$53 billion.⁴⁴

OptumRx, the PBM subsidiary of UnitedHealth Group, serves 56 million pharmacy members and processes more than one billion pharmacy claims annually.⁴⁵ UnitedHealth Group was the first of the three to pursue a vertically integrated model when they ended their long running relationship with Medco in 2013 (then owned by Express Scripts) and created OptumRx. In 2015, OptumRx acquired competitor Catamaran and absorbed their 35 million pharmacy benefits members.⁴⁶

Although the market is concentrated, competition remains among other market participants. Prime Therapeutics services more than 28 million members by partnering directly with 18 BCBS plans, including North Dakota.⁴³ IngenioRx, launched by Anthem in 2019, entered the space in hopes of capturing market share and developing their value proposition as a wholly integrated healthcare company. Other PBMs and PBM alternatives are competing in various market segments and include companies like Humana, MedImpact, Navitus, EnvisionRx, Welldyne, MagellanRx, RxSense, FliptRx, CapitalRx, RxAdvance, WithMe and others.

8.2 Pharmacy Benefit Carve-Out Trends

A “carve-out” pharmacy benefit plan refers to separating the administration of the prescription benefit, including drug costs and services, from the medical benefits plan. Carve-out pharmacy benefit programs have been a strategy for plan sponsors since the 1990s. As the PBM industry consolidated, and the resulting organizations grew, they positioned the value of the carve-out model as a strategy to control costs, leveraging scale to negotiate better rates and improve health outcomes by offering specialized prescription drug management programs. The argument for carving-out pharmacy benefits has been particularly salient with large employers. In 2001, 37 percent of employers with more than 20,000 employees implemented a pharmacy benefits carve-out strategy, by 2011 the number grew to 57 percent, and in 2019 it was 70 percent.¹²

Although the trend towards carving-out pharmacy has continued over the last two decades, evolving market forces may start reversing this trend.

The vertical integrations of the largest PBMs with national health insurers are already starting to shift marketing efforts away from carve-out business and towards integrated medical and prescription drug programs. In 2020, Cigna released their fourth annual “Value of Integration” study that found employers that offered

medical, prescription drug, and behavioral health saved \$867 per individual compared to employers with carved-out prescription drug benefits.⁴⁷ The study also found a savings of \$7,372 for individuals on specialty drugs and \$11,679 on oncology specific patients along with a 24 percent lower in-patient expense.⁴⁷ UnitedHealth Group and OptumRx released a study based on their 2017 claims that showed increased medication adherence rates, higher adherence to evidence-based therapies, increased patient safety, and improved physician quality metrics through an integrated medical and prescription drug program.⁴⁸ Research by Aetna published in 2017 showed combining medical and pharmacy improves cost containment over time. The study found that plan sponsors with integrated medical and pharmacy had a 34 percent lower medical trend than those with carved-out prescription drug benefits.⁴⁹ In 2020, a Cambia Health Solutions and Prime Therapeutics released the results of a jointly conducted study of 331,390 members that took place over two years. It found that members with an integrated medical and prescription drug benefit resulted lower per member per year costs of \$148, 15 percent lower odds of hospitalization, and seven percent lower odds of an emergency department visit compared to members with a carve-out benefit. The study also demonstrated that members with chronic conditions experience a larger benefit from the integrated benefit. Members with coronary artery disease (CAD) were estimated to save \$4,351 per member per year, members with chronic obstructive pulmonary disease (COPD) were estimated to save \$3,177 per member year, and members with diabetes were estimated to save \$1,363 per member per year.⁵⁰

The research sponsored by insurers and PBMs is the most relevant data to the impact of integrated vs carve-out benefits because they study the question directly. Other clinical studies that do not specifically look at benefit structure but instead investigate the effects of member engagement and adherence to treatment may also be instructive. A 2018 study published in the *Annals of Pharmacotherapy* estimated the annual cost of drug-related morbidity and mortality resulting from nonoptimized medication therapy was \$528.4 billion, or 16 percent of total US health care expenditures in 2016. Based on these results, a reasonable application of the findings would be that insurers or PBMs that can effectively optimize medication therapy can reduce the costs created by non-optimized medication therapy.⁵¹

The growth in consumer driven health care, and specifically high-deductible health plan (HDHP) designs, may also favor an integrated program compared to a carve-out arrangement. In 2009, only 12 percent of government employers offered a HDHP, while in 2019 the number rose to 47 percent.¹² NDPERS offers a high-deductible

plan as an option for participants, and currently over 1,000 members are enrolled. HDHPs have combined medical and pharmacy deductibles and out-of-pocket maximums, which requires coordination between the medical administrator and the pharmacy benefits manager to accurately track the member's expenses to accumulate the totals towards the plan's out-of-pocket limits. Carve-out pharmacy benefit managers and medical insurers can exchange the file feeds to track accumulators; however, there are usually additional expenses for the integration, and it may require additional administration from the plan sponsor.

8.3 Considerations based on Carve-out Prescription Drug Trends and Shifting Alignments between PBMs and Health Insurers

- PBMs have become a larger player in the healthcare landscape over time. Market consolidation in the 1990s and 2000s resulted in PBMs with scale and specialized drug management capabilities.
- PBMs positioned the value of carving-out the prescription drug program as a strategy to control rising drug costs by leveraging purchasing scale and implementing prescription drug utilization management.
- Today, three PBMs serve 80 percent of the pharmacy benefit market (CVS Health, Express Scripts, and OptumRx). Each is now integrated with a national health insurer (CVS Health with Aetna, Express Scripts with Cigna, and OptumRx with UnitedHealth Group). Other market participants are also pursuing integrated medical and prescription drug strategies, like Prime Therapeutics with their BCBS owner-clients, and Anthem and its new PBM IngenioRx.
- PBMs and health insurers have shifted their value propositions to emphasize the cost efficiencies, clinical outcomes, and customer experience of integrated models compared to carve-out alternatives.

9 Summary and Conclusion

The considerations for transitioning from the fully-insured uniform group insurance program to a carve-out prescription drug program will be based on the availability and feasibility of different options. The results of the procurement for the NDPERS uniform group insurance program will clarify the relative importance of each consideration in the context of the alternatives available to NDPERS. A summary of the considerations outlined in this study for the State that merit evaluation include, but are not limited to:

- **A carve-out prescription drug plan would likely require a change to self-insurance for prescription drugs.** Fully-insured carve-out prescription drug benefits are not commonly available in the market.

The competitive procurement will determine the insurance options available for the 2021-23 biennium. If the State determines that a self-insured plan is not in the best interest of the State and the State's eligible members, then a carve-out prescription drug plan may not be available.

- **Carving-out the pharmacy benefit allows for greater flexibility to procure benefits arrangements determined to be in the best interest of the State.** Under the current arrangement, the NDPERS Board selects the insurer that presents the best overall value for medical and pharmacy, even though the best value for medical and pharmacy may not necessarily be the same provider. Carving-out the prescription drug benefit gives the Board the flexibility to select the best value for each benefit.
- **Contracting for a carve-out pharmacy benefit under a self-insured plan allows for more choice in administrators.** The insurance market in North Dakota is concentrated and most commercially insured business in the state is administered by Blue Cross Blue Shield of North Dakota (BCBSND) or Sanford Health Plan. There are many pharmacy benefit managers that administer self-insured benefit programs that do not offer fully-insured options or medical benefits.
- **Carving-out the prescription drug benefit allows for more control of aspects of the prescription drug plan.** As described by consulting firm Pharmacy Benefits Consultants (PBC) in their testimony to the Health Care Reform Review Committee, carving-out the prescription drug benefit will give

the Board more control over the prescription drug contract, formulary, and clinical management programs.

- **Self-insured, carve-out, prescription drug programs allow for greater visibility into costs.** Most fully-insured arrangements do not provide detailed cost data and financial information because the insurer assumes all the risk. Self-insured arrangements offer a higher degree of control and visibility into the underlying cost components of the contract. North Dakota Century Code statutes mandate access to prescription drug financial information regardless of the insurance arrangement. Due to the Century Code requirements, some insurers may not offer fully-insured insurance options, or compliant fully-insured options, for the uniform group insurance program.
- **A self-insured, carve-out prescription drug plan would eliminate the downside risk protection of the modified fully-insured contract.** The modified fully-insured arrangement with gain-sharing offers the advantage of fixed monthly premiums and no risk of loss should claims exceed premiums. A self-insured plan would require that the State assume all claims risk (or purchase stop loss insurance to insure against large claim losses).
- **A self-insured, carve-out prescription drug plan would result in more claims volatility than the modified fully-insured contract.** Prescription drug costs continue to rise, driven by the prevalence of chronic conditions and specialty drugs that treat high-cost, complex conditions. Additionally, market events such as COVID-19 could have a dramatic impact on claims costs. NDPERS' size will help minimize the volatility associated with large claims or unpredictable risk, however, claims under a self-insured contract will fluctuate more than a fixed premium agreement.
- **Reserve funding may need to be increased.** In a self-insured, carve-out prescription drug arrangement, the State will need to build a reserve fund for fluctuations in claims, costs, and expenses. Under current statute, the balance amount would need to be between two and four months of expected claims.

Depending on the funding required, and the availability of funds, higher premiums may be necessary to build the reserve.

- **Stop loss insurance may introduce new costs to the plan.** Under a self-insured plan, stop loss insurance could be purchased to mitigate some of the

risk of large claims. Given NDPERS' size and tolerance for risk, stop loss insurance may not be necessary. If the State implements a self-insured, carve-out, prescription drug plan while maintaining a fully-insured medical plan, stop loss coverage options may be limited or unavailable.

- **Direct or indirect carve-out costs.** It is common for insurers and administrators to charge “carve-out” fees as a disincentive to carving-out the prescription drug benefit. Fees can include, but are not limited to, increased medical premiums, higher medical administrative service fees, file feed charges, and implementation fees.
- **A carve-out may add administrative complexity for NDPERS.** Carving-out the prescription drug benefit to a separate vendor may create the need to add resources, including additional NDPERS personnel, to manage the third-party. A carve-out prescription drug plan typically requires a separate contract, separate account and customer service teams, separate invoicing and financial requirements, separate reporting systems, and separate programs and services.

Carving-out also likely requires additional administrative tasks such as sharing additional claims and eligibility files, coordinating plan documents, monitoring, and reconciling separate financial reporting. NDPERS also supports a variety of wellness and disease management programs that are reliant on data and collaboration with the medical and prescription drug insurer that would need to be replicated in a carve-out arrangement. These additional administrative needs would likely result in NDPERS requiring additional staff.

- **Accumulator integration for high-deductible plans would require additional coordination.** Plan designs that feature combined medical and prescription drug deductibles and out-of-pocket maximums (most frequently high-deductible health plans) require careful tracking to accurately account for member out-of-pocket payments. In a carve-out prescription drug program, file feeds with claims information need to be exchanged regularly between the medical and prescription drug plan in order to track these accumulators. Most medical and prescription drug administrators have the ability to integrate these accumulator files but updates to member accumulators may be slower than if the medical and prescription drug benefits are combined under a single insurer.
- **A carve-out may impact clinical integration.** A carve-out contract could result in less clinical integration between the medical and prescription drug

administrators. Insurers combine medical and pharmacy data to monitor for issues such as gaps in care; adherence; and fraud, waste, and abuse; track health outcomes; and identify potential risks. Less integration may create challenges in combining data efficiently and coordinating between medical and prescription drug to achieve clinical outcomes. Plan sponsors can mitigate some of the risk of reduced clinical integration by proactively engaging the medical and prescription drug administrators to support clinical integration through contractual, reporting, and service level agreements.

- **Delivering an integrated benefits experience to members may be more difficult in a carve-out arrangement.** Carving-out the prescription benefit has an impact on the plan member experience. Members may have different ID cards, different mobile applications and websites for each vendor, may need to contact different service teams, and may receive different communications. Members will need information on how their benefits work when they are administered by different companies, as well as support for different administrative policies under each vendor agreement. It is also important to align benefit policies including coverage designs, rules, requirements, and payment procedures across medical and prescription drug programs. This is particularly important for patients that receive treatment that could be paid under the medical or the prescription drug benefit, like cancer.

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Memorandum

TO: NDPERS Board

FROM: Bryan

DATE: September 8, 2020

SUBJECT: Health Insurance RFP Update

Deloitte will call into the meeting to give the Board an update in executive session regarding the technical and cost proposals received. We will discuss our progress in reviewing the proposals and issues we are attempting to resolve. Board direction on next steps, including possible further interviews and vendor presentations, will need to be discussed.



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Memorandum

TO: NDPERS Board

FROM: Rebecca

DATE: September 8, 2020

SUBJECT: **FlexComp Vendors – Voluntary Products**

We have conducted our annual review of the vendors for the voluntary insurance products approved for pretax premiums under our Section 125 FlexComp Plan. We sent all current vendors a request to confirm the products they offer, provide a brief product description, and verify whether it is eligible to be a pretax product. Following is a list of the respondents:

AFLAC
Central United
Colonial Life
Total Dental Administrators (TDA)
USABLE

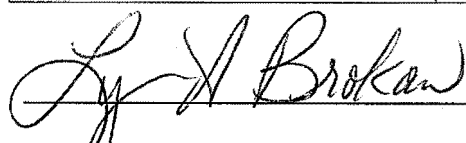
All of the vendors have responded and confirmed the ongoing eligibility of their products for pretax treatment under our FlexComp plan. The attached outlines the vendor products available for payroll deduction, a brief description of the product, and certification by the vendor regarding which products are or are not eligible to be pre-taxed. No new products are being proposed by any of the participating companies.

Staff recommends that the vendors and their eligible products be approved for inclusion as pretax benefits under the FlexComp program for the 2021 plan year.

Board Action Requested

Approve the inclusion of the products eligible to be pre-taxed for the FlexComp 2021 plan year.

| AFLAC Product Name | Company Representative – Lynn Brokaw 400 E Broadway Ste 307 Bismarck ND 58501 701-258-6040 E-Mail: lynn_brokaw@us.aflac.com Product Description | Pretax Eligibility |
|-----------------------------|---|-----------------------|
| Cancer | Cancer indemnity policies providing benefits for diagnosis of skin cancer, internal cancer as well as annual screening benefits. | Yes |
| Hospital Confinement | Indemnity benefits whether hospitalized days or weeks. | Yes |
| Hospital Intensive Care | Provides coverage in the event of a sickness or injury and is admitted to the ICU unit. | Yes |
| Accident | Accident indemnity policies providing benefits for accident/injury. | Yes |
| Lump Sum Critical Illness | Pays a lump sum benefit for code red major critical illness event. (Heart attack, stroke, coma, paralysis, major organ transplant, end stage renal failure. Riders available for cancer, sudden cardiac death.) | Yes |
| Personal Sickness Indemnity | Indemnity policy for sickness related hospital confinement, major diagnostic exams, in & out-patient surgeries. | No |
| Specified Health Event | Critical care, recovery indemnity policies for major critical illness. | Yes |
| Disability | All disability policies that are specific replacement of income benefits. | No |
| Dental | Voluntary dental. No networks, no deductibles, no pre-certifications. | No |
| Vision Now | Vision indemnity policy providing vision insurance, vision correction benefits. | No |
| Life | All life policies. | No |
| | | |
| | | |


Signature

08-10-2020

Date

| | | |
|-----------------------------|--|---------------------------|
| Central United | Company Representative – James M Kasper | |
| | C/O Asset Management Group Inc. PO Box 9016 Fargo ND 58103--9016 701-232-6250 | |
| Product Name | E-Mail: jmkasper@amg-nd.com | Pretax Eligibility |
| | Product Description | |
| Cancer Insurance <i>JMK</i> | Provides cash benefits to covered persons for treatment of cancer. <i>JMK</i> | Yes <i>JMK</i> |
| | | |
| | | |

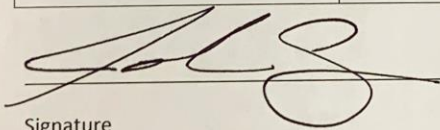
James M Kasper

 Signature

August 3, 2020

 Date

| Colonial Life | Company Representative – John Guzman | |
|------------------|--|--------------------|
| Product Name | Farmers Union Insurance 4141 38 th St s Suite C Fargo, ND 58104 E-Mail: john.guzman@fumic.com | Pretax Eligibility |
| | Product Description | |
| Accident | Composite rated, guaranteed renewable accident product with choice of plan levels and optional riders. It provides indemnity benefits for on and off the job accidents. | Yes |
| Cancer | Composite rated, guaranteed renewable specified disease product with choice of plan levels and optional riders. Provides benefits for expenses related to cancer. | Yes |
| Disability | Age banded, guaranteed renewable short-term disability income product. | No |
| Medical Bridge | Age banded, guaranteed renewable hospital confinement indemnity product. Choice of plans, levels. Includes confinement, rehab unit, surgical and diagnostic procedures. | Yes |
| Critical Illness | Specified disease product with a lump sum benefit upon diagnosis of a covered specified disease with a choice of plan options for reoccurrence, cancer, face amounts, and optional riders. | No |
| Life | All life insurance policies. | No |
| | | |
| | | |

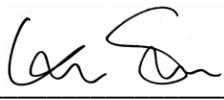


Signature

8/20/2020

Date

| Total Dental Administrators Product Name | Company Representative – Logan Stucki 2800 N 44th Street Ste 500 Phoenix AZ 85008 801-268-9740 Ext 306 E-Mail: lstucki@TDA dental.com Product Description | Pretax Eligibility |
|---|---|---------------------------|
| Elite Choice | Fully insured dental program. | Yes |
| | | |
| | | |



 Signature

2020.08.10

 Date

| USABLE | | |
|---|--|---------------------------|
| Company Representative – Matthew Sullivan | | |
| Azurance Group 4510 13 Ave S Fargo ND 58121 701-277-2319 | | |
| Product Name | E-Mail: Matthew.Sullivan@noridian.com | Pretax Eligibility |
| Product Description | | |
| Accident Elite | Employees can get help prevent financial hardship due to medical/travel expenses caused from an accident. Payments direct to employee. | Yes |
| Cancer Care Elite | Payments direct to employee for new and experimental treatment, travel, lodging, out of pocket medical costs, deductibles, co-pay amounts. | Yes |
| Hospital Confinement Plan | Payment direct to employee for costs related to intensive care, hospitalization, birth of a child, accidents. | Yes |
| | | |
| | | |



Signature

8-10-2020

Date



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Memorandum

TO: NDPERS Board

FROM: Rebecca

DATE: September 8, 2020

SUBJECT: Life Insurance Plan Renewal/Rebid

Effective July 1, 2017, Voya was awarded the bid for the group vision insurance plan. The Board approved renewing the contract with Voya for July 1, 2019 through June 30, 2021, which is the 2nd 2-year period for renewal. Voya has now provided the same premium guarantee for the final 2-year period, July 1, 2021 through June 30, 2023 (Attachment 1).

After receiving Voya's premium guarantee for the final 2-year period, staff asked Voya to consider reducing premiums that were not divisible by 2 by 1 penny to make them divisible by 2. This is important for processing bi-monthly payrolls, which includes all payrolls from University System employers. Voya did not agree to reduce all the necessary premiums by 1 penny, but rather is proposing that some be reduced by 1 penny and some be increased by 1 penny. Attachment 2 is the proposal from Voya Financial to accommodate these bi-monthly payrolls. This change amounts in a monthly increase in premiums collected of \$10,084, which out of a \$3.38M monthly premium would be a 0.3% premium increase.

As you may recall as part of their original bid in 2017, Voya made several plan enhancements, which included:

- Reduced premiums in employee supplemental and spouse supplemental coverages
- Increased the basic level of coverage from \$3,500 to \$7,000 for the same cost
- Increased the maximum amounts for employee supplemental and spouse supplemental coverages
- Offered additional tiers (\$7,000 and \$10,000) of dependent coverage
- Increased the maximum accelerated death benefit and added a new long term care facility provision to this benefit
- Extended the disability waiver of premium to dependents and spouses

- Added additional benefits such as the Occupational Hazard and Line of Duty AD&D benefits
- Added a portability of basic and supplemental life insurance feature for terminating employees
- Increased the one-step supplemental life upgrades with guarantee issue from \$5,000 to \$25,000 up to the maximum guarantee issue amount of \$200,000 at each annual enrollment.

As reported to the Board following the implementation of these enhancements, NDPERS did see and has continued to see increased activity from the membership to increase their coverage levels for employee, dependent and spouse supplemental coverage.

Voya has provided the Life Client Experience Report – Paid Claims by Incurred Date for 2019 (Attachment 3) for your information.

Staff recommends that we amend the current contract to renew with Voya for the July 1, 2021 through June 30, 2023 contract period. However, staff is looking for direction on whether the Board wishes to renew at the same premium guarantee or to renew with the slight increase but accommodation of the bi-monthly payrolls.

If the Board opts to not renew with Voya, staff will begin preparations of the Life Insurance Plan Request for Proposal and will bring it to the Board for approval at a future meeting.

Board Action Requested

Approve staff's recommendation to amend the current contract to renew with Voya for the July 1, 2021 through June 30, 2023 contract period. Provide direction on whether the renewal is at the same premium guarantee or with the slight 0.3% increase to accommodate the bi-monthly payrolls of employers on the life insurance plan.

From: [Bahnmann, R. \(Ruth\)](#)
To: [Fricke, Rebecca D.](#)
Cc: [Holt, T. \(Theodore\)](#); [Bessette, A \(Adam\)](#); [Neilson, B. \(Brittany\)](#)
Subject: NDPERS, 673897 - Life Insurance Rate Guarantee Extension to 7/1/23
Date: Friday, August 14, 2020 11:33:31 AM
Attachments: [image005.jpg](#)
[image006.jpg](#)
[673897_NDPERS_070121 - Renewal Letter.pdf](#)

CAUTION: This email originated from an outside source. Do not click links or open attachments unless you know they are safe.

Hi Rebecca:

We're pleased to let you know that we can extend the rate guarantee on the life insurance policy for NDPERS to 7/1/23.

Below is an excerpt from the RFP we received from the quote process for the 7/1/17 renewal:

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We wanted to comply with the request for advance notice of the rate extension.

Attached is the renewal exhibit for your reference.

Please let us know if you have any questions.

Have a good weekend~

Ruth Bahnmann | National Account Executive
Voya Financial Employee Benefits
612-325-2880 | ruth.bahnmann@voyafinancial.com

NYSE: VOYA



Upcoming PTO: 8/17/20

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Group Annual Term Life Insurance Renewal Offer

Voya Employee Benefits

Prepared For:
North Dakota Public Employees Retirement System (NDPERS)

Policy Number
673897

Effective Date
July 1, 2021

ReliaStar Life Insurance Company, a member of the Voya ® family of companies

PLAN | INVEST | PROTECT

Life Insurance Renewal Offer
North Dakota Public Employees Retirement System
Group Benefit Plan: 673897
Class Name: All Employees

New Premium Rate Effective Date:

07/01/2021

| COVERAGE | Current Premium Rates | Renewal Premium Rates |
|---|-----------------------------|-----------------------------|
| Life Basic Employee, per unit | \$0.245 | \$0.245 |
| Life Basic Retiree, per unit | \$4.300 | \$4.300 |
| AD&D Basic Employee, per unit | \$0.035 | \$0.035 |
| AD&D Basic Retiree, per unit | \$0.020 | \$0.020 |
| Life Supplemental Employee, per \$1,000 | | |
| <20 | \$0.020 | \$0.020 |
| 20-24 | \$0.020 | \$0.020 |
| 25-29 | \$0.020 | \$0.020 |
| 30-34 | \$0.030 | \$0.030 |
| 35-39 | \$0.050 | \$0.050 |
| 40-44 | \$0.070 | \$0.070 |
| 45-49 | \$0.090 | \$0.090 |
| 50-54 | \$0.150 | \$0.150 |
| 55-59 | \$0.320 | \$0.320 |
| 60-64 | \$0.500 | \$0.500 |
| 65-69 | \$0.970 | \$0.970 |
| 70+ | \$1.610 | \$1.610 |
| Life Supplemental Spouse, per \$1,000 | | |
| <20 | \$0.030 | \$0.030 |
| 20-24 | \$0.030 | \$0.030 |
| 25-29 | \$0.030 | \$0.030 |
| 30-34 | \$0.040 | \$0.040 |
| 35-39 | \$0.060 | \$0.060 |
| 40-44 | \$0.090 | \$0.090 |
| 45-49 | \$0.110 | \$0.110 |
| 50-54 | \$0.170 | \$0.170 |
| 55-59 | \$0.330 | \$0.330 |
| 60-64 | \$0.510 | \$0.510 |
| 65-69 | \$0.980 | \$0.980 |
| 70+ | \$1.610 | \$1.610 |
| Life Supplemental Child, Option 1, Per \$2,000 | \$0.200 | \$0.200 |
| Life Supplemental Child, Option 2, Per \$5,000 | \$0.500 | \$0.500 |
| Life Supplemental Child, Option 3, Per \$7,000 | \$0.700 | \$0.700 |
| Life Supplemental Child, Option 4, Per \$10,000 | \$1.000 | \$1.000 |
| AD&D Supplemental Employee, per \$1,000 | \$0.010 | \$0.010 |

ReliaStar Life Insurance Company, a member of the Voya ® family of companies

PLAN | INVEST | PROTECT

Life Insurance Renewal Offer
North Dakota Public Employees Retirement
Group Benefit Plan: 673897

All Premium Rates are Guaranteed from: 07/01/2021 to 07/01/2023

In order for us to process this renewal in a timely manner, please sign below and return the completed form via fax, email, or mail to your Account Manager.

This form only acknowledges acceptance of the renewal rates. Amendments may need to be signed by the Policyholder for any changes to the current Policy and will be sent after acceptance of the renewal.

If Renewal offer is accepted, this document will serve as your premium rate notification for the rate guarantee period outlined above.

This document was produced on 08/14/2020, and is valid for 90 days from that date.

Authorized Signature

Print Name

Notes:

- * The cost for Basic Life Insurance may include Voya Travel Assistance and Funeral Planning and Concierge Services.
- * Funeral Planning and Concierge Services are provided by Everest Funeral Package, LLC, Houston, TX.
- * Voya Travel Assistance services are provided by Europ Assistance USA, Bethesda, MD.
- * If Portability is elected, individuals who choose to port their coverage may have different rate schedules than those listed above.
- * Group Term Life Insurance is underwritten by ReliaStar Life Insurance Company (Minneapolis, MN), a member of the Voya ® family of companies. Policy form LP00GP (may vary by state).

ReliaStar Life Insurance Company, a member of the Voya ® family of companies

PLAN | INVEST | PROTECT



| | |
|----------------|--|
| Group Name | North Dakota Public Employees Retirement |
| Effective Date | 07/01/2021 |

| Supplemental Life - Employee | Current Rates | Current Divisible by 2 | Adjusted Rates | Divisible by 2 |
|---------------------------------|---------------|---------------------------|-------------------|-------------------|
| <20 | 0.020 | 0.010 | 0.020 | 0.010 |
| 20-24 | 0.020 | 0.010 | 0.020 | 0.010 |
| 25-29 | 0.020 | 0.010 | 0.020 | 0.010 |
| 30-34 | 0.030 | 0.015 | 0.040 | 0.020 |
| 35-39 | 0.050 | 0.025 | 0.040 | 0.020 |
| 40-44 | 0.070 | 0.035 | 0.080 | 0.040 |
| 45-49 | 0.090 | 0.045 | 0.080 | 0.040 |
| 50-54 | 0.150 | 0.075 | 0.160 | 0.080 |
| 55-59 | 0.320 | 0.160 | 0.320 | 0.160 |
| 60-64 | 0.500 | 0.250 | 0.500 | 0.250 |
| 65-69 | 0.970 | 0.485 | 0.960 | 0.480 |
| 70-74 | 1.610 | 0.805 | 1.600 | 0.800 |
| Premium | \$2,760,078 | | \$2,772,454 | |
| Variance | \$0 | | \$12,375 | |

| Supplemental Life - Spouse | Current Rates | Current Divisible by 2 | Adjusted Rates | Divisible by 2 |
|-------------------------------|---------------|---------------------------|-------------------|-------------------|
| <20 | 0.030 | 0.015 | 0.020 | 0.010 |
| 20-24 | 0.030 | 0.015 | 0.020 | 0.010 |
| 25-29 | 0.030 | 0.015 | 0.040 | 0.020 |
| 30-34 | 0.040 | 0.020 | 0.040 | 0.020 |
| 35-39 | 0.060 | 0.030 | 0.060 | 0.030 |
| 40-44 | 0.090 | 0.045 | 0.080 | 0.040 |
| 45-49 | 0.110 | 0.055 | 0.120 | 0.060 |
| 50-54 | 0.170 | 0.085 | 0.160 | 0.080 |
| 55-59 | 0.330 | 0.165 | 0.340 | 0.170 |
| 60-64 | 0.510 | 0.255 | 0.500 | 0.250 |
| 65-69 | 0.980 | 0.490 | 0.980 | 0.490 |
| 70-74 | 1.610 | 0.805 | 1.600 | 0.800 |
| Premium | \$622,772.2 | | \$620,480.8 | |
| Variance | \$0.0 | | -\$2,291.4 | |

Notes:

The client would like an option to adjust the step rates so when divided by 2 there are only 2 digits after the decimal.

The SAD&D rate is currently \$0.01/\$1,000 and is not addressed above.

North Dakota Public Employees Retirement System

Group: 673897

Life Client Experience Report - Paid Claims by Incurred Date

Run Date: 08/14/2020

The information in this report is provided solely for business purposes you have with Voya® Employee Benefits. It may contain information on individuals. By accepting this report, you are agreeing not to disclose any private information on an individual to another party without a separate, written authorization from the individual.

PERSONAL AND CONFIDENTIAL

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Basic Life

| Experience Period | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------|---------------------|------------------------------|---------------------------|--------------------|-----------------|--------------------|
| 01/2019 to 12/2019 | \$222,897.15 | \$396,822.47 | \$700.00 | \$44,600.00 | 22,004 | 134,777,592 |
| Totals | \$222,897.15 | \$396,822.47 | \$700.00 | \$44,600.00 | 22,004 | 134,777,592 |

Supplemental Life

| Experience Period | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------|-----------------------|------------------------------|---------------------------|---------------------|-----------------|----------------------|
| 01/2019 to 12/2019 | \$2,623,505.36 | \$1,696,150.64 | \$0.00 | \$541,900.00 | 11,825 | 1,370,954,308 |
| Totals | \$2,623,505.36 | \$1,696,150.64 | \$0.00 | \$541,900.00 | 11,825 | 1,370,954,308 |

Basic AD&D

| Experience Period | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------|-------------------|------------------------------|---------------------------|--------------------|-----------------|--------------------|
| 01/2019 to 12/2019 | \$9,099.03 | \$16,621.69 | \$0.00 | \$0.00 | 22,017 | 134,758,192 |
| Totals | \$9,099.03 | \$16,621.69 | \$0.00 | | 22,017 | 134,758,192 |

Supplemental AD&D

| Experience Period | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------|---------------------|------------------------------|---------------------------|--------------------|-----------------|----------------------|
| 01/2019 to 12/2019 | \$164,988.83 | \$193,158.30 | \$0.00 | \$0.00 | 11,758 | 1,365,093,417 |
| Totals | \$164,988.83 | \$193,158.30 | \$0.00 | | 11,758 | 1,365,093,417 |

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Dependent Life

| Experience Period | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------|---------------------|------------------------------|---------------------------|--------------------|-----------------|--------------------|
| 01/2019 to 12/2019 | \$675,105.14 | \$1,264,862.93 | \$0.00 | \$0.00 | 12,742 | 342,643,250 |
| Totals | \$675,105.14 | \$1,264,862.93 | \$0.00 | | 12,742 | 342,643,250 |

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Account: 1 NORTH DAKOTA PUBLIC EMPLOYEES RETIREMENT SYSTEM

Basic AD&D

| Experience Period | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------|-------------------|------------------------------|---------------------------|--------------------|-----------------|--------------------|
| 01/2019 to 12/2019 | \$8,654.19 | \$15,320.55 | \$0.00 | \$0.00 | 21,995 | 134,691,275 |
| Totals | \$8,654.19 | \$15,320.55 | \$0.00 | | 21,995 | 134,691,275 |

Basic Life

| Experience Period | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------|---------------------|------------------------------|---------------------------|--------------------|-----------------|--------------------|
| 01/2019 to 12/2019 | \$221,327.35 | \$382,814.82 | \$700.00 | \$44,600.00 | 21,986 | 134,692,425 |
| Totals | \$221,327.35 | \$382,814.82 | \$700.00 | \$44,600.00 | 21,986 | 134,692,425 |

Dependent Life

| Experience Period | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------|---------------------|------------------------------|---------------------------|--------------------|-----------------|--------------------|
| 01/2019 to 12/2019 | \$669,632.20 | \$1,264,862.93 | \$0.00 | \$0.00 | 12,731 | 342,290,833 |
| Totals | \$669,632.20 | \$1,264,862.93 | \$0.00 | | 12,731 | 342,290,833 |

Supplemental AD&D

| Experience Period | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------|---------------------|------------------------------|---------------------------|--------------------|-----------------|----------------------|
| 01/2019 to 12/2019 | \$163,738.71 | \$193,158.30 | \$0.00 | \$0.00 | 11,747 | 1,363,971,725 |
| Totals | \$163,738.71 | \$193,158.30 | \$0.00 | | 11,747 | 1,363,971,725 |

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Account: 1 NORTH DAKOTA PUBLIC EMPLOYEES RETIREMENT SYSTEM

Supplemental Life

| Experience Period | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------|-----------------------|------------------------------|---------------------------|---------------------|-----------------|----------------------|
| 01/2019 to 12/2019 | \$2,601,207.46 | \$1,585,078.68 | \$0.00 | \$541,900.00 | 11,810 | 1,369,506,700 |
| Totals | \$2,601,207.46 | \$1,585,078.68 | \$0.00 | \$541,900.00 | 11,810 | 1,369,506,700 |

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

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Group: 673897 North Dakota Public Employees Retirement System

Account: 3

Basic AD&D

| Experience Period | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------|---------------|------------------------------|---------------------------|--------------------|-----------------|--------|
| 10/2019 to 10/2019 | \$0.00 | \$1,301.14 | | \$0.00 | | |
| Totals | \$0.00 | \$1,301.14 | | | | |

Basic Life

| Experience Period | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------|---------------|------------------------------|---------------------------|--------------------|-----------------|--------|
| 11/2019 to 11/2019 | \$0.00 | \$7,002.77 | | \$0.00 | | |
| Totals | \$0.00 | \$7,002.77 | | | | |

Supplemental Life

| Experience Period | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------|---------------|------------------------------|---------------------------|--------------------|-----------------|--------|
| 11/2019 to 11/2019 | \$0.00 | \$18,007.13 | | \$0.00 | | |
| Totals | \$0.00 | \$18,007.13 | | | | |

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

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Group: 673897 North Dakota Public Employees Retirement System

Account: 390 North Dakota Public Employees Retirement System

Basic AD&D

| Experience Period | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------|---------------|------------------------------|---------------------------|--------------------|-----------------|--------------|
| 05/2019 to 12/2019 | \$1.92 | \$0.00 | \$0.00 | \$0.00 | 1 | 7,000 |
| Totals | \$1.92 | \$0.00 | \$0.00 | | 1 | 7,000 |

Basic Life

| Experience Period | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------|----------------|------------------------------|---------------------------|--------------------|-----------------|--------------|
| 05/2019 to 12/2019 | \$87.36 | \$0.00 | \$0.00 | \$0.00 | 1 | 7,000 |
| Totals | \$87.36 | \$0.00 | \$0.00 | | 1 | 7,000 |

Supplemental AD&D

| Experience Period | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------|---------------|------------------------------|---------------------------|--------------------|-----------------|---------------|
| 05/2019 to 12/2019 | \$3.60 | \$0.00 | \$0.00 | \$0.00 | 1 | 13,000 |
| Totals | \$3.60 | \$0.00 | \$0.00 | | 1 | 13,000 |

Supplemental Life

| Experience Period | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------|-----------------|------------------------------|---------------------------|--------------------|-----------------|---------------|
| 05/2019 to 12/2019 | \$162.24 | \$0.00 | \$0.00 | \$0.00 | 1 | 13,000 |
| Totals | \$162.24 | \$0.00 | \$0.00 | | 1 | 13,000 |

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Account: 391 North Dakota Public Employees Retirement System

Basic AD&D

| Experience Period | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------|-----------------|------------------------------|---------------------------|--------------------|-----------------|---------------|
| 01/2019 to 12/2019 | \$442.92 | \$0.00 | \$0.00 | \$0.00 | 26 | 74,700 |
| Totals | \$442.92 | \$0.00 | \$0.00 | | 26 | 74,700 |

Basic Life

| Experience Period | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------|-------------------|------------------------------|---------------------------|--------------------|-----------------|---------------|
| 01/2019 to 12/2019 | \$1,482.44 | \$7,004.88 | \$0.00 | \$0.00 | 21 | 96,600 |
| Totals | \$1,482.44 | \$7,004.88 | \$0.00 | | 21 | 96,600 |

Dependent Life

| Experience Period | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------|-------------------|------------------------------|---------------------------|--------------------|-----------------|----------------|
| 01/2019 to 12/2019 | \$5,472.94 | \$0.00 | \$0.00 | \$0.00 | 13 | 422,900 |
| Totals | \$5,472.94 | \$0.00 | \$0.00 | | 13 | 422,900 |

Supplemental AD&D

| Experience Period | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------|-------------------|------------------------------|---------------------------|--------------------|-----------------|------------------|
| 01/2019 to 12/2019 | \$1,246.52 | \$0.00 | \$0.00 | \$0.00 | 13 | 1,335,630 |
| Totals | \$1,246.52 | \$0.00 | \$0.00 | | 13 | 1,335,630 |

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Account: 391 North Dakota Public Employees Retirement System

Supplemental Life

| Experience Period | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------|--------------------|------------------------------|---------------------------|--------------------|-----------------|------------------|
| 01/2019 to 12/2019 | \$22,135.66 | \$93,064.83 | \$0.00 | \$0.00 | 17 | 1,726,730 |
| Totals | \$22,135.66 | \$93,064.83 | \$0.00 | | 17 | 1,726,730 |

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Basic Life

| Year | Month | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|---------------------------|-----------|---------------------|------------------------------|---------------------------|--------------------|-----------------|--------------------|
| 2019 | January | \$18,687.14 | \$25,722.70 | \$0.00 | \$23,600.00 | 22,046 | 135,968,300 |
| 2019 | February | \$18,421.09 | \$22,614.19 | \$0.00 | \$23,600.00 | 22,011 | 135,850,500 |
| 2019 | March | \$18,422.46 | \$48,857.53 | \$0.00 | \$23,600.00 | 22,048 | 136,060,900 |
| 2019 | April | \$18,089.09 | \$32,725.44 | \$0.00 | \$23,600.00 | 22,127 | 136,406,600 |
| 2019 | May | \$18,768.24 | \$16,124.89 | \$0.00 | \$29,300.00 | 22,105 | 135,943,300 |
| 2019 | June | \$18,466.88 | \$27,069.73 | \$0.00 | \$36,300.00 | 22,004 | 135,711,200 |
| 2019 | July | \$18,589.94 | \$27,029.67 | \$0.00 | \$36,300.00 | 21,940 | 135,382,600 |
| 2019 | August | \$18,627.68 | \$38,749.55 | \$0.00 | \$37,600.00 | 21,900 | 134,721,100 |
| 2019 | September | \$18,651.84 | \$23,119.82 | \$0.00 | \$44,600.00 | 21,922 | 134,832,100 |
| 2019 | October | \$18,939.01 | \$45,210.79 | \$23,800.00 | \$44,600.00 | 22,029 | 135,464,000 |
| 2019 | November | \$18,654.00 | \$59,451.73 | \$0.00 | \$44,600.00 | 22,021 | 125,563,700 |
| 2019 | December | \$18,579.78 | \$30,146.43 | \$0.00 | \$44,600.00 | 21,893 | 135,426,800 |
| Total: | | \$222,897.15 | \$396,822.47 | \$23,800.00 | \$44,600.00 | 22,004 | 134,777,592 |
| Basic Life Total : | | \$222,897.15 | \$396,822.47 | \$700.00 | \$44,600.00 | 22,004 | 134,777,592 |

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Supplemental Life

| Year | Month | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|----------------------------------|-----------|-----------------------|------------------------------|---------------------------|---------------------|-----------------|----------------------|
| 2019 | January | \$230,729.66 | \$18,008.86 | \$0.00 | \$345,200.00 | 11,989 | 1,378,711,850 |
| 2019 | February | \$223,844.01 | \$138,083.00 | \$0.00 | \$345,200.00 | 11,928 | 1,374,518,700 |
| 2019 | March | \$222,876.25 | \$397,321.87 | \$0.00 | \$345,200.00 | 11,921 | 1,374,804,300 |
| 2019 | April | \$224,157.61 | \$71,054.10 | \$0.00 | \$345,200.00 | 11,875 | 1,376,991,350 |
| 2019 | May | \$220,619.39 | \$193,142.46 | \$0.00 | \$338,200.00 | 11,936 | 1,374,772,800 |
| 2019 | June | \$219,047.44 | \$193,367.14 | \$0.00 | \$393,200.00 | 11,855 | 1,369,758,400 |
| 2019 | July | \$221,546.50 | \$193,171.50 | \$0.00 | \$393,200.00 | 11,805 | 1,365,296,350 |
| 2019 | August | \$214,215.78 | \$98,057.60 | \$0.00 | \$541,900.00 | 11,720 | 1,361,589,700 |
| 2019 | September | \$211,170.48 | \$43,030.56 | \$0.00 | \$541,900.00 | 11,693 | 1,364,598,600 |
| 2019 | October | \$215,863.77 | \$229,859.96 | \$0.00 | \$541,900.00 | 11,753 | 1,370,601,950 |
| 2019 | November | \$210,083.70 | \$18,007.13 | \$0.00 | \$541,900.00 | 11,719 | 1,370,085,900 |
| 2019 | December | \$209,350.77 | \$103,046.46 | \$0.00 | \$541,900.00 | 11,710 | 1,369,721,800 |
| Total: | | \$2,623,505.36 | \$1,696,150.64 | \$0.00 | \$541,900.00 | 11,825 | 1,370,954,308 |
| Supplemental Life Total : | | \$2,623,505.36 | \$1,696,150.64 | \$0.00 | \$541,900.00 | 11,825 | 1,370,954,308 |

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Basic AD&D

| Year | Month | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|-------------------------------|-----------|-------------------|------------------------------|---------------------------|--------------------|-----------------|--------------------|
| 2019 | January | \$802.86 | \$0.00 | \$0.00 | | 22,045 | 135,902,300 |
| 2019 | February | \$743.16 | \$0.00 | \$0.00 | | 22,018 | 135,845,500 |
| 2019 | March | \$723.56 | \$7,005.74 | \$0.00 | | 22,048 | 136,060,900 |
| 2019 | April | \$822.93 | \$0.00 | \$0.00 | | 22,137 | 136,346,800 |
| 2019 | May | \$735.51 | \$1,301.22 | \$0.00 | | 22,111 | 135,938,300 |
| 2019 | June | \$722.06 | \$0.00 | \$0.00 | | 22,004 | 135,711,200 |
| 2019 | July | \$813.14 | \$0.00 | \$0.00 | | 21,950 | 135,336,600 |
| 2019 | August | \$730.26 | \$0.00 | \$0.00 | | 21,904 | 134,714,100 |
| 2019 | September | \$726.86 | \$0.00 | \$0.00 | | 21,924 | 134,832,100 |
| 2019 | October | \$818.67 | \$1,301.14 | \$0.00 | | 22,041 | 135,427,000 |
| 2019 | November | \$734.57 | \$0.00 | \$0.00 | | 22,022 | 125,556,700 |
| 2019 | December | \$725.45 | \$7,013.59 | \$0.00 | | 22,000 | 135,426,800 |
| Total: | | \$9,099.03 | \$16,621.69 | \$0.00 | | 22,017 | 134,758,192 |
| Basic AD&D Total : | | \$9,099.03 | \$16,621.69 | \$0.00 | | 22,017 | 134,758,192 |

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Supplemental AD&D

| Year | Month | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------------------------|-----------|---------------------|------------------------------|---------------------------|--------------------|-----------------|----------------------|
| 2019 | January | \$13,949.10 | \$0.00 | \$0.00 | | 11,977 | 1,377,592,100 |
| 2019 | February | \$13,806.08 | \$0.00 | \$0.00 | | 11,927 | 1,374,325,700 |
| 2019 | March | \$13,748.04 | \$193,158.30 | \$0.00 | | 11,921 | 1,374,804,300 |
| 2019 | April | \$13,684.74 | \$0.00 | \$0.00 | | 11,532 | 1,344,122,700 |
| 2019 | May | \$13,442.71 | \$0.00 | \$0.00 | | 11,506 | 1,340,292,000 |
| 2019 | June | \$13,697.90 | \$0.00 | \$0.00 | | 11,855 | 1,369,758,400 |
| 2019 | July | \$13,873.93 | \$0.00 | \$0.00 | | 11,796 | 1,364,607,600 |
| 2019 | August | \$13,649.13 | \$0.00 | \$0.00 | | 11,719 | 1,361,348,700 |
| 2019 | September | \$13,682.96 | \$0.00 | \$0.00 | | 11,693 | 1,364,598,600 |
| 2019 | October | \$13,953.20 | \$0.00 | \$0.00 | | 11,743 | 1,370,056,200 |
| 2019 | November | \$13,749.26 | \$0.00 | \$0.00 | | 11,718 | 1,369,892,900 |
| 2019 | December | \$13,751.78 | \$0.00 | \$0.00 | | 11,710 | 1,369,721,800 |
| Total: | | \$164,988.83 | \$193,158.30 | \$0.00 | | 11,758 | 1,365,093,417 |
| Supplemental AD&D Total : | | \$164,988.83 | \$193,158.30 | \$0.00 | | 11,758 | 1,365,093,417 |

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya ® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Dependent Life

| Year | Month | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|-------------------------------|-----------|---------------------|------------------------------|---------------------------|--------------------|-----------------|--------------------|
| 2019 | January | \$58,521.05 | \$142,118.70 | \$0.00 | | 12,750 | 347,197,000 |
| 2019 | February | \$57,754.50 | \$35,022.07 | \$0.00 | | 12,659 | 347,739,000 |
| 2019 | March | \$56,917.75 | \$270,189.00 | \$0.00 | | 12,640 | 346,050,000 |
| 2019 | April | \$60,571.19 | \$110,059.39 | \$0.00 | | 15,657 | 367,114,000 |
| 2019 | May | \$56,760.30 # | \$120,086.55 | \$0.00 | | 11,893 | 303,404,000 |
| 2019 | June | \$56,096.75 | \$105,070.33 | \$0.00 | | 12,568 | 345,021,000 |
| 2019 | July | \$56,484.17 | \$155,129.55 | \$0.00 | | 12,500 | 344,903,000 |
| 2019 | August | \$54,787.45 | \$112,099.94 | \$0.00 | | 12,404 | 343,014,000 |
| 2019 | September | \$54,395.72 | \$5,004.03 | \$0.00 | | 12,434 | 342,274,000 |
| 2019 | October | \$55,131.73 | \$0.00 | \$0.00 | | 12,454 | 342,025,000 |
| 2019 | November | \$53,982.10 | \$105,041.61 | \$0.00 | | 12,483 | 341,866,000 |
| 2019 | December | \$53,702.43 | \$105,041.76 | \$0.00 | | 12,457 | 341,112,000 |
| Total: | | \$675,105.14 | \$1,264,862.93 | \$0.00 | | 12,742 | 342,643,250 |
| Dependent Life Total : | | \$675,105.14 | \$1,264,862.93 | \$0.00 | | 12,742 | 342,643,250 |

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Account: 1 NORTH DAKOTA PUBLIC EMPLOYEES RETIREMENT SYSTEM

Basic Life

| Year | Month | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|---------------------------|-----------|---------------------|------------------------------|---------------------------|--------------------|-----------------|--------------------|
| 2019 | January | \$18,346.78 | \$25,722.70 | \$0.00 | \$23,600.00 | 22,000 | 135,779,300 |
| 2019 | February | \$18,345.41 | \$22,614.19 | \$0.00 | \$23,600.00 | 22,002 | 135,795,500 |
| 2019 | March | \$18,422.46 | \$41,852.65 | \$0.00 | \$23,600.00 | 22,048 | 136,060,900 |
| 2019 | April | \$17,767.43 | \$32,725.44 | \$0.00 | \$23,600.00 | 22,083 | 136,209,600 |
| 2019 | May | \$18,716.36 | \$16,124.89 | \$0.00 | \$29,300.00 | 22,096 | 135,894,300 |
| 2019 | June | \$18,455.96 | \$27,069.73 | \$0.00 | \$36,300.00 | 22,003 | 135,704,200 |
| 2019 | July | \$18,238.64 | \$27,029.67 | \$0.00 | \$36,300.00 | 21,894 | 135,177,600 |
| 2019 | August | \$18,582.60 | \$38,749.55 | \$0.00 | \$37,600.00 | 21,891 | 134,672,100 |
| 2019 | September | \$18,630.00 | \$23,119.82 | \$0.00 | \$44,600.00 | 21,919 | 134,811,100 |
| 2019 | October | \$18,646.66 | \$45,210.79 | \$23,800.00 | \$44,600.00 | 21,987 | 135,270,000 |
| 2019 | November | \$18,608.92 | \$52,448.96 | \$0.00 | \$44,600.00 | 22,015 | 125,528,700 |
| 2019 | December | \$18,566.13 | \$30,146.43 | \$0.00 | \$44,600.00 | 21,890 | 135,405,800 |
| Total: | | \$221,327.35 | \$382,814.82 | \$23,800.00 | \$44,600.00 | 21,986 | 134,692,425 |
| Basic Life Total : | | \$221,327.35 | \$382,814.82 | \$700.00 | \$44,600.00 | 21,986 | 134,692,425 |

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Account: 1 NORTH DAKOTA PUBLIC EMPLOYEES RETIREMENT SYSTEM

Supplemental Life

| Year | Month | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|----------------------------------|-----------|-----------------------|------------------------------|---------------------------|---------------------|-----------------|----------------------|
| 2019 | January | \$225,988.86 | \$18,008.86 | \$0.00 | \$345,200.00 | 11,955 | 1,375,536,400 |
| 2019 | February | \$223,112.91 | \$138,083.00 | \$0.00 | \$345,200.00 | 11,921 | 1,373,658,700 |
| 2019 | March | \$222,876.25 | \$304,257.04 | \$0.00 | \$345,200.00 | 11,921 | 1,374,804,300 |
| 2019 | April | \$219,393.44 | \$71,054.10 | \$0.00 | \$345,200.00 | 11,840 | 1,373,624,900 |
| 2019 | May | \$219,982.89 | \$193,142.46 | \$0.00 | \$338,200.00 | 11,927 | 1,373,678,800 |
| 2019 | June | \$219,027.16 | \$193,367.14 | \$0.00 | \$393,200.00 | 11,854 | 1,369,745,400 |
| 2019 | July | \$216,451.98 | \$193,171.50 | \$0.00 | \$393,200.00 | 11,768 | 1,361,953,900 |
| 2019 | August | \$213,860.16 | \$98,057.60 | \$0.00 | \$541,900.00 | 11,712 | 1,360,680,700 |
| 2019 | September | \$210,849.12 | \$43,030.56 | \$0.00 | \$541,900.00 | 11,690 | 1,364,199,600 |
| 2019 | October | \$210,681.39 | \$229,859.96 | \$0.00 | \$541,900.00 | 11,716 | 1,367,394,000 |
| 2019 | November | \$209,728.08 | \$0.00 | \$0.00 | \$541,900.00 | 11,714 | 1,369,480,900 |
| 2019 | December | \$209,255.22 | \$103,046.46 | \$0.00 | \$541,900.00 | 11,707 | 1,369,322,800 |
| Total: | | \$2,601,207.46 | \$1,585,078.68 | \$0.00 | \$541,900.00 | 11,810 | 1,369,506,700 |
| Supplemental Life Total : | | \$2,601,207.46 | \$1,585,078.68 | \$0.00 | \$541,900.00 | 11,810 | 1,369,506,700 |

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Account: 1 NORTH DAKOTA PUBLIC EMPLOYEES RETIREMENT SYSTEM

Basic AD&D

| Year | Month | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|-------------------------------|-----------|-------------------|------------------------------|---------------------------|--------------------|-----------------|--------------------|
| 2019 | January | \$722.07 | \$0.00 | \$0.00 | | 22,000 | 135,779,300 |
| 2019 | February | \$722.11 | \$0.00 | \$0.00 | | 22,002 | 135,795,500 |
| 2019 | March | \$723.56 | \$7,005.74 | \$0.00 | | 22,048 | 136,060,900 |
| 2019 | April | \$724.64 | \$0.00 | \$0.00 | | 22,084 | 136,195,800 |
| 2019 | May | \$722.68 | \$1,301.22 | \$0.00 | | 22,096 | 135,894,300 |
| 2019 | June | \$721.82 | \$0.00 | \$0.00 | | 22,003 | 135,704,200 |
| 2019 | July | \$718.71 | \$0.00 | \$0.00 | | 21,894 | 135,177,600 |
| 2019 | August | \$717.33 | \$0.00 | \$0.00 | | 21,891 | 134,672,100 |
| 2019 | September | \$718.16 | \$0.00 | \$0.00 | | 21,919 | 134,811,100 |
| 2019 | October | \$720.49 | \$0.00 | \$0.00 | | 21,987 | 135,270,000 |
| 2019 | November | \$721.64 | \$0.00 | \$0.00 | | 22,015 | 125,528,700 |
| 2019 | December | \$720.98 | \$7,013.59 | \$0.00 | | 21,995 | 135,405,800 |
| Total: | | \$8,654.19 | \$15,320.55 | \$0.00 | | 21,995 | 134,691,275 |
| Basic AD&D Total : | | \$8,654.19 | \$15,320.55 | \$0.00 | | 21,995 | 134,691,275 |

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Account: 1 NORTH DAKOTA PUBLIC EMPLOYEES RETIREMENT SYSTEM

Supplemental AD&D

| Year | Month | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------------------------|-----------|---------------------|------------------------------|---------------------------|--------------------|-----------------|----------------------|
| 2019 | January | \$13,755.37 | \$0.00 | \$0.00 | | 11,955 | 1,375,536,400 |
| 2019 | February | \$13,736.59 | \$0.00 | \$0.00 | | 11,921 | 1,373,658,700 |
| 2019 | March | \$13,748.04 | \$193,158.30 | \$0.00 | | 11,921 | 1,374,804,300 |
| 2019 | April | \$13,414.45 | \$0.00 | \$0.00 | | 11,506 | 1,341,445,000 |
| 2019 | May | \$13,394.39 | \$0.00 | \$0.00 | | 11,498 | 1,339,439,000 |
| 2019 | June | \$13,697.45 | \$0.00 | \$0.00 | | 11,854 | 1,369,745,400 |
| 2019 | July | \$13,619.53 | \$0.00 | \$0.00 | | 11,768 | 1,361,953,900 |
| 2019 | August | \$13,606.80 | \$0.00 | \$0.00 | | 11,712 | 1,360,680,700 |
| 2019 | September | \$13,641.99 | \$0.00 | \$0.00 | | 11,690 | 1,364,199,600 |
| 2019 | October | \$13,686.10 | \$0.00 | \$0.00 | | 11,716 | 1,367,394,000 |
| 2019 | November | \$13,706.93 | \$0.00 | \$0.00 | | 11,714 | 1,369,480,900 |
| 2019 | December | \$13,731.07 | \$0.00 | \$0.00 | | 11,707 | 1,369,322,800 |
| Total: | | \$163,738.71 | \$193,158.30 | \$0.00 | | 11,747 | 1,363,971,725 |
| Supplemental AD&D Total : | | \$163,738.71 | \$193,158.30 | \$0.00 | | 11,747 | 1,363,971,725 |

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Account: 1 NORTH DAKOTA PUBLIC EMPLOYEES RETIREMENT SYSTEM

Dependent Life

| Year | Month | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|-------------------------------|-----------|---------------------|------------------------------|---------------------------|--------------------|-----------------|--------------------|
| 2019 | January | \$57,652.00 | \$142,118.70 | \$0.00 | | 12,730 | 346,554,000 |
| 2019 | February | \$57,379.20 | \$35,022.07 | \$0.00 | | 12,653 | 347,547,000 |
| 2019 | March | \$56,917.75 | \$270,189.00 | \$0.00 | | 12,640 | 346,050,000 |
| 2019 | April | \$59,486.30 | \$110,059.39 | \$0.00 | | 15,631 | 366,339,000 |
| 2019 | May | \$56,304.50 | \$120,086.55 | \$0.00 | | 11,885 | 303,170,000 |
| 2019 | June | \$56,096.75 | \$105,070.33 | \$0.00 | | 12,568 | 345,021,000 |
| 2019 | July | \$55,355.55 | \$155,129.55 | \$0.00 | | 12,471 | 344,070,000 |
| 2019 | August | \$54,716.65 | \$112,099.94 | \$0.00 | | 12,396 | 342,780,000 |
| 2019 | September | \$54,164.45 | \$5,004.03 | \$0.00 | | 12,431 | 342,070,000 |
| 2019 | October | \$53,983.15 | \$0.00 | \$0.00 | | 12,429 | 341,272,000 |
| 2019 | November | \$53,911.30 | \$105,041.61 | \$0.00 | | 12,478 | 341,709,000 |
| 2019 | December | \$53,664.60 | \$105,041.76 | \$0.00 | | 12,454 | 340,908,000 |
| Total: | | \$669,632.20 | \$1,264,862.93 | \$0.00 | | 12,731 | 342,290,833 |
| Dependent Life Total : | | \$669,632.20 | \$1,264,862.93 | \$0.00 | | 12,731 | 342,290,833 |

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Account: 3

Basic Life

| Year | Month | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|---------------|----------|--------------|------------------------------|---------------------------|--------------------|-----------------|--------|
| 2019 | November | \$0.00 # | \$7,002.77 | \$0.00 | | | |
| Total: | | | \$7,002.77 | \$0.00 | | | |

| | |
|---------------------------|-------------------|
| Basic Life Total : | \$7,002.77 |
|---------------------------|-------------------|

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Account: 3

Supplemental Life

| Year | Month | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|---------------|----------|--------------|---------------------------------|------------------------------|-----------------------|--------------------|--------|
| 2019 | November | \$0.00 # | \$18,007.13 | \$0.00 | | | |
| Total: | | | \$18,007.13 | \$0.00 | | | |

| | |
|----------------------------------|--------------------|
| Supplemental Life Total : | \$18,007.13 |
|----------------------------------|--------------------|

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Account: 3

Basic AD&D

| Year | Month | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------|---------|--------------|---------------------------------|------------------------------|-----------------------|--------------------|--------|
| 2019 | October | \$0.00 # | \$1,301.14 | \$0.00 | | | |
| Total: | | | \$1,301.14 | \$0.00 | | | |

Basic AD&D Total : \$1,301.14

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Account: 390 North Dakota Public Employees Retirement System

Basic Life

| Year | Month | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|---------------------------|-----------|----------------|------------------------------|---------------------------|--------------------|-----------------|--------------|
| 2019 | May | \$10.92 | \$0.00 | \$0.00 | | 1 | 7,000 |
| 2019 | June | \$10.92 | \$0.00 | \$0.00 | | 1 | 7,000 |
| 2019 | July | \$10.92 | \$0.00 | \$0.00 | | 1 | 7,000 |
| 2019 | August | \$10.92 | \$0.00 | \$0.00 | | 1 | 7,000 |
| 2019 | September | \$10.92 | \$0.00 | \$0.00 | | 1 | 7,000 |
| 2019 | October | \$10.92 | \$0.00 | \$0.00 | | 1 | 7,000 |
| 2019 | November | \$10.92 | \$0.00 | \$0.00 | | 1 | 7,000 |
| 2019 | December | \$10.92 | \$0.00 | \$0.00 | | 1 | 7,000 |
| Total: | | \$87.36 | \$0.00 | \$0.00 | | 1 | 7,000 |
| Basic Life Total : | | \$87.36 | \$0.00 | \$0.00 | | 1 | 7,000 |

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.



Group: 673897 North Dakota Public Employees Retirement System

Account: 390 North Dakota Public Employees Retirement System

Supplemental Life

| Year | Month | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|----------------------------------|-----------|-----------------|------------------------------|---------------------------|--------------------|-----------------|---------------|
| 2019 | May | \$20.28 | \$0.00 | \$0.00 | | 1 | 13,000 |
| 2019 | June | \$20.28 | \$0.00 | \$0.00 | | 1 | 13,000 |
| 2019 | July | \$20.28 | \$0.00 | \$0.00 | | 1 | 13,000 |
| 2019 | August | \$20.28 | \$0.00 | \$0.00 | | 1 | 13,000 |
| 2019 | September | \$20.28 | \$0.00 | \$0.00 | | 1 | 13,000 |
| 2019 | October | \$20.28 | \$0.00 | \$0.00 | | 1 | 13,000 |
| 2019 | November | \$20.28 | \$0.00 | \$0.00 | | 1 | 13,000 |
| 2019 | December | \$20.28 | \$0.00 | \$0.00 | | 1 | 13,000 |
| Total: | | \$162.24 | \$0.00 | \$0.00 | | 1 | 13,000 |
| Supplemental Life Total : | | \$162.24 | \$0.00 | \$0.00 | | 1 | 13,000 |

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Account: 390 North Dakota Public Employees Retirement System

Basic AD&D

| Year | Month | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|-------------------------------|-----------|---------------|------------------------------|---------------------------|--------------------|-----------------|--------------|
| 2019 | May | \$0.24 | \$0.00 | \$0.00 | | 1 | 7,000 |
| 2019 | June | \$0.24 | \$0.00 | \$0.00 | | 1 | 7,000 |
| 2019 | July | \$0.24 | \$0.00 | \$0.00 | | 1 | 7,000 |
| 2019 | August | \$0.24 | \$0.00 | \$0.00 | | 1 | 7,000 |
| 2019 | September | \$0.24 | \$0.00 | \$0.00 | | 1 | 7,000 |
| 2019 | October | \$0.24 | \$0.00 | \$0.00 | | 1 | 7,000 |
| 2019 | November | \$0.24 | \$0.00 | \$0.00 | | 1 | 7,000 |
| 2019 | December | \$0.24 | \$0.00 | \$0.00 | | 1 | 7,000 |
| Total: | | \$1.92 | \$0.00 | \$0.00 | | 1 | 7,000 |
| Basic AD&D Total : | | \$1.92 | \$0.00 | \$0.00 | | 1 | 7,000 |

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Account: 390 North Dakota Public Employees Retirement System

Supplemental AD&D

| Year | Month | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|--------------------------------------|-----------|---------------|------------------------------|---------------------------|--------------------|-----------------|---------------|
| 2019 | May | \$0.45 | \$0.00 | \$0.00 | | 1 | 13,000 |
| 2019 | June | \$0.45 | \$0.00 | \$0.00 | | 1 | 13,000 |
| 2019 | July | \$0.45 | \$0.00 | \$0.00 | | 1 | 13,000 |
| 2019 | August | \$0.45 | \$0.00 | \$0.00 | | 1 | 13,000 |
| 2019 | September | \$0.45 | \$0.00 | \$0.00 | | 1 | 13,000 |
| 2019 | October | \$0.45 | \$0.00 | \$0.00 | | 1 | 13,000 |
| 2019 | November | \$0.45 | \$0.00 | \$0.00 | | 1 | 13,000 |
| 2019 | December | \$0.45 | \$0.00 | \$0.00 | | 1 | 13,000 |
| Total: | | \$3.60 | \$0.00 | \$0.00 | | 1 | 13,000 |
| Supplemental AD&D Total : | | \$3.60 | \$0.00 | \$0.00 | | 1 | 13,000 |

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Account: 391 North Dakota Public Employees Retirement System

Basic Life

| Year | Month | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|---------------------------|-----------|-------------------|------------------------------|---------------------------|--------------------|-----------------|---------------|
| 2019 | January | \$340.36 | \$0.00 | \$0.00 | | 46 | 189,000 |
| 2019 | February | \$75.68 | \$0.00 | \$0.00 | | 9 | 55,000 |
| 2019 | March | \$0.00 # | \$7,004.88 | \$0.00 | | | |
| 2019 | April | \$321.66 | \$0.00 | \$0.00 | | 44 | 197,000 |
| 2019 | May | \$40.96 | \$0.00 | \$0.00 | | 8 | 42,000 |
| 2019 | July | \$340.38 | \$0.00 | \$0.00 | | 45 | 198,000 |
| 2019 | August | \$34.16 | \$0.00 | \$0.00 | | 8 | 42,000 |
| 2019 | September | \$10.92 | \$0.00 | \$0.00 | | 2 | 14,000 |
| 2019 | October | \$281.43 | \$0.00 | \$0.00 | | 41 | 187,000 |
| 2019 | November | \$34.16 | \$0.00 | \$0.00 | | 5 | 28,000 |
| 2019 | December | \$2.73 | \$0.00 | \$0.00 | | 2 | 14,000 |
| Total: | | \$1,482.44 | \$7,004.88 | \$0.00 | | 21 | 96,600 |
| Basic Life Total : | | \$1,482.44 | \$7,004.88 | \$0.00 | | 19 | 87,818 |

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.



Group: 673897 North Dakota Public Employees Retirement System

Account: 391 North Dakota Public Employees Retirement System

Supplemental Life

| Year | Month | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|----------------------------------|-----------|--------------------|------------------------------|---------------------------|--------------------|-----------------|------------------|
| 2019 | January | \$4,740.80 | \$0.00 | \$0.00 | | 34 | 3,175,450 |
| 2019 | February | \$731.10 | \$0.00 | \$0.00 | | 7 | 860,000 |
| 2019 | March | \$0.00 # | \$93,064.83 | \$0.00 | | | |
| 2019 | April | \$4,764.17 | \$0.00 | \$0.00 | | 35 | 3,366,450 |
| 2019 | May | \$616.22 | \$0.00 | \$0.00 | | 8 | 1,081,000 |
| 2019 | July | \$5,074.24 | \$0.00 | \$0.00 | | 36 | 3,329,450 |
| 2019 | August | \$335.34 | \$0.00 | \$0.00 | | 7 | 896,000 |
| 2019 | September | \$301.08 | \$0.00 | \$0.00 | | 2 | 386,000 |
| 2019 | October | \$5,162.10 | \$0.00 | \$0.00 | | 36 | 3,194,950 |
| 2019 | November | \$335.34 | \$0.00 | \$0.00 | | 4 | 592,000 |
| 2019 | December | \$75.27 | \$0.00 | \$0.00 | | 2 | 386,000 |
| Total: | | \$22,135.66 | \$93,064.83 | \$0.00 | | 17 | 1,726,730 |
| Supplemental Life Total : | | \$22,135.66 | \$93,064.83 | \$0.00 | | 16 | 1,569,755 |

Premium includes partially due and partially paid premium

* Premium is all due

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Group: 673897 North Dakota Public Employees Retirement System

Account: 391 North Dakota Public Employees Retirement System

Basic AD&D

| Year | Month | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|---------------|-----------|-----------------|------------------------------|---------------------------|--------------------|-----------------|---------------|
| 2019 | January | \$80.79 | \$0.00 | \$0.00 | | 45 | 123,000 |
| 2019 | February | \$21.05 | \$0.00 | \$0.00 | | 16 | 50,000 |
| 2019 | April | \$98.29 | \$0.00 | \$0.00 | | 53 | 151,000 |
| 2019 | May | \$12.59 | \$0.00 | \$0.00 | | 14 | 37,000 |
| 2019 | July | \$94.19 | \$0.00 | \$0.00 | | 55 | 152,000 |
| 2019 | August | \$12.69 | \$0.00 | \$0.00 | | 12 | 35,000 |
| 2019 | September | \$8.46 | \$0.00 | \$0.00 | | 4 | 14,000 |
| 2019 | October | \$97.94 | \$0.00 | \$0.00 | | 53 | 150,000 |
| 2019 | November | \$12.69 | \$0.00 | \$0.00 | | 6 | 21,000 |
| 2019 | December | \$4.23 | \$0.00 | \$0.00 | | 4 | 14,000 |
| Total: | | \$442.92 | \$0.00 | \$0.00 | | 26 | 74,700 |

| | | | | | | | |
|-------------------------------|--|-----------------|---------------|---------------|--|-----------|---------------|
| Basic AD&D Total : | | \$442.92 | \$0.00 | \$0.00 | | 26 | 74,700 |
|-------------------------------|--|-----------------|---------------|---------------|--|-----------|---------------|

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Account: 391 North Dakota Public Employees Retirement System

Supplemental AD&D

| Year | Month | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|---------------|-----------|-------------------|------------------------------|---------------------------|--------------------|-----------------|------------------|
| 2019 | January | \$193.73 | \$0.00 | \$0.00 | | 22 | 2,055,700 |
| 2019 | February | \$69.49 | \$0.00 | \$0.00 | | 6 | 667,000 |
| 2019 | April | \$270.29 | \$0.00 | \$0.00 | | 26 | 2,677,700 |
| 2019 | May | \$47.87 | \$0.00 | \$0.00 | | 7 | 840,000 |
| 2019 | July | \$253.95 | \$0.00 | \$0.00 | | 27 | 2,640,700 |
| 2019 | August | \$41.88 | \$0.00 | \$0.00 | | 6 | 655,000 |
| 2019 | September | \$40.52 | \$0.00 | \$0.00 | | 2 | 386,000 |
| 2019 | October | \$266.65 | \$0.00 | \$0.00 | | 26 | 2,649,200 |
| 2019 | November | \$41.88 | \$0.00 | \$0.00 | | 3 | 399,000 |
| 2019 | December | \$20.26 | \$0.00 | \$0.00 | | 2 | 386,000 |
| Total: | | \$1,246.52 | \$0.00 | \$0.00 | | 13 | 1,335,630 |

| | | | | | | | |
|--------------------------------------|--|-------------------|---------------|---------------|--|-----------|------------------|
| Supplemental AD&D Total : | | \$1,246.52 | \$0.00 | \$0.00 | | 13 | 1,335,630 |
|--------------------------------------|--|-------------------|---------------|---------------|--|-----------|------------------|

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.

Group: 673897 North Dakota Public Employees Retirement System

Account: 391 North Dakota Public Employees Retirement System

Dependent Life

| Year | Month | Premium Paid | Paid Claims by Incurred Date | Conversion & Port Charges | Waiver Face Amount | Number of Lives | Volume |
|---------------|-----------|-------------------|------------------------------|---------------------------|--------------------|-----------------|----------------|
| 2019 | January | \$869.05 | \$0.00 | \$0.00 | | 20 | 643,000 |
| 2019 | February | \$375.30 | \$0.00 | \$0.00 | | 6 | 192,000 |
| 2019 | April | \$1,084.89 | \$0.00 | \$0.00 | | 26 | 775,000 |
| 2019 | May | \$455.80 # | \$0.00 | \$0.00 | | 8 | 234,000 |
| 2019 | July | \$1,128.62 | \$0.00 | \$0.00 | | 29 | 833,000 |
| 2019 | August | \$70.80 | \$0.00 | \$0.00 | | 8 | 234,000 |
| 2019 | September | \$231.27 | \$0.00 | \$0.00 | | 3 | 204,000 |
| 2019 | October | \$1,148.58 | \$0.00 | \$0.00 | | 25 | 753,000 |
| 2019 | November | \$70.80 | \$0.00 | \$0.00 | | 5 | 157,000 |
| 2019 | December | \$37.83 | \$0.00 | \$0.00 | | 3 | 204,000 |
| Total: | | \$5,472.94 | \$0.00 | \$0.00 | | 13 | 422,900 |

| | | | | | | | |
|-------------------------------|--|-------------------|---------------|---------------|--|-----------|----------------|
| Dependent Life Total : | | \$5,472.94 | \$0.00 | \$0.00 | | 13 | 422,900 |
|-------------------------------|--|-------------------|---------------|---------------|--|-----------|----------------|

Premium includes partially due and partially paid premium

* Premium is all due

The 'Totals' for Waiver Face Amount represents the total Waiver Face Amount in the most recent Experience Period. Number of Lives and Volume represent averages.

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No Waiver Claims to Display

| Account | Activity Date | Claimant Name | Claimant DOB | Claim ID | Incurred Date | Status | Coverage Type | Waiver Face Amount |
|---------------|---------------|---------------------|--------------|----------------|---------------|----------|-------------------|--------------------|
| 1 | 12/31/19 | BAUER, NANCY | 10/18/1971 | BC-2018-296107 | 12/05/2017 | Approved | Basic Life | 7,000.00 |
| 1 | 12/31/19 | DOCKTER, VERONICA | 03/03/1958 | BC-2018-196971 | 02/08/2012 | Approved | Basic Life | 3,500.00 |
| 1 | 12/31/19 | GJERDEVIG, MICHELLE | 05/25/1967 | BC-2019-541714 | 05/24/2019 | Pended | Basic Life | 1,300.00 |
| 1 | 12/31/19 | GJERDEVIG, MICHELLE | 05/25/1967 | BC-2019-541717 | 05/01/2019 | Pended | Supplemental Life | 148,700.00 |
| 1 | 12/31/19 | HOLZ, MAGDALENE | 09/09/1957 | BC-2018-197655 | 06/15/2015 | Approved | Basic Life | 3,500.00 |
| 1 | 12/31/19 | KVASAGER, PATRECE | 05/07/1970 | BC-2019-488710 | 12/29/2018 | Approved | Basic Life | 7,000.00 |
| 1 | 12/31/19 | KVASAGER, PATRECE | 05/07/1970 | BC-2019-488713 | 12/29/2018 | Approved | Supplemental Life | 55,000.00 |
| 1 | 12/31/19 | LEAPALDT, JOEL | 03/12/1964 | BC-2019-546713 | 03/12/2019 | Approved | Basic Life | 7,000.00 |
| 1 | 12/31/19 | MCCLINTOCK, JOHN | 02/11/1961 | BC-2018-192667 | 04/15/2017 | Approved | Basic Life | 1,300.00 |
| 1 | 12/31/19 | MCCLINTOCK, JOHN | 02/11/1961 | BC-2018-201797 | 04/15/2017 | Approved | Supplemental Life | 198,700.00 |
| 1 | 12/31/19 | MOSER, STEVEN | 04/16/1963 | BC-2018-192906 | 01/09/2013 | Approved | Basic Life | 3,500.00 |
| 1 | 12/31/19 | MOSER, STEVEN | 04/16/1963 | BC-2018-200057 | 01/09/2013 | Approved | Supplemental Life | 46,500.00 |
| 1 | 12/31/19 | SCHULZ, INGO | 06/16/1957 | BC-2018-190469 | 12/30/2016 | Approved | Basic Life | 3,500.00 |
| 1 | 12/31/19 | SCHUMACHER, PAUL | 03/16/1979 | BC-2018-246183 | 04/14/2018 | Approved | Basic Life | 7,000.00 |
| 1 | 12/31/19 | SCHUMACHER, PAUL | 03/16/1979 | BC-2018-246186 | 04/14/2018 | Approved | Supplemental Life | 93,000.00 |
| Total: | | | | | | | | 586,500.00 |

Insured plans are underwritten by ReliaStar Life Insurance Company, a member of the Voya® family of companies. For self-funded disability plans, we provide only administrative services.



| Report Field | Definition |
|------------------------------|---|
| Account | Account number assigned to the employer by Voya Employee Benefits. |
| Activity Date | Date of activity for a process. |
| Claimant DOB | Date of birth of the claimant. |
| Claimant Name | Identifies the name of the individual claimant for which the payment is being made. |
| Claim ID | A unique number assigned to the claim by Voya Employee Benefits. |
| Conversion Charges | The total amount of conversion charges that have been charged to a specific EA date. |
| Coverage Type | Type of coverage the applicant is applying for. |
| Group | Policy/Plan number assigned to the employer by Voya Employee Benefits. |
| Incurred Date | Actual date of death or disability. |
| Number of Lives | Number of covered participants. |
| Paid Claims by Incurred Date | Benefit amount plus interest based on claim incurred date. |
| Port Charges | The total amount of port charges that have been charged to a specific EA date. |
| Premium Paid | Premium payment or fee payment made to Voya Employee Benefits for a group or account. |
| Status | The current status of the file. |
| Volume | Amount of coverage assigned to specific individuals. |
| Waiver Face Amount | Amount stated as payable to the insured. |

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**North Dakota
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Memorandum

TO: NDPERS Board

FROM: Rebecca

DATE: September 8, 2020

SUBJECT: SHP Updates - COVID-19 and Virtual ID Cards

Sanford Health Plan (SHP) will be at the meeting to provide an update related to COVID-19 and the impact on the NDPERS health insurance plan. Please see the Attachment 1 for additional details. In addition, SHP will provide an update on the Virtual ID cards (Attachment 2).

Memo

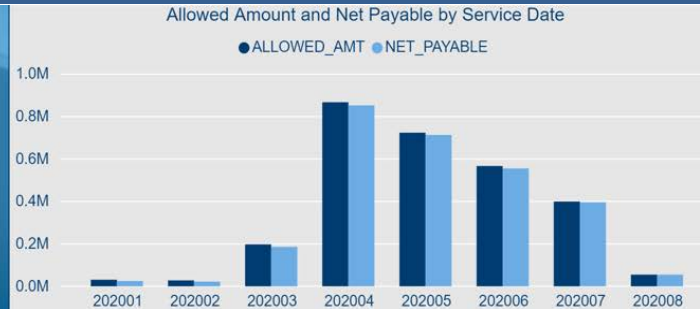
To: Rebecca Fricke
From: Steve Webster
Date: August 24, 2020
Re: Telehealth Visits & COVID-19 Service - Update

NDPERS - All Telehealth Claims

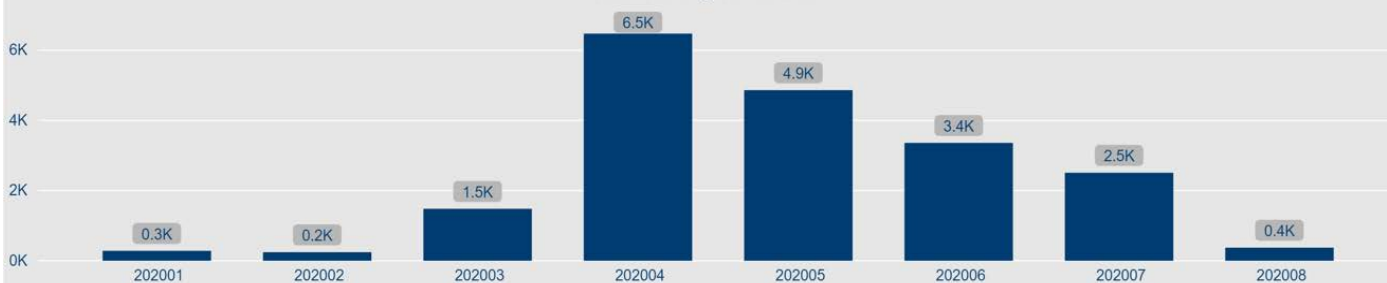
All Lines of Business

1.1.20-8-24.20 paid to date

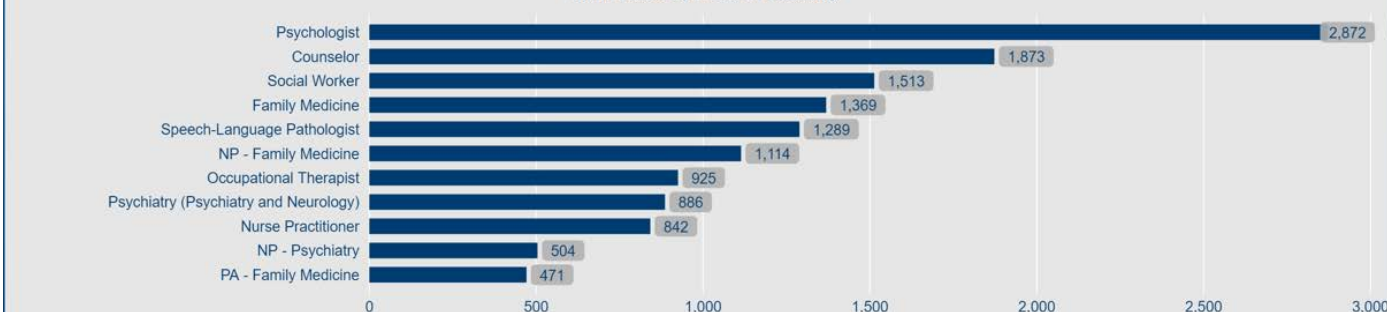
| SERVICE_DATE | ALLOWED_AMT | NET_PAYABLE | CLAIM_COUNT |
|--------------|---------------------|---------------------|---------------|
| 202008 | 54,930.06 | 54,810.05 | 372 |
| 202007 | 399,663.54 | 396,243.82 | 2,507 |
| 202006 | 567,108.86 | 555,735.48 | 3,358 |
| 202005 | 724,063.57 | 713,480.75 | 4,862 |
| 202004 | 867,596.81 | 852,876.75 | 6,473 |
| 202003 | 197,661.54 | 186,180.27 | 1,481 |
| 202002 | 27,840.35 | 22,029.59 | 244 |
| 202001 | 30,880.62 | 24,821.97 | 283 |
| Total | 2,869,745.35 | 2,806,178.68 | 19,580 |



Claim Count by Service Date



Claim Count by Provider Specialty



| Total Claims Expense PMPM Incurred Date | | | COVID-19 Services Paid to Date | | | | |
|--|--|--|---|------------------------------------|----------------|-------------|--------------|
| Month | Per Member Per Month (Medical & Pharmacy) | Percentage of Claims (Received to date) | Place of Service | | | | |
| | | | Medical Care (Facility/Professional) | Testing (Facility/Professional) | Emergency Room | All Other | Total |
| Jul-20 | \$524.34 | 46.7% | \$133,146.37 | \$80,616.78 | \$32,151.29 | \$83,288.27 | \$329,202.71 |
| Jun-20 | \$521.47 | 86.7% | \$4,832.60 | \$57,409.26 | \$33,573.69 | \$58,152.96 | \$153,968.51 |
| May-20 | \$421.38 | 91.7% | \$52,303.00 | \$23,707.85 | \$31,402.67 | \$62,306.76 | \$169,720.28 |
| Apr-20 | \$359.20 | 94.5% | \$0.00 | \$6,007.41 | \$1,033.91 | \$11,116.03 | \$18,157.35 |
| Mar-20 | \$457.53 | 96.6% | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Feb-20 | \$514.30 | 97.2% | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Jan-20 | \$449.90 | 97.5% | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| | | | | | | | \$671,048.85 |

Memo

To: Rebecca Fricke
From: Steve Webster
Date: August 24, 2020
Re: Virtual ID Card Implementation

This memo to inform the NDPERS Board the Virtual ID Card was implemented in August 2020. Members can download the (Sanford) MyChart App, click on the 'Mobile ID Card', and the front and back of the physical ID card will appear within the App. The MyChart app will continue to host insurance related information including Explanation of Benefits.



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Memorandum

TO: NDPERS Board

FROM: Shawna Piatz

DATE: September 8, 2020

SUBJECT: Audit Committee May 2020 Minutes

Attached are the approved minutes for the May 13, 2020 meeting. Those who attended the meeting are available at the Board meeting to answer any questions you may have.

The minutes may also be viewed on the NDPERS website at www.nd.gov.ndpers.

The next Audit Committee meeting is scheduled for November 9, 2020 at 3:00 p.m. in the NDPERS Conference Room.

MEMORANDUM

TO: Audit Committee
Mona Rindy
Adam Miller
Julie Dahle
Dirk Wilke
Senator John Grabinger

FROM: Shawna Piatz

DATE: May 13, 2020

SUBJECT: **May 13, 2020 Audit Committee Meeting**

In Attendance:

Mona Rindy
Julie Dahle
Adam Miller
Senator John Grabinger
Dean DePountis
Shawna Piatz
Scott Miller
Derrick Hohbein
Rebecca Fricke
Sarah Marsh

The meeting was called to order at 10:00 a.m. by Ms. Rindy. The committee began the meeting with approving the prior Audit Committee minutes.

I. February 12, 2020 Audit Committee Minutes

- A. The Audit Committee minutes were examined. Mr. Miller moved that the minutes be accepted. The motion was seconded by Ms. Dahle.

II. Internal Audit Reports

- A. Quarterly Audit Plan Status Report – A summary of the Internal Audit staff time spent for the past quarter was included with the Audit Committee materials. Of the total hours reported, 63.31% was spent in audit, 2.72% in consulting, and 33.97% in administrative hours. A large portion of the audit hours continue to be spent on auditing the retirement program, partially due to a more thorough compliance review being performed on the retirement accounts, as well as increased testing related to the new FAS methodology calculation for new retirees who terminate employment after 12/31/2019. Internal Audit also completed the Contract Process Review and assisted with the Sanford Health Plan

Claims Audit this quarter.

- B. Retirement Benefit Payment Status Report – Information was provided to the Audit Committee, which summarizes the accuracy percentages of the retirement benefit and refund payments. The report shows the number of new retirees or refunds each month, the total number of new retirees or refunds audited, whether issues identified were procedure, system, compliance, or employer issues. An accuracy rate of 96.15% has been achieved fiscal YTD as of April 2020 for new retirement benefit payments, which is slightly under the 97% goal. Single Life and 100% Joint & Survivor benefits continue to be the largest new retiree benefit options. An accuracy rate of 86.89% was achieved fiscal YTD as of April 2020 for retirement refunds, which is below the 97% goal. However, a limited number of retirement refunds were audited and a portion of the sample was focused on those refunds in which a known system issue may have occurred.
- C. Sanford Health Plan Claims Audit Report – Internal Audit assisted in the Sanford Health Plan Claims Audit. The Research and Planning Manager performs the audit of a sample of the claims that have been processed through the medical plan. A couple findings were identified and are being addressed.
- D. IT Risk Assessment Report – A consultant completed an internal vulnerability assessment and penetration test to evaluate internal and external vulnerabilities and threats to the agency. Due to the sensitive nature of the report, the report was not provided to the Audit Committee but a few comments were made in relation to the testing.
- E. Benefit/Premium Adjustments Report – The quarterly benefit adjustment report was provided to the Audit Committee. The report is in several sections, each representing the type of corrections. These adjustments are considered errors, not adjustments made in the normal course of business. The number of errors increased; however, the dollar amount did slightly decline from the prior quarter. The adjustments did not show any noticeable trends.
- F. Outstanding Issues Status Report – As stated in the Audit Policy #103, the Internal Audit Division is to report quarterly to management and to the Audit Committee, the status of the audit recommendations of the external auditors, as well as any found by the Internal Auditor. The report has been updated to reflect what has been accomplished February 1, 2020 through April 30, 2020. Staff reviewed the recommendations with the committee. There was three new and three outstanding issues that continue to be worked through.

III. Administrative

- A. Audit Committee Member Appointment – Mona Rindy was nominated and accepted the position of the Audit Committee Chair. Mona introduced herself during the meeting.
- B. Audit Committee Meeting Date and Time – Discussions were held to move the Audit Committee meetings from the second Wednesday of every third month to the second Monday of every third month to coincide with Board meetings and accommodate travel

schedules. Ms. Dahle motioned to hold the next Audit Committee meeting Monday, August 17 at 3:00pm and then to hold future meetings the second Monday of every third month. Mr. Adam seconded the motion, followed by voice vote.

- C. De minimis Policy & Internal Review Policies Discussion – NDPERS has a De minimis Policy that was reviewed by the Audit Committee and approved by the Board of Directors in 2016. This policy was established to direct NDPERS staff in how to handle the various retirement account errors to wages, service credit, account contributions or interest as they occur. Adjustments to reported wages and service credit may affect a member's ongoing monthly retirement benefits. Adjustments to account balance and accumulated interest affect a member's minimum guarantee or the amount available for a lump sum refund. Prior to the adoption of this policy, NDPERS attempted to correct and process any and all adjustments to member accounts which could become costly and time consuming. A motion was made by Mr. Grabinger to increase the De minimis policy to \$25 for an underpayment and \$50 for an overpayment. The motion was seconded by Mr. Miller, followed by voice vote.

The Board approved an Overtime Pay Policy and Written Agreements Policy in 2017. These policies were established to direct NDPERS staff in how to handle overtime and wage agreement issues as they occur. Discussions took place around whether these policies should be applied on a broader basis to all payroll reporting discrepancies or remain specific to overtime and payments. The Audit Committee directed staff to revise the approved overtime and wage agreement policies to be applied to all payroll reporting issues except for known issues that wouldn't be caught through normal internal review policies. The Audit Committee provided further direction that any reporting corrections that would need to be made should apply to active and deferred member accounts only. The Audit Committee requested staff bring the revised policy to the next Audit Committee meeting for consideration.

Mr. Miller made a motion to continue to audit account balances for refund payments prospectively for active and deferred members and to exclude account balance reviews for annuitant payments unless and until there would be a refund of the account balance at some point in the future. Ms. Dahle seconded the motion, followed by voice vote.

- D. Risk Areas not Included on Audit Plan – Internal Audit provided a list of risk areas that were identified through NDPERS risk analysis but were not included in the upcoming audit plan, based on the request during the prior Audit Committee meeting. A similar list with risk ratings will continue to be provided annually with the updated audit plan.
- E. Internal Audit Budget Request – A summary of the budget request that was submitted to Accounting to consider for the Internal Audit Division as they prepare the 2021-2023 budget was provided to the Audit Committee, for their information.
- F. Annual Performance Evaluation Update – This year the Audit Committee agreed that since the Chief Audit Officer reports directly to the Audit Committee, they would provide their input in her annual performance evaluation, along with that of the Executive Director. Discussions were held around if the annual performance evaluation outcome

was reasonable since the Audit Committee did not have a baseline or previous evaluation to use for comparison. It was determined that to be fair and better reflect the work completed, the overall rating needed to be adjusted. Mr. Miller made a motion to adjust the Chief Audit Officer's overall rating to 3.61, which is in line with the average score of the top five PERS employees. The motion was seconded by Ms. Dahle, followed by voice vote.

- G. External Audit Update – CliftonLarsonAllen (CLA) is scheduled to perform their fieldwork remotely May 18th through 22nd, 2020. Staff has been working on providing support for their preliminary fieldwork.

IV. **Miscellaneous**

- A. Travel Expenditures – The out-of-state travel expenditures incurred by the Executive Director or Board of Directors for the period February 1, 2020 through April 30, 2020 were provided for the committee's review.
- B. Risk Management Report – During a previous review of the Audit Committee's charter, it was determined that a Risk Management Policy for PERS would not be necessary because we have a Loss Control Committee in place to manage risk for the agency. Bryan Reinhardt will come to the August meeting each year to update the Audit Committee on the Loss Control Committee's activity over the past year and to answer questions.

The minutes from the last Loss Control Committee meeting and the agenda for the next meeting were provided to the Audit Committee for their review. The Loss Control Committee reviewed a number of action items as well as several incident reports reported for the previous quarter. It was discussed that active shooter training was completed and the offices were accessed for safety. Some changes were considered.

- C. Report on Consultant Fees – According to the Audit Committee Charter, the Audit Committee should "Periodically review a report of all costs and payments to the external financial statement auditor. The listing should separately disclose the costs of the financial statement audit, other attest projects, agreed-upon-procedures and any non-audit services provided." A copy of the report showing the consulting, investment and administrative fees paid during the quarter ended March 2020 was provided for the Audit Committee's information.
- D. CPEs and Webinars – A report on the continuing professional education webinars, luncheon meetings and seminars Internal Audit participated in for the period February 1, 2020 through April 30, 2020, which Internal Audit did not attend any in the prior quarter, was provided for review.
- E. Publications – A copy of Accounting and Financial Reporting Considerations for Audit Committees Regarding COVID-19 from the Deloitte Audit Committee Brief from April 2020, was provided for the Audit Committee's information.
- F. Confidential Meeting – Discussions took place around removing the confidential meeting

as an agenda item from each Audit Committee meeting and instead scheduling as an executive session only as needed. All Audit Committee members agreed; therefore, this was removed for future Audit Committee meetings.

Meeting adjourned at 12:15 p.m, by Ms. Rindy.



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Memorandum

TO: NDPERS Board

FROM: Scott

DATE: September 8, 2020

SUBJECT: Actuarial Primer

GRS, the Board's actuarial firm, will present the actuarial valuation for the various retirement plans during the October Board meeting. The Board previously agreed that having a primer on actuarial theories and language before receiving the valuation would be helpful for it to understand the upcoming valuations. To aid in doing so, I have provided some information for your use. Below are several screenshots out of last year's PERS valuation. Those screenshots contain some of the important information within the valuation. We will go through that information to help clarify your understanding of the actuarial issues discussed.

I have also attached a document titled, "Actuarially Speaking: A Plain Language Summary of Actuarial Methods and Practices for Public Employee Pension and Other Post-Employment Benefits" by Grant Boyken with the California Research Bureau. The document is from 2008. Some of the actuarial principals and terms have changed since then (for instance, we now call it "actuarially determined contribution rate" or "ADC" rather than "actuarially required contribution rate" or "ARC"). Nonetheless, it should be helpful for your deeper understanding of the actuarial issues you face.

| | Main System | % |
|---|--------------------|----------|
| Total Actuarial Accrued Liability | \$ 4,136,252,987 | |
| Actuarial Value of Assets (AVA) | 2,949,967,049 | |
| Unfunded Actuarial Accrued Liability (UAAL) | 1,186,285,938 | |
| Funded Ratio (Actuarial Value of Assets) | 71.3% | |
| Total Annual Gross Normal Cost | 129,473,757 | (11.64%) |
| Employee Contribution | 77,883,968 | (7.00%) |
| Annual Employer Normal Cost | 51,589,789 | (4.64%) |
| Amortization of Unfunded Liability ¹ | 84,390,285 | (7.58%) |
| Actuarial Contribution | \$ 135,980,074 | (12.22%) |
| Statutory Employer Contribution | 79,219,121 | (7.12%) |
| Statutory Contribution Deficit/(Surplus) | 56,760,953 | (5.10%) |
| Employer UAAL Contribution from Statutory Rate | 27,629,332 | (2.48%) |
| Amortization Period from Statutory Rate (Years) | Infinite* | |
| Market Value of Assets (MVA) | \$ 2,964,180,628 | |
| Unfunded Actuarial Accrued Liability (UAAL) | 1,172,072,359 | |
| Funded Ratio (Market Value of Assets) | 71.7% | |
| Actuarial Contribution | | (12.13%) |
| Amortization Period from Statutory Rate (Years) | Infinite | |

Single Discount Rate

Projected benefit payments are required to be discounted to their actuarial present values using a Single Discount Rate that reflects (1) a long-term expected rate of return on pension plan investments (to the extent that the plan's fiduciary net position is projected to be sufficient to pay benefits) and (2) a tax-exempt municipal bond rate based on an index of 20-year mixed maturity general obligation bonds with an average Standard & Poor's Corp.'s AA credit rating (which is published by Fidelity) as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

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Attachment



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Actuarially Speaking: A Plain Language Summary of Actuarial Methods and Practices for Public Employee Pension and Other Post-Employment Benefits

*By Grant Boyken
Senior Research Specialist*

FEBRUARY 2008

CRB 08-003

C A L I F O R N I A R E S E A R C H B U R E A U

**Actuarially Speaking:
A Plain Language Summary
of Actuarial Methods and Practices
for Public Employee Pension and
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ISBN 1-58703-234-1

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I would also like to thank Chris Marxen, Assistant Director of the California Research Bureau and Dean Misczynski, Director of the California Research Bureau, for their thorough and thoughtful review of earlier drafts of this report. Thanks also to Patricia Kinnard, Katie Sarber, and Megan Quirk for their assistance in the publication of this report.

INTERNET ACCESS

This paper is available through the Internet at the California State Library's home page (<http://www.library.ca.gov/>) under California Research Bureau Reports.

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I. INTRODUCTION

Why a primer on actuarial methods and policies?

The cost and sustainability of pension and retiree health benefits for public employees have been called into question in recent years. Pension benefit increases that were granted in the midst of the bull market in the late 1990s, combined with the downturn of the financial markets in the early 2000s, have increased the amount that employers need to contribute to pension plans to pay the cost of benefits. In addition, demographic changes, such as the aging of the public sector workforce and longer life expectancies, are predicted to increase the cost of providing retiree pension and health benefits.

In response to these issues, a proposed ballot initiative in 2005 sought to prohibit new public employees in California from participating in defined benefit pension plans, which supporters of the initiative viewed as more costly than defined contribution plans.* Although the initiative never made it to the ballot, the concerns out of which it emerged have not subsided.

In December 2006, Governor Arnold Schwarzenegger established the Public Employee Post-Employment Benefits Commission to address unfunded post-employment benefits. In addition to the cost of providing public pensions, the Commission's hearings in 2007 illustrated a heightened concern about the costs of providing retiree health benefits. This is due to rising medical costs as well as new governmental accounting standards that require public employers to report the cost of these benefits as they accrue rather than at the time that they are paid.

Because a thorough understanding of these issues requires at least a basic understanding of actuarial accounting practices used for pension benefits, and increasingly for "other post-employment benefits" (OPEB; which includes retiree health, dental, vision and other non-pension benefits), this report was developed to serve as a reference guide for policy makers, government employers, pension and health plan administrators, and members of the general public.

* Public employers in California typically provide primary pension benefits through a defined benefit plan. In contrast to defined contribution plans, in which retirement income depends on the amount accumulated in an employee's individual account, defined benefit plans guarantee a specific level of retirement income that is calculated based on an employee's age, years of service, and salary.

How are defined benefit pension plans funded?

A key objective for defined benefit pensions is to strive for *prefunded* benefits, which means that contributions are made during the working career of the employee with the objective that at the time the employee retires, those contributions (and the interest earned on them) will be sufficient to pay for the entire cost of the employee's pension benefits.

Retirement system funds are typically held in some form of trust that can only be used to pay member benefits and the costs of administering the pension plan. Defined benefit retirement systems receive income from returns on invested assets and contributions from employers and employees. The majority of retirement systems' income generally comes from investment returns.

Unlike private sector defined benefit plans that tend to be “non-contributory” (i.e., do not require employees to contribute), public employees generally contribute to defined benefit plans at a fixed rate (typically a percentage of salary) that varies among different types of employees and retirement systems. In some cases, collective bargaining agreements may specify that employers pay employees' contributions for a period of time.

Employer contributions vary from year to year depending on investment returns and actuarial calculations that determine the size of the pension fund that will be needed to pay current and future benefits.

How are retiree health and other post-employment benefits funded?

Historically, the majority of public sector employers that have provided retiree health and other post employment benefits have done so on a pay-as-you-go basis; paying for benefits as the costs come due with little or no money set aside to pay benefits in future years.

Recently there has been growing interest in prefunding OPEB due, at least in part, to rising medical costs that have made it increasingly more costly to provide retiree health benefits on a pay-as-you-go basis. Between 2000 and 2007, for example, annual premium increases for California Public Employees' Retirement System (CalPERS) health plans have averaged more than 12 percent.¹ The monthly premium for CalPERS Health Maintenance Organization (HMO) plans in 2007 was more than \$800 to cover an employee and one additional family member.

In addition to rising medical costs, new accounting standards issued by the Governmental Accounting Standards Board (GASB) have focused greater attention on government employers' OPEB liability. The purpose of the standards is to make accounting methods more accurately reflect the cost of providing public services by recognizing the costs of the benefits at the time that they are earned, rather than when they are paid. As a result of the new standards, public agencies are beginning to report large unfunded OPEB liabilities on their balance sheets that they were not previously required to report.

The provisions of the new GASB standards do not require governments to prefund OPEB plans, but they provide a framework – and the impetus – for doing so. Prefunding would mean establishing some form of trust similar to those that currently exist for pensions. Annual costs paid into an OPEB trust would be based on actuarially determined amounts that, if paid on an ongoing basis, generally would provide sufficient resources to pay benefits as they come due.

Although the State of California has not yet developed a formal plan to prefund retiree health benefits for state employees, a number of local governments have begun to do so. Several have begun to contribute to the California Employers' Retiree Benefit Trust Fund that CalPERS launched in March 2007.* Initially, the fund was open only to employers that contract with CalPERS to provide health benefits under the provisions of the Public Employee Medical and Hospital Care Act (PEMHCA). New legislation (Hernandez, AB 554, Chapter 318, Statutes of 2007) expands the program to allow employers that do not participate in the CalPERS health program to use the trust to prefund OPEB. A number of public employers have also established, or are examining the possibility of establishing, OPEB trust funds of their own.

What is an actuary?

An actuary analyzes the financial consequences of risk. Actuaries use mathematics, statistics, and financial theory to study uncertain future events, particularly those of concern to insurance and pension programs. Pension actuaries analyze probabilities related

* Legislation passed in 1988 did establish a fund that allowed public employers to prefund retiree health benefits through the Public Employee Medical and Hospital Care Act (PEMHCA) (AB 1104, Elder, Chapter 331, Statutes of 1988). However, the fund remained dormant until recently when CalPERS formally launched the Retiree Benefit Trust Fund.

to the demographics of the members in a pension plan (e.g., the likelihood of retirement, disability, and death) and economic factors that may affect the value of benefits or the value of assets held in a pension plan's trust (e.g., investment return rate, inflation rate, rate of salary increases). They determine the value of pension benefits and work with employers to devise strategies for funding the cost of those benefits.

What is an actuarial valuation?

An actuarial valuation can be thought of as a financial check-up for a pension or retiree health benefit plan. It measures current costs and contribution requirements to determine how much employers and employees should contribute to maintain appropriate benefit funding progress. It also measures plan assets and liabilities to determine funding progress. This includes comparing recent plan experience with assumptions made in the previous valuation.

Actuarial reports vary in format, but most follow a similar structure. The information is often shown in three parts of the report. The summary usually includes text descriptions and numerical tables of the important results. The body of the report usually contains more details on the results and how they were determined. Exhibits or appendices are often used for summaries of benefits and assumptions, required disclosure information, member demographic information, and more detailed contribution information. The valuation report presents both what goes into the valuation and the results that come out of it.

Under current law in California (Government Code Sections 7501 through 7504) each public retirement system is required to have an actuarial valuation performed at least once every three years. Both the California Public Employees' Retirement System and the California State Teachers' Retirement System (CalSTRS) employ full-time actuaries to perform statutorily required valuations. CalPERS and CalSTRS also contract with outside actuarial consulting firms to perform independent valuations annually.

In 1992, retirement system boards were given Constitutional authority by Proposition 132 to set actuarial methods and assumptions as part of the "administration of the system." Retirement systems usually review actuarial methods and assumptions on a regular basis (typically every two to three years). Assumptions are almost always based on a system's experience and boards typically accept the actuary's recommended assumptions.

A valuation takes into consideration a range of factors that affect the funding progress of the plan including:

- Plan provisions;
- Participant data;
- Financial data;
- Actuarial assumptions; and
- Funding methods and policies.

What is the purpose of an actuarial valuation?

Contribution requirements

The primary purpose of a valuation is to determine how much employers and employees should contribute to the plan during the upcoming year. Typically, public employees contribute a fixed percentage of their salaries to a defined benefit plan. Annual changes in contribution rates generally affect only the employer contribution.

The valuation determines the annual amount of employer contributions that will be necessary to pay for the costs of current benefits (the normal cost) as well as the annual costs of any unfunded liability (benefits that have already accrued, but for which the plan does not have sufficient assets to pay). This amount that the employer is required to contribute is referred to as the Annual Required Contribution, or ARC.

Usually there is a lag between the valuation date and the date new contribution rates begin. For example, the June 30, 2007 actuarial valuation might set contribution rates for the 2008/09 fiscal year, starting July 1, 2008.

Funding progress

The second key purpose of a valuation is to determine the plan's funding progress by examining how the plan's assets compare with its liabilities. The funding progress can be described as a *funded ratio* (assets divided by liabilities) or as the *funded status*, which is the amount of over-funding or under-funding (assets minus liabilities).

If assets are greater than liabilities:

- The *funded ratio* is over 100 percent; and
- The *funded status* is the amount of over-funding, and is called the *surplus*.

If assets are less than liabilities:

- The *funded ratio* is under 100 percent; and
- The *funded status* is the amount of under-funding, and is called the *unfunded liability* or, more formally, the *unfunded actuarial accrued liability* (UAAL).

Actuarial Certification

A third key purpose is to get the actuary's professional opinion on the actuarial methods and assumptions and funding policy. In California, retirement system boards have the responsibility to set actuarial methods and assumptions and determine contribution policy, while the actuary's job is to make recommendations to the board in these areas. The retirement system board is not required to take the actuary's recommendation, but the actuary must certify that what the board has decided to do falls within a range of acceptable actuarial standards of practice.

Disclosure requirements

Accounting and other financial reporting rules require disclosure of the plan's *annual required contribution*, plan assets and liabilities, as well as other information. Disclosure is required for both employer and plan financial statements.

Basis for pricing plan changes

The actuarial valuation provides the baseline for evaluating the impact of any possible benefit changes on plan costs and plan liabilities.

II. ACTUARIAL METHODS AND FUNDING POLICIES

C + I = B + E: Over time, contributions plus investment returns must equal benefits plus expenses.

This equation provides the foundation for understanding how pension (or prefunded OPEB) plans are funded. Employer and employee contributions flow into a trust fund that is dedicated for the purpose of paying benefits. Those contributions earn investment returns. Benefits and expenses (associated with administering the benefits and investing the assets) are paid out of the fund. Any increase in benefits or expenses will *ultimately* require a corresponding increase in contributions or investment returns.

The actuarial assumptions and funding policies adopted by the plan determine how and when the costs are paid. Changes in those assumptions or policies can increase or decrease the current contribution requirements. However, it is important to remember that the ultimate cost of the plan will depend on the plan's *actual* experience, regardless of what is *assumed* to happen.

Actuarial valuations try to achieve equity across generations of taxpayers by funding the employees' benefits while they are rendering service so that the cost of the benefits is incurred by the taxpayers receiving services from those employees. The goal is that at retirement there will be enough money, on a present value basis, to pay for the entire benefit. Another advantage of prefunding is that over time the majority of benefit cost is paid by investment returns rather than by contributions from the employer or employees.

The actuary's role is to help the retirement boards balance the equation by developing a long-term contribution plan necessary to pay expenses and benefits. As noted above, actuarial assumptions, methods and funding policies may affect the timing of when and how the long-term benefit cost is paid. The goal of choosing accurate actuarial assumptions and level funding methods and policies is to have stable, level contributions over time.

Despite the apparent simplicity of the equation ($C + I = B + E$), pension actuaries' task of balancing it can be complex. Describing what he refers to as the "tenuous nature of actuarial science," CalPERS' Chief Actuary, Ron Seeling, explains that the role of the pension actuary is to make long-term assumptions about an unknown future:

You hire some new employee at age twenty-something, and you've got to worry about when is this person going to leave? What will I owe them? How much service will they have? What will their salary be?... [You] make assumptions about all of that. And you do these studies, and you make your best assumption about the future. And the fact that it doesn't work out on a year-by-year basis is no great surprise. And the question is, how is the actuary going to respond to that and change employers' contributions?²

Indeed, how the actuary and the retirement board respond can have a significant impact on funding progress and future contributions. Beyond the uncertainty associated with predicting the future, additional complexity stems from the fact that retirement systems may pursue varying funding objectives. While some may strive to keep contributions as low as possible or as steady as possible, others might place a greater emphasis on working toward full funding as quickly as possible. These objectives impact actuaries' recommendations to retirement system boards, as well as the assumptions and funding policies adopted by those boards.

The Actuarial Funding Method

The actuarial report will include a summary of actuarial methods and funding policies that have been adopted by the system. These techniques have been developed by actuaries to:

- Determine how much of the total value of the members' future benefits should be contributed each year by both the employer and the members; and
- Determine the employer contribution in a way that reduces short-term, year-to-year volatility, but still assures that future contributions, together with plan assets, will be enough to provide those future benefits.

Actuarial methods and funding policies involve terminology and concepts that are unique to pension (and OPEB) plan funding. What follows is a brief description of the main elements of actuarial methods and policies.

Total Present Value of Future Benefits

The total present value of future benefits (PVB) is the total cost of benefits accrued throughout an employee's career. The PVB can

be divided into two parts: costs that are allocated to past years and the present value of costs of benefits allocated to future years.

If the system has assets equal to this PVB (and all assumptions come true) then no future contributions would be needed to provide future benefits for current active and retired members – even including future service and salary increases for active members. The actuarial methods and funding policies determine how much of the PVB should be contributed in the current year (and future years) so that, together with the assets, the entire PVB will be funded.

The Normal Cost

The *normal cost* is the portion of the total present value of benefits that actuaries allocate to each year of service, both past and future. It can be thought of as the annual premium that the employer must contribute to fund the benefit. If the normal cost is paid for each year of service and all actuarial assumptions are met, the employee's pension benefit will be fully funded at the time of retirement.

Conceptually, this would be (somewhat) simple to understand if the normal cost for a given year represented the (present value of the) cost of the benefits accrued during that year. But alas, conceptual simplicity is neither the goal, nor the forte, of the pension actuary.

A key objective that pension actuaries pursue is to keep employer contribution rates stable. If, as suggested above, the normal cost for a given year were to be based on the cost of the benefits accrued during that year, the normal cost would likely rise from year to year due to inflationary and merit-based increases in salary. Employees earn higher benefits at higher salaries. Thus, the cost of benefits accrued during a single year at an early point in an employee's career would be less than the cost of benefits accrued during a single year at a later point in the employee's career.

In order to make the normal cost more stable, the majority (approximately 75 percent³) of large public pension systems in the U.S. use some type of "entry age" cost method, which spreads the costs more evenly across the years. Under this method, actuaries first calculate the present value of the benefit that the employee is likely to receive at retirement. Actuaries then determine the normal cost by assigning an equal portion of the present value of benefits to each year of service during the employee's career in a

constant dollar amount or as a constant percentage of the participant's estimated salary from year to year.

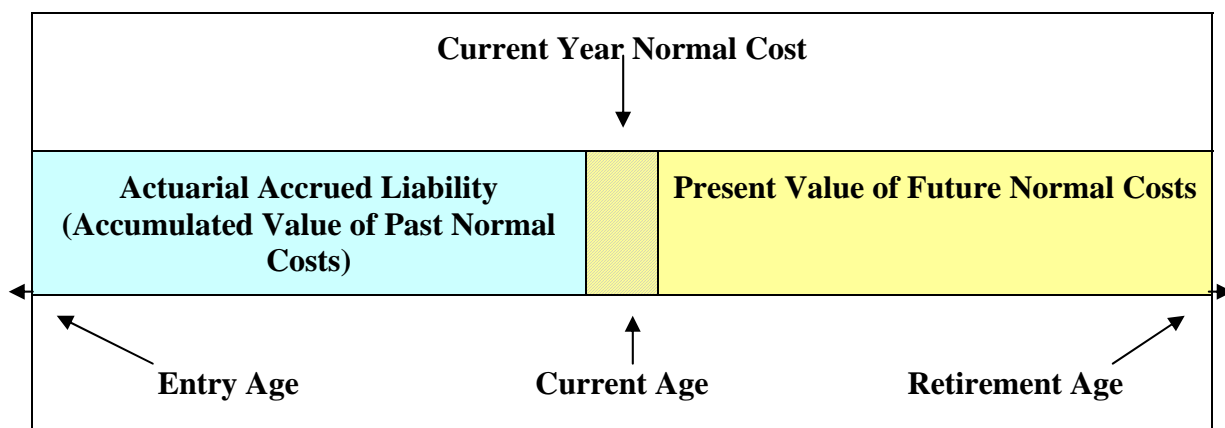
The Actuarial Accrued Liability (AAL)

The actuarial accrued liability is the value today of all past normal costs. Retired employees are no longer accruing additional benefits, so their AAL is the entire value of their benefit – i.e., for retirees all normal costs are in the past. For active members, the AAL can be thought of as the amount of assets the system would have today if:

- The current plan provisions, participant data and actuarial assumptions had always been in effect;
- In each past year, contributions equaled the normal cost for that year; and
- In each past year, all the actuarial assumptions had come true.

Figure 1 illustrates how the actuarial accrued liability and the normal cost relate to the present value of future benefits. Recall that the PVB is the total cost of benefits accrued throughout an employee's career. The normal cost is portion of that total cost that must be paid during the current year. The AAL represents the accumulation of past normal costs for each year that the employee has worked.

**Figure 1. Present Value of Future Benefits (PVB)
(for an active employee)**



Asset Smoothing Method

Actuaries assign a market-related value to a plan's assets in order to determine contribution requirements. This value is called the actuarial value of assets (AVA) or, more commonly, the *smoothed value*. To minimize short term, year-to-year contribution rate fluctuations, actuarial policies typically require the plan's investment gains and losses to be spread, or smoothed, over a period of time. The objectives of the AVA are to:

- Track the market value of assets over time; and
- Produce a less volatile pattern of contributions than would result from using the market value.

For example, suppose a plan with a five-year smoothing period experiences a 10 percent gain (an increase over the expected return) in the market value of its assets in a given year. The plan will spread that gain over a period of five years, recognizing only a 2 percent increase in the current year's AVA for that particular gain. The remaining 8 percent of the gain will be included in the AVA over the next four years.

Amortization Policy

When actuarial assumptions are not met, the plan may fall behind in – or get ahead of – its funding schedule. Plan assets may become insufficient to cover liabilities, requiring employers to contribute an additional amount to pay for the shortfall.

The unfunded actuarial accrued liability is the amount (if any) by which the actuarial accrued liability exceeds the actuarial value of assets, while the surplus is the amount (if any) by which the AVA exceeds the AAL.

- When a plan has a shortfall of assets compared to liabilities (a UAAL), the current contribution includes the normal cost *plus* a charge to fund, or “amortize,” the shortfall.
- When a plan has an excess of asset over liabilities (a surplus), the current contribution includes the normal cost *minus* a credit to amortize the excess.

A plan's amortization policy determines how to either fund or take credit for any difference between liabilities and assets (the UAAL or surplus). *Amortize* generally means to pay off an obligation through a series of payments. A plan's amortization policy determines how much of the UAAL will be funded each year, or how much of the surplus will be used up. Amortization policies

vary in terms of length and also in terms of whether there is one amortization period for the entire UAAL or separate amortization periods for different parts of the UAAL.

When a plan has unfunded liability, a shorter amortization period is generally considered to be a more conservative approach. Contributions will be higher than they would be with a longer amortization period, but the shortfall will be retired and contributions will revert down to the normal cost more quickly.

In contrast, when a plan has a surplus, a longer amortization period is more conservative. As CalPERS' Chief Actuary, Ron Seeling, notes, when a plan has a surplus, a shorter amortization period is no longer conservative:

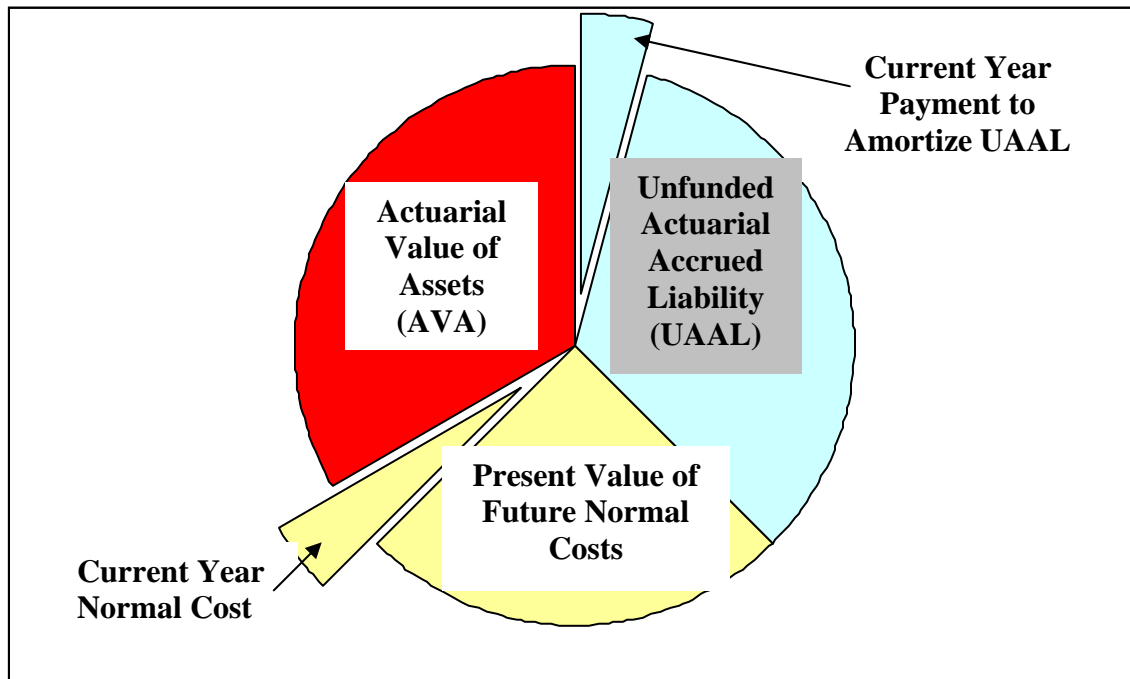
Our prior funding methods at CalPERS had what anybody would call very conservative mathematical and actuarial practices. We amortized investment gains and losses over about ten years...We spread asset gains and losses over three years...And in a situation where you have an unfunded liability, that's going to really hurry up and get you back to 100 percent quickly, which is where we started.

Now, witness the incredible stock-market boom of the late 1990s. And everything that was an unfunded liability turned into plus, and now you're giving surplus back to the employers through reduced contributions over three-year periods, and it resulted in 75 percent of all CalPERS employers contributing zero. So what was really conservative approaches, "let's hurry up and pay off unfunded liabilities," completely backfires.⁴

The Required Contribution

Based on the asset smoothing and amortization policies of a plan, actuaries determine the current year normal cost and the portion of the cost of unfunded liabilities that need to be paid each year. These two elements constitute the current year contribution, the annual required contribution (ARC), and are represented by the two slices that extend out from the chart shown in Figure 2.

Figure 2. The Two Parts of the Current Year Contribution



In the pie chart presented in Figure 2, the AVA and the UAAL, combined, represent the value of the actuarial accrued liability. The portion of the AAL that is funded by current assets is the actuarial value of assets. The difference between the AAL and the AVA is the unfunded actuarial accrued liability. The yellow portion of the chart represents the costs that will have to be paid for future service for current members.

How to Read a Plan's Schedule of Funding Progress

One of the elements of an actuarial valuation is a schedule of funding progress. This can be thought of as an actuarial balance sheet that displays the value of the plan's assets and liabilities over time. It also shows a plan's funding progress as the ratio of assets to accrued liabilities expressed as a percentage (funded ratio). When assets exceed liabilities, the ratio is greater than 100 percent. When assets are less than accrued liabilities, the ratio is less than 100 percent.

The sample schedule of funding progress in Table 1 presents key actuarial figures for CalPERS valuations conducted for ten separate years. The valuations for the years 1997 through 2002 reflect significant investment earnings that resulted in a surplus (i.e., a negative value for UAAL) and funded ratios greater than 100 percent.

CalPERS data was used for this sample schedule of funding progress for no other reason than that it was readily available. The reader should note that the system's Public Employees' Retirement Fund has experienced double digit investment returns (well above assumed rates of return) annually since 2004. CalPERS officials announced in July 2007 that the majority of their plans were 100 percent funded on a market-value basis.⁵

Table 1. Sample Schedule of Funding Progress
(Dollars in Millions)

| Actuarial Valuation Date | (1) Actuarial Value of Assets | (2) AAL ¹ | (3) UAAL ² (2) – (1) | (4) Funded Ratios (1) / (2) | (5) Annual Covered Payroll | (6) UAAL as a % of Covered Payroll (3)/(5) |
|--------------------------------|--|-------------------------|---------------------------------------|--------------------------------------|-------------------------------------|---|
| 6/30/1996 | \$94,230 | \$96,838 | \$2,608 | 97.3% | \$22,322 | 11.7% |
| 6/30/1997 | \$108,566 | \$97,925 | (\$10,641) | 110.9% | \$22,504 | (47.3%) |
| 6/30/1998 | \$128,830 | \$106,938 | (\$21,892) | 120.5% | \$24,672 | (88.7%) |
| 6/30/1999 | \$148,605 | \$115,748 | (\$32,857) | 128.4% | \$27,636 | (118.9%) |
| 6/30/2000 | \$162,439 | \$135,970 | (\$26,469) | 119.5% | \$28,098 | (94.2%) |
| 6/30/2001 | \$166,860 | \$149,155 | (\$17,705) | 111.9% | \$30,802 | (57.5%) |
| 6/30/2002 | \$156,067 | \$163,961 | \$7,894 | 95.2% | \$32,873 | 24.0% |
| 6/30/2003 | \$158,596 | \$180,922 | \$22,326 | 87.7% | \$34,784 | 64.2% |
| 6/30/2004 | \$169,899 | \$194,609 | \$24,710 | 87.3% | \$35,078 | 70.4% |
| 6/30/2005 | \$183,680 | \$210,301 | \$26,621 | 87.3% | \$36,045 | 73.9% |

1. Actuarial Accrued Liability.

2. Unfunded Actuarial Accrued Liability. Negative amount indicates an excess of assets over liabilities.

III. ACTUARIAL ASSUMPTIONS AND OTHER ELEMENTS OF A VALUATION

Contribution requirements and funding progress are the end results of a valuation. Those results are dependent on a number of elements that go into the valuation. These include crucial information about the plan and its members, actuarial assumptions, and actuarial methods and policies.

Information about the plan

Plan provisions

The actuarial report will include a Summary of Benefit Provisions. It summarizes key features of the plan such as eligibility rules, benefit formulas, the computation of final compensation and member contribution rates.

Member data

The actuarial report will include various summaries of member data. There are three categories of members: actives, retirees (including beneficiaries), and inactive members who have terminated with a deferred vested benefit (members who are no longer working for employers covered by the plan, no longer making contributions, but who have not yet taken a refund of their contributions or begun to receive a retirement allowance). The membership data is reviewed by an actuary for reasonableness, but the actuary does not audit the data by comparing it to other data sources (payroll, etc.). This means the data will not be perfect, but that any data flaws are expected to result in only minor valuation result differences.

Financial data

The actuarial report will include summaries of plan assets and related calculations. This is usually obtained from the retirement system or from an outside auditor. From the market value information the actuary determines the actuarial (or smoothed) value that is used in the valuation. The valuation report will show how the actuarial value of assets is determined.

Demographic assumptions

Demographic assumptions determine when and for how long members will receive the various types of benefits. The main demographic assumptions are rates (probabilities) of *decrement*, (i.e., what percentage of members at each age will die, retire, become disabled, or withdraw/terminate).

Mortality assumptions

Mortality assumptions can vary by type of member and sometimes by cause of death. In particular, there can be different mortality assumptions for:

- Death before and after retirement;
- Service connected death and non-service connected death; and
- Service retirees, disabled retirees, and beneficiaries.

Retirement assumptions

Retirement assumptions are generally based on age, but can also depend on years of service. Often, there will be higher retirement rates assumed for members eligible for an unreduced retirement benefit, based either on service or on some combination of age and service.

Disability assumptions

Disability assumptions can vary by type of disability such as: whether the disability is job-related; whether the disability is total and permanent; and whether the benefit provides coverage for employees who can no longer perform the duties of their own occupation, or only for those who can no longer work at any occupation.

Withdrawal/termination assumptions

Actuaries make assumptions about members who withdraw from the system by withdrawing their member contributions and those who terminate after becoming vested, leave their contributions with the system and thereby have a deferred vested benefit. Termination rates can depend on age, on length of service, or on a combination of both.

Other demographic assumptions

Actuaries also make assumptions about other demographic factors that impact anticipated benefits including:

- Percent of active members married or with domestic partners (and thus eligible for survivor benefits);
- Member/spouse age difference for active members; and
- Percent of deferred vested members who are working in a reciprocal system (reciprocity is an agreement between or

among retirement system that provides portability of retirement benefits by allowing an employee to accrue benefits in all systems covered by the agreement).

Economic assumptions

Economic actuarial assumptions predict how the assets and benefits grow over time. The key economic assumptions are investment earnings, salary increases, and inflation. Because the three are related – inflation, for example, affects both investment earnings and salary increases – the assumptions should be kept consistent with one another.

Investment earnings assumptions

Investment earnings affect how much of future benefit payments can be funded by investment income rather than by contributions. The investment return assumption is composed of several components including inflation, the real rate of investment return, administrative expenses, and investment expenses.

What happens if the investment return assumption is lowered? Recall that the basic funding equation for employee benefit trusts says that contributions plus investment earnings must equal benefits and expenses over time. If lower investment earnings are anticipated, current contributions must increase to make up the expected difference.

Put another way, when trustees lower the investment return assumption they are saying that the current assets on hand are not expected to earn as much as previously thought and, thus, will not fund as large a portion of plan liabilities (i.e., the portion of the present value of benefits attributed to the past).

For the 126 retirement systems included in the 2006 National Association of Retirement System Administrator's Public Fund Survey, investment return assumptions ranged from 6 percent to 8.5 percent with a mean of about 8 percent.⁶ CalSTRS uses an 8 percent investment return assumption; CalPERS uses 7.75 percent; while the retirement systems for Los Angeles and Alameda Counties use 7.75 percent and 7.8 percent, respectively.

Salary increase assumptions

The salary increase is typically composed of three components including inflation, real salary increases, and increases based on merit and promotion. A plan that raises its salary increase assumption expects to pay higher benefits. This is because

pensions are calculated based on employees' salaries. A higher rate of salary increase means that benefits will be higher and more money will be needed to pay for those benefits. This will increase contributions and liabilities.

In an actuarial valuation, a projection of *total payroll* usually includes inflation and real salary increases, but not the merit and promotion increases. These are increases that individual members receive as they advance in their careers. Because assumptions about merit and promotion increases are based on the specific experience of the system, this assumption is often studied along with the demographic assumptions.

Inflation assumptions

Inflation affects Cost of Living Adjustments (COLAs) and is also a component of both investment earnings and salary increases. Lowering the inflation assumption decreases the investment return, which causes contributions to go up and the funded ratio to go down. At the same time, however, a decrease in the inflation assumption causes a corresponding decrease in the salary increase rate. This causes the contribution rate to decrease and the funded ratio to increase.

In a typical plan, investment earnings have a significantly greater impact than salary increases. This means that, on the whole and assuming no other assumption components are changed, a decrease in the inflation assumption causes contribution rates to increase, because contributions rise more due to a lower investment return rate than they fall due to a lower salary increase rate.

IV. CURRENT ISSUES

Actuarial methods never lie, but...

In 2001, an article in the *Public Retirement Journal* reported that the CalPERS Board of Administration adopted a policy intended to “persuade local agencies to grant higher benefits to their employees in exchange for the actuarial manipulation of the value of their assets on deposit with PERS.”⁷ The background to this is that pension fund investment returns had risen considerably during the bull market of the 1990s, but due to the asset smoothing policy in place at the time, public agencies were recognizing less than market value in their actuarial value of assets. The Board policy increased the value in order to lessen the cost of adopting enhanced benefits.

Similarly, in 1996 trustees of the San Diego City Employees’ Retirement System reduced the city’s contribution rates contingent on the city granting benefit improvements.⁸ By 2005, the city’s pension debt rose significantly, its credit rating faltered, and there was speculation that the city might have to file for bankruptcy.

Cases such as these where trustees alter actuarial policies to reduce costs in the short term, and to make benefit increases appear less costly, diminish the public trust in retirement system boards and the actuarial profession.

Actuarial policies such as smoothing certainly serve a legitimate purpose. Smoothing helps to lessen the volatility of contribution rates. This makes it easier for employers to budget. Smoothing also buffers employers from the effects of market losses and ensures that they do not take credit for market gains too quickly. Problems arise, however, when established actuarial policies are altered for short-term contribution relief, or in exchange for a benefit improvement.

With rare exceptions, however, even these types of activities are certified by boards’ actuaries. Actuarial certification indicates that they fall within the range of accepted practices as defined by the American Academy of Actuaries. The problem is that for any given situation there may be a range of accepted actuarial practices that is wide enough to allow retirement system boards to adopt policies that are aimed more toward achieving the short term objective of reducing costs than toward the long term objective of ensuring that the fund is managed according to sound actuarial principles.

A 2006 report published by a task force of the American Academy of Actuaries acknowledges that there is a difference between “accepted practices” and “best practices.”⁹ The report explains, however, that it is difficult to develop best practice standards because doing so may unnecessarily limit alternative practices that may in some instances be the most appropriate.

To address this issue, some states have increased legislative oversight of public retirement systems’ actuarial methods and assumptions. Some have even passed legislation to enforce actuarial standards.

Since its enactment in 1983, the State of Georgia’s Public Retirement System Standards Law has required that the actuarial cost of all pension legislation with a fiscal effect must be determined by an actuarial study arranged by the state auditor before the bill can leave its committee. The only amendments that can be made are those that would reduce the cost of the legislation. If no appropriations are made to fund the pension benefit changes, the bill is automatically repealed. The Employees Retirement System and Teachers’ Retirement System of Georgia are among the best-funded public pension plans in the nation, with costs and benefits near the national median.¹⁰ In 2006, the State of Oklahoma passed legislation modeled after the Georgia law.

Given the Constitutional authority granted to public retirement system boards in California under Proposition 162, which passed in 1992, it is unlikely that any legislation could diminish boards’ authority to determine actuarial policies. The California Public Employee Post-Employment Benefits Commission, however, recommended the establishment of an actuarial advisory panel at the state level. The purpose of the panel would be to “provide the California Legislature, the Governor’s Office, public retirement systems, public agencies, and other interested parties with impartial and independent information on pensions, OPEB benefits, and best practices.”¹¹

In January 2008, SB 1123 (Wiggins) was introduced in response to the Commission’s recommendations. As introduced, the bill would create the California Actuarial Advisory Panel. The bill contains a number of additional provisions that would increase the transparency of actuarial practices for pension and retiree health benefits.

Have you heard the one about the two actuaries?

There is a joke about two actuaries on a golf course. One hits a tee shot that lands twenty feet to the right of the hole; the other, 20 feet to the left. The two celebrate with congratulatory high-fives after concluding that, on average, they accomplished a hole-in-one.

The joke serves to illuminate the reality that for any given year the contribution rates determined by an actuary will be too high or too low. It is impossible to predict the future with complete accuracy. Actuaries, however, are engaged in long-term planning, making projections 30 or more years out into the future. What matters is that the contribution rates they recommend are reasonable in the long-term and that the actuarial methods adopted are designed to meet the objective of paying for retirement benefits during the working career of the employee and not manipulated for the purpose of providing short-term contribution rate relief or to ease the burden of paying for benefit increases.

Actuarial work for pension (and for retiree health and other post-employment benefits) trusts can be compared to steering a ship across a sea. You set a course based on your knowledge of present conditions. As winds and currents shift, it may become necessary to change course to arrive at the desired port. Without accurate data about current conditions, periodic review, and a sound plan for how to act on the data, errors can compound over time and put the ship far off course.

This analogy has several implications for actuarial work intended to guide pension and OPEB trusts toward the destination of full funding. Due to the interrelationship of actuarial factors (inflation, for example, affects both investment returns and salary increases), errors can compound and significantly affect the outcome of actuarial forecasts. Actuarial assumptions must therefore be realistic and based on accurate data about member demographics and economic conditions. Actuarial studies should be repeated at regular intervals to determine whether assumptions need to be changed.

Finally, staying on course requires that boards who govern pension and OPEB trusts adhere to funding policies that are based on sound actuarial methods while resisting temptations to alter amortization periods, actuarial assumptions, or asset valuation methods for the purpose of lowering costs in the short-term if those changes would work to the detriment of the long-term funding plan and the goal of avoiding intergenerational transfers of benefit costs.

NOTES

- ¹ “Eight Year History of Premiums: 2000-2007,” CalPERS Health Benefits Branch, California Public Employees’ Retirement System.
- ² Testimony of Ron Seeling, Chief Actuary, California Public Employees’ Retirement System, California Public Employee Post-Employment Benefits Commission Meeting, Burlingame, CA, July 12, 2007, pp. 125-6. <http://www.pebc.ca.gov/images/files/Minutes-071207.pdf>.
- ³ 2006 Public Fund Survey, National Association of State Retirement Administrators, <http://www.publicfundsurvey.org>.
- ⁴ Testimony of Ron Seeling, Chief Actuary, California Public Employees’ Retirement System, California Public Employee Post-Employment Benefits Commission Meeting, Burlingame, CA, July 12, 2007, pp. 132-3. <http://www.pebc.ca.gov/images/files/Minutes-071207.pdf>.
- ⁵ Testimony of Ron Seeling, Chief Actuary, California Public Employees’ Retirement System, California Public Employee Post-Employment Benefits Commission Meeting, Burlingame, CA, July 12, 2007, p. 139. <http://www.pebc.ca.gov/images/files/Minutes-071207.pdf>.
- ⁶ “2006 Public Fund Survey,” National Association of State Retirement System Administrators, 2007. <http://www.publicfundsurvey.org>.
- ⁷ “So, Why Do We Have Staff?,” *The Public Retirement Journal*, May/June 2001, p. 1.
- ⁸ “San Diego’s Pension Scandal for Dummies,” by Daniel Strumpf, *San Diego City Beat*, June 22, 2005.
- ⁹ “A Critical Review of the U.S. Actuarial Profession: Final Report for the U.S. Actuarial Profession and Other Interested Parties,” prepared by the American Academy of Actuaries’ Critical Review of the U.S. Actuarial Profession Task Force,” December 2006.
- ¹⁰ “NASRA Response to Reason Foundation Study, ‘The Gathering Pension Storm,’” National Association of State Retirement Administrators, p. 6. <http://www.nasra.org/resources/NASRA%20Reason%20Response.pdf>.
- ¹¹ “Funding Pensions and Retiree Health Care for Public Employees,” California Public Employee Post-Employment Benefits Commission, January 2008, p. 190. http://www.pebc.ca.gov/images/files/final/080107_PEBCCReport2007.pdf.



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Memorandum

TO: NDPERS Board

FROM: Scott

DATE: September 8, 2020

SUBJECT: Legislation

In addition to the bills NDPERS has proposed, there are a number of other bills in front of the Employee Benefits Programs Committee that would affect one or more of the plans administered by NDPERS. The below is a short description of each. The bills themselves are attached.

Bill 49 – establish health insurance minimums in the event the ACA is eliminated

Bill 55 – requires health insurance policies to cover physicals that include Department of Transportation requirements

Bill 68 – requires the NDPERS Health Plans to cover drugs imported from Canada

Bill 135 – establishes Health Plan participation for former state employees who were subject to a reduction in force

Bill 136 – establishes a retirement plan for “protective services employees” of the Department of Corrections (I understand they will most likely retract this proposed bill)

Bill 148 – removes the uniform group insurance plan decision-making from the NDPERS Board and transfers it to the Employee Benefits Programs Committee

Bill 170 – cleans up some unclear language regarding stop loss insurance acquisition

Bill 183 – requires certain health insurance policies to cover insulin

21.0049.01000

Sixty-seventh
Legislative Assembly
of North Dakota

BILL NO.

Introduced by

Senator Mathern

1 A BILL for an Act to create and enact chapter 26.1-36.8 of the North Dakota Century Code,
2 relating to requirements of health insurance policies; to provide for application; and to provide a
3 contingent effective date.

4 BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:

5 **SECTION 1.** Chapter 26.1-36.8 of the North Dakota Century Code is created and enacted
6 as follows:

7 **26.1-36.8-01. Definitions.**

8 As used in this chapter:

- 9 1. "Affiliation period" means a period that begins on a policyholder or dependent's
10 enrollment date, runs concurrently with any waiting period under the health insurance
11 policy, must expire before coverage is effective, and during which the policy provider
12 need not provide benefits for medical care and may not charge any premium to the
13 policyholder or dependent.
- 14 2. "Commissioner" means the commissioner of insurance.
- 15 3. "Cost-sharing" means any copayment, coinsurance, or deductible required by, or on
16 behalf of, a covered individual in order to receive a specific health care item or service
17 covered by a health insurance policy.
- 18 4. "Drug" has the same meaning as provided under section 19-02.1-01.
- 19 5. "Health insurance policy" means any individual insurance policy, group insurance
20 policy, or other health benefit plan subject to the requirements of chapter 26.1-36.
- 21 6. "Pharmacy benefits manager" has the same meaning as provided under section
22 19-03.6-01.
- 23 7. "Pre-existing condition exclusion" means a limitation or exclusion of benefits related to
24 a condition based on the fact the condition was present before the enrollment date for

1 coverage, regardless of whether any medical diagnosis, care, or treatment was
2 recommended or received before the enrollment date.

3 8. "Premium adjustment percentage" for any calendar year means the percentage by
4 which the average per capita premium for health insurance policies in this state in the
5 previous calendar year, as determined by the commissioner not later than October first
6 of such preceding calendar year, exceeds such average per capita premium for 2020.

7 **26.1-36.8-02. Required policy provisions - Rules.**

8 1. The commissioner shall adopt rules that set minimum policy coverage standards
9 applicable to a health insurance policy subject to this chapter. In addition to other
10 requirements provided by law, the standards must require a policy regulated under this
11 chapter to provide as benefits to all enrollees coverage for:

12 a. Ambulatory patient services;

13 b. Emergency services;

14 c. Hospitalization;

15 d. Maternity and newborn care;

16 e. Mental health and substance use disorder services, including behavioral health
17 treatment;

18 f. Drugs;

19 g. Rehabilitative and habilitative services and devices;

20 h. Laboratory services;

21 i. Preventative and wellness services and chronic disease management; and

22 j. Pediatric services, including oral and vision care.

23 2. A health insurance policy subject to this chapter may not establish lifetime or annual
24 limits on the dollar value of benefits described in subsection 1 for any covered
25 individual.

26 3. A health insurance policy subject to this chapter which offers coverage for a child or
27 stepchild of a policyholder must continue to offer such coverage, at the option of the
28 policyholder, until the unmarried child or stepchild reaches the age of twenty-six.

26.1-36.8-03. Limitations on pre-existing condition exclusions for health insurance policies.

1. A health insurance policy issuer may not impose a pre-existing condition exclusion and may not deny enrollment to a individual on the basis of a pre-existing condition.
2. A health insurance policy issuer may:
 - a. Restrict enrollment in a health insurance policy to open enrollment and special enrollment periods in accordance with other provisions of this chapter.
 - b. Impose an affiliation period on any health insurance policy that is not provided through the individual market. An affiliation period may not exceed ninety days and may not apply to emergency services.
 - c. Use other alternatives approved by the commissioner to address adverse selection.

26.1-36.8-04. Fairness in cost-sharing and ratemaking - Rules.

1. A health insurance policy issuer may not require cost-sharing in an amount greater than the cost-sharing limit amount.
 - a. For plan years beginning in calendar year 2021, the cost-sharing limit amount is eight thousand one hundred fifty dollars for self-only coverage and sixteen thousand three hundred dollars for other than self-only coverage.
 - b. For plan years beginning after calendar year 2021, the cost-sharing limit is equal to the dollar amount applicable to the previous calendar year, increased by the product of that amount and the premium adjustment percentage as determined by the commissioner for the calendar year.
2. In calculating an insured's contribution to an applicable cost-sharing requirement, including the annual limitation on cost-sharing subject to subsection 1:
 - a. An insurer shall include any cost-sharing amounts paid by the insured or on behalf of an enrollee by another person; and
 - b. A pharmacy benefits manager shall include any cost-sharing amounts paid by the insured or on behalf of the insured by another person.
3. Premium rates charged for any health insurance policy subject to this chapter must be reasonable in relation to the benefits available under the policy, as determined by the commissioner.

- 1 4. A health insurance policy subject to this chapter may charge different premium rates
2 for each individual covered by that policy; however, the premium rates may vary only
3 in relation to:
- 4 a. Whether the policy covers an individual or a family;
5 b. Rating area, as established pursuant to subsection 6;
6 c. Age, except that such rate may not vary by more than three to one for adults; and
7 d. Tobacco use, except that such rate may not vary by more than one and one-half
8 to one.
- 9 5. With respect to family coverage under an individual or group health insurance policy,
10 the rating variations permitted under this section must be applied based on the portion
11 of the premium attributable to each family member covered under the policy.
- 12 6. The commissioner shall adopt rules to establish:
- 13 a. One or more geographic rating areas within the state and the permissible age
14 bands within which premium rates may vary; and
15 b. Minimum standards for ratemaking and cost-sharing, in accordance with
16 accepted actuarial principles and practices.

17 **26.1-36.8-05. Rules - Application.**

- 18 1. The commissioner shall adopt rules addressing any standard or practice necessary to
19 effectuate the purposes of this chapter.
- 20 2. Unless a rule provides a different application date, a rule adopted under this chapter
21 applies beginning six months after the date the rule becomes final.

22 **26.1-36.8-06. Conflict of laws.**

- 23 1. A health insurance policy subject to this chapter remains subject to every other
24 requirement and provision of this title which is not inconsistent with this chapter.
- 25 2. If a provision of this chapter conflicts with another provision of this title, the provision of
26 this chapter controls, unless the application of this chapter would result in a reduction
27 of coverage.

28 **SECTION 2. APPLICATION.** This Act applies to a health insurance policy delivered,
29 executed, issued, amended, adjusted, or renewed in this state on or after six months following
30 finalization of the rules adopted under chapter 26.1-36.8. This chapter does not abridge or

1 otherwise affect a health insurance policy already in effect at the time this chapter becomes
2 applicable until that policy is renewed, amended, or adjusted.

3 **SECTION 3. CONTINGENT EFFECTIVE DATE.** This Act becomes effective three months
4 after the insurance commissioner certifies to the legislative council that a court of competent
5 jurisdiction has ruled all or a significant portion of the federal Patient Protection and Affordable
6 Care Act is unconstitutional and the judgment of that court has become final and definitive.

21.0055.01000

Sixty-seventh
Legislative Assembly
of North Dakota

BILL NO.

Introduced by

Representative Schatz

1 A BILL for an Act to create and enact section 26.1-36-09.16 of the North Dakota Century Code,
2 relating to health insurance coverage of annual physical examinations; and to amend and
3 reenact section 26.1-36.6-03 of the North Dakota Century Code, relating to public employees
4 retirement system self-insurance health plans.

5 **BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:**

6 **SECTION 1.** Section 26.1-36-09.16 of the North Dakota Century Code is created and
7 enacted as follows:

8 **26.1-36-09.16. Coverage of physical examination.**

9 An insurer may not deliver, issue, execute, or renew an accident and health insurance
10 policy on an individual, group, blanket, franchise, or association basis which provides coverage
11 for an annual physical examination unless the coverage includes an examination that meets the
12 requirements for a federal department of transportation physical examination. This section does
13 not require coverage of more than one physical examination per year. This section does not
14 require every physical examination to meet the requirements of a federal department of
15 transportation physical examination.

16 **SECTION 2. AMENDMENT.** Section 26.1-36.6-03 of the North Dakota Century Code is
17 amended and reenacted as follows:

18 **26.1-36.6-03. Self-insurance health plans - Requirements.**

19 1. The following policy provisions apply to a self-insurance health plan or to the
20 administrative services only or third-party administrator, and are subject to the
21 jurisdiction of the commissioner: 26.1-36-03, 26.1-36-03.1, 26.1-36-05, 26.1-36-10,
22 26.1-36-12, 26.1-36-12.4, 26.1-36-12.6, 26.1-36-13, 26.1-36-14, 26.1-36-17,
23 26.1-36-18, 26.1-36-19, 26.1-36-23, 26.1-36-29, 26.1-36-37.1, 26.1-36-38, 26.1-36-39,
24 26.1-36-41, 26.1-36-44, and 26.1-36-46.

- 1 2. The following health benefit provisions applicable to a group accident and health
2 insurance policy under chapter 26.1-36 apply to a self-insurance health plan and are
3 subject to the jurisdiction of the commissioner: 26.1-36-06, 26.1-36-06.1, 26.1-36-07,
4 26.1-36-08, 26.1-36-08.1, 26.1-36-09, 26.1-36-09.1, 26.1-36-09.2, 26.1-36-09.3,
5 26.1-36-09.5, 26.1-36-09.6, 26.1-36-09.7, 26.1-36-09.8, 26.1-36-09.9, 26.1-36-09.10,
6 26.1-36-09.11, 26.1-36-09.12, 26.1-36-09.13, 26.1-36-09.14, 26.1-36-09.15,
7 26.1-36-09.16, 26.1-36-11, 26.1-36-12.2, 26.1-36-20, 26.1-36-21, 26.1-36-22,
8 26.1-36-23.1, and 26.1-36-43.

21.0068.01000

Sixty-seventh
Legislative Assembly
of North Dakota

BILL NO.

Introduced by

Representative M. Nelson

1 A BILL for an Act to create and enact a new section to chapter 54-52.1 of the North Dakota
2 Century Code, relating to public employee health insurance drug benefit coverage; to amend
3 and reenact section 26.1-36.6-03 of the North Dakota Century Code, relating to self-insurance
4 health plans; to require a report; to provide for application; to provide an expiration date; and to
5 declare an emergency.

6 BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:

7 **SECTION 1. AMENDMENT.** Section 26.1-36.6-03 of the North Dakota Century Code is
8 amended and reenacted as follows:

9 **26.1-36.6-03. Self-insurance health plans - Requirements.**

- 10 1. The following policy provisions apply to a self-insurance health plan or to the
11 administrative services only or third-party administrator, and are subject to the
12 jurisdiction of the commissioner: 26.1-36-03, 26.1-36-03.1, 26.1-36-05, 26.1-36-10,
13 26.1-36-12, 26.1-36-12.4, 26.1-36-12.6, 26.1-36-13, 26.1-36-14, 26.1-36-17,
14 26.1-36-18, 26.1-36-19, 26.1-36-23, 26.1-36-29, 26.1-36-37.1, 26.1-36-38, 26.1-36-39,
15 26.1-36-41, 26.1-36-44, and 26.1-36-46.
- 16 2. The following health benefit provisions applicable to a group accident and health
17 insurance policy under chapter 26.1-36 apply to a self-insurance health plan and are
18 subject to the jurisdiction of the commissioner: 26.1-36-06, 26.1-36-06.1, 26.1-36-07,
19 26.1-36-08, 26.1-36-08.1, 26.1-36-09, 26.1-36-09.1, 26.1-36-09.2, 26.1-36-09.3,
20 26.1-36-09.5, 26.1-36-09.6, 26.1-36-09.7, 26.1-36-09.8, 26.1-36-09.9, 26.1-36-09.10,
21 26.1-36-09.11, 26.1-36-09.12, 26.1-36-09.13, 26.1-36-09.14, 26.1-36-09.15,
22 26.1-36-11, 26.1-36-12.2, 26.1-36-20, 26.1-36-21, 26.1-36-22, 26.1-36-23.1, and
23 26.1-36-43. Section 2 of this Act applies to a self-insurance health plan and is subject
24 to the jurisdiction of the commissioner.

1 **SECTION 2.** A new section to chapter 54-52.1 of the North Dakota Century Code is created
2 and enacted as follows:

3 **Coverage of imported prescription drugs.**

4 Prescription drug benefits coverage provided under section 54-52.1-04, 54-52.1-04.1, or
5 54-52.1-04.2, must include coverage for prescription drugs imported from Canada in
6 compliance with section 804 of the Federal Food, Drug, and Cosmetics Act [21 U.S.C. 384].
7 Coverage required under this section may allow for a copayment that does not exceed
8 twenty-five dollars.

9 **SECTION 3. APPLICATION.** This Act applies to prescription drug benefits coverage that
10 begins after June 30, 2021, and which does not extend past June 30, 2023.

11 **SECTION 4. PUBLIC EMPLOYEES RETIREMENT SYSTEM - COVERAGE OF DRUGS**
12 **IMPORTED FROM CANADA - REPORT.** Pursuant to section 54-03-28, the public employees
13 retirement system shall prepare and submit for introduction a bill to the sixty-eighth legislative
14 assembly to repeal the expiration date for sections 1 and 2 of this Act and to extend the
15 coverage of prescription drugs imported from Canada to apply to all group and individual health
16 insurance policies. The public employees retirement system shall append to the bill a report
17 regarding the effect of the prescription drug coverage requirement on the system's health
18 insurance programs, information on the utilization and costs relating to the coverage, and a
19 recommendation regarding whether the coverage should continue.

20 **SECTION 5. EXPIRATION DATE.** Sections 1 and 2 of this Act are effective through July 31,
21 2023, and after that date are ineffective.

22 **SECTION 6. EMERGENCY.** This Act is declared to be an emergency measure.

21.0135.01000

Sixty-seventh
Legislative Assembly
of North Dakota

BILL NO.

Introduced by

Representative Keiser

1 A BILL for an Act to amend and reenact section 54-52.1-02 of the North Dakota Century Code,
2 relating to the public employees retirement system uniform group insurance program benefits;
3 and to provide for application.

4 **BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:**

5 **SECTION 1. AMENDMENT.** Section 54-52.1-02 of the North Dakota Century Code is
6 amended and reenacted as follows:

7 **54-52.1-02. Uniform group insurance program created - Formation into subgroups.**

8 In order to promote the economy and efficiency of employment in the state's service, reduce
9 personnel turnover, and offer an incentive to high-grade individuals to enter and remain in the
10 service of state employment, there is created a uniform group insurance program. The uniform
11 group must be composed of eligible and retired employees and former eligible employees of at
12 least twenty-five years who have separated from employment due to a reduction in force and be
13 formed to provide hospital benefits coverage, medical benefits coverage, and life insurance
14 benefits coverage in the manner set forth in this chapter. The uniform group may be divided into
15 the following subgroups at the discretion of the board:

16 1. Medical and hospital benefits coverage group consisting of active eligible employees
17 and, retired employees not eligible for Medicare, ~~except for employees who first retire~~
18 ~~after July 1, 2015, and are not eligible for Medicare on their retirement~~ and former
19 eligible employees of at least twenty-five years who separated from employment due
20 to a reduction in force who are not eligible for Medicare. In determining premiums for
21 coverage under this subsection for retired employees and separated employees due
22 to reduction in force not eligible for Medicare, the rate for a non-Medicare retiree or
23 separated employee due to reduction in force single plan is one hundred fifty percent
24 of the active member single plan rate, the rate for a non-Medicare retiree or separated

employee due to reduction in force family plan of two people is twice the non-Medicare retiree or separated employee due to reduction in force single plan rate, and the rate for a non-Medicare retiree or separated employee due to reduction in force family plan of three or more persons is two and one-half times the non-Medicare retiree or separated employee due to reduction in force single plan rate.

2. In addition to the coverage provided in subsection 1, another coverage option may be provided for retired employees not eligible for Medicare, ~~except for employees who first retire after July 1, 2015, and are not eligible for Medicare on their retirement and former eligible employees of at least twenty-five years who separated from employment due to a reduction in force who are not eligible for Medicare,~~ provided the option does not increase the implicit subsidy as determined by the governmental accounting standards board's other postemployment benefit reporting procedure. In offering this additional option, the board may have an open enrollment but thereafter enrollment for this option must be as specified in section 54-52.1-03.

3. Retired Medicare-eligible employee group medical and hospital benefits coverage.

4. Active eligible employee life insurance benefits coverage.

5. Retired employee life insurance benefits coverage.

6. Terminated employee continuation group medical and hospital benefits coverage.

7. Terminated employee conversion group medical and hospital benefits coverage.

8. Dental benefits coverage.

9. Vision benefits coverage.

10. Long-term care benefits coverage.

11. Employee assistance benefits coverage.

12. Prescription drug coverage.

SECTION 2. APPLICATION. This Act applies to an employee who retires or separates from employment due to a reduction in force after July 31, 2021. The public employees retirement system board shall offer a limited enrollment period for former employees who retired or separated from employment due to a reduction in force after June 30, 2015, and before August 1, 2021, or the surviving spouse of such former employee.

21.0136.02000

Sixty-seventh
Legislative Assembly
of North Dakota

BILL NO.

Introduced by

Employee Benefits Programs Committee

(At the request of the Department of Corrections and Rehabilitation)

1 A BILL for an Act to create and enact a new section to chapter 54-52 of the North Dakota
2 Century Code, relating to participation by protective services employees of the department of
3 corrections and rehabilitation in the defined benefit retirement plan; to amend and reenact
4 section 54-52-01, subsection 3 of section 54-52-05, and subsection 3 of section 54-52-17 of the
5 North Dakota Century Code, relating to participation by protective services employees of the
6 department of corrections and rehabilitation in the defined benefit retirement plan; and to
7 provide an appropriation.

8 BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:

9 **SECTION 1. AMENDMENT.** Section 54-52-01 of the North Dakota Century Code is
10 amended and reenacted as follows:

11 **54-52-01. Definition of terms.**

12 As used in this chapter, unless the context otherwise requires:

- 13 1. "Account balance" means the total contributions made by the employee, vested
14 employer contributions under section 54-52-11.1, the vested portion of the vesting
15 fund as of June 30, 1977, and interest credited thereon at the rate established by the
16 board.
- 17 2. "Beneficiary" means any person in receipt of a benefit provided by this plan or any
18 person designated by a participating member to receive benefits.
- 19 3. "Correctional officer" means a participating member who is employed as a correctional
20 officer by a political subdivision.
- 21 4. "Eligible employee" means all permanent employees who meet all of the eligibility
22 requirements set by this chapter and who are eighteen years or more of age, and
23 includes appointive and elective officials under sections 54-52-02.5, 54-52-02.11, and
24 54-52-02.12, and nonteaching employees of the superintendent of public instruction,

1 including the superintendent of public instruction, who elect to transfer from the
2 teachers' fund for retirement to the public employees retirement system under section
3 54-52-02.13, and employees of the state board for career and technical education who
4 elect to transfer from the teachers' fund for retirement to the public employees
5 retirement system under section 54-52-02.14. Eligible employee does not include
6 nonclassified state employees who elect to become members of the retirement plan
7 established under chapter 54-52.6 but does include employees of the judicial branch
8 and employees of the board of higher education and state institutions under the
9 jurisdiction of the board.

10 5. "Employee" means any individual employed by a governmental unit, whose
11 compensation is paid out of the governmental unit's funds, or funds controlled or
12 administered by a governmental unit, or paid by the federal government through any of
13 its executive or administrative officials; licensed employees of a school district means
14 those employees eligible to participate in the teachers' fund for retirement who, except
15 under subsection 2 of section 54-52-17.2, are not eligible employees under this
16 chapter.

17 6. "Employer" means a governmental unit.

18 7. "Firefighter" means a participating member who is employed as a firefighter by a
19 political subdivision and, notwithstanding subsection 13, for an individual employed
20 after July 31, 2017, is employed at least thirty-two hours per week and at least twenty
21 weeks each year of employment. A firefighter who is a participating member of the law
22 enforcement retirement plan created by this chapter who begins employment after
23 July 31, 2017, is ineligible to participate concurrently in any other retirement plan
24 administered by the public employees retirement system. The term does not include a
25 firefighter employee of the North Dakota national guard.

26 8. "Funding agent" or "agents" means an investment firm, trust bank, or other financial
27 institution which the retirement board may select to hold and invest the employers' and
28 members' contributions.

29 9. "Governmental unit" means the state of North Dakota, except the highway patrol for
30 members of the retirement plan created under chapter 39-03.1, or a participating
31 political subdivision thereof.

- 1 10. "National guard security officer or firefighter" means a participating member who is:
- 2 a. A security police employee of the North Dakota national guard; or
- 3 b. A firefighter employee of the North Dakota national guard.
- 4 11. "Participating member" means an eligible employee who through payment into the
- 5 plan has established a claim against the plan.
- 6 12. "Peace officer" means a participating member who is a peace officer as defined in
- 7 section 12-63-01 and is employed as a peace officer by the bureau of criminal
- 8 investigation or by a political subdivision and, notwithstanding subsection 13, for
- 9 persons employed after August 1, 2005, is employed thirty-two hours or more per
- 10 week and at least twenty weeks each year of employment. A peace officer who is a
- 11 participating member of the law enforcement retirement plan created by this chapter
- 12 who begins employment after August 1, 2005, is ineligible to participate concurrently in
- 13 any other retirement plan administered by the public employees retirement system.
- 14 13. "Permanent employee" means a governmental unit employee whose services are not
- 15 limited in duration and who is filling an approved and regularly funded position in an
- 16 eligible governmental unit, and is employed twenty hours or more per week and at
- 17 least twenty weeks each year of employment.
- 18 14. "Prior service" means service or employment before July 1, 1966.
- 19 15. "Prior service credit" means such credit toward a retirement benefit as the retirement
- 20 board may determine under the provisions of this chapter.
- 21 16. "Protective services employee" means a participating member who is employed by the
- 22 department of corrections and rehabilitation under the job classification of protective
- 23 services or who is employed by the department of corrections and rehabilitation in the
- 24 supervisory chain of protective services employees and, notwithstanding the definition
- 25 of "permanent employee", for an individual employed after June 30, 2021, who is
- 26 employed thirty-two hours or more per week and at least twenty weeks each year of
- 27 employment. A protective services employee who is a participating member of the
- 28 protective services retirement plan created by this chapter who begins employment
- 29 after June 30, 2021, is ineligible to participate concurrently in any other retirement plan
- 30 administered by the public employees retirement system.

1 17. "Public employees retirement system" means the retirement plan and program
2 established by this chapter.

3 ~~17.~~18. "Retirement" means the acceptance of a retirement allowance under this chapter upon
4 either termination of employment or termination of participation in the retirement plan.

5 ~~18.~~19. "Retirement board" or "board" means the governing authority created under section
6 54-52-03.

7 ~~19.~~20. "Seasonal employee" means a participating member who does not work twelve
8 months a year.

9 ~~20.~~21. "Service" means employment on or after July 1, 1966.

10 ~~21.~~22. "Service benefit" means the credit toward retirement benefits as determined by the
11 retirement board under the provisions of this chapter.

12 ~~22.~~23. "Temporary employee" means a governmental unit employee who is not eligible to
13 participate as a permanent employee, who is at least eighteen years old and not
14 actively contributing to another employer-sponsored pension fund, and, if employed by
15 a school district, occupies a noncertified teacher's position.

16 ~~23.~~24. "Wages" and "salaries" means the member's earnings in eligible employment under
17 this chapter reported as salary on the member's federal income tax withholding
18 statements plus any salary reduction or salary deferral amounts under 26 U.S.C. 125,
19 401(k), 403(b), 414(h), or 457. "Salary" does not include fringe benefits such as
20 payments for unused sick leave, personal leave, vacation leave paid in a lump sum,
21 overtime, housing allowances, transportation expenses, early retirement incentive pay,
22 severance pay, medical insurance, workforce safety and insurance benefits, disability
23 insurance premiums or benefits, or salary received by a member in lieu of previously
24 employer-provided fringe benefits under an agreement between the member and
25 participating employer. Bonuses may be considered as salary under this section if
26 reported and annualized pursuant to rules adopted by the board.

27 **SECTION 2. AMENDMENT.** Subsection 3 of section 54-52-05 of the North Dakota Century
28 Code is amended and reenacted as follows:

29 3. Each employer, at ~~its~~the option ~~of that employer~~, may pay all or a portion of the
30 employee contributions required by subsection 2 and sections 54-52-06.1, 54-52-06.2,
31 54-52-06.3, ~~and 54-52-06.4,~~ and section 3 of this Act, or the employee contributions

1 required to purchase service credit on a pretax basis pursuant to subsection 5 of
2 section 54-52-17.4. Employees may not receive the contributed amounts directly once
3 the employer has elected to pay the employee contributions. The amount paid must be
4 paid by the employer in lieu of contributions by the employee. If the state determines
5 not to pay the contributions, the amount that would have been paid must continue to
6 be deducted from the employee's compensation. If contributions are paid by the
7 employer, ~~they~~the contributions must be treated as employer contributions in
8 determining tax treatment under this code and the federal Internal Revenue Code. If
9 contributions are paid by the employer, ~~they~~the contributions may not be included as
10 gross income of the employee in determining tax treatment under this code and the
11 Internal Revenue Code until ~~they~~the contributions are distributed or made available.
12 The employer shall pay these employee contributions from the same source of funds
13 used in paying compensation to the employee. The employer shall pay these
14 contributions by effecting an equal cash reduction in the gross salary of the employee
15 or by an offset against future salary increases or by a contribution of a reduction in
16 gross salary and offset against future salary increases. If employee contributions are
17 paid by the employer, ~~they~~the employee contributions must be treated for the
18 purposes of this chapter in the same manner and to the same extent as employee
19 contributions made ~~prior to~~before the date on which employee contributions were
20 assumed by the employer. An employer exercising ~~its~~the employer's option under this
21 subsection shall report ~~its~~the employer's choice to the board in writing.

22 **SECTION 3.** A new section to chapter 54-52 of the North Dakota Century Code is created
23 and enacted as follows:

24 **Contribution by protective services employees - Employer contribution.**

25 Each protective services employee who is a member of the public employees retirement
26 system is assessed and shall pay monthly four percent of the employee's monthly salary. The
27 assessment must be deducted and retained out of the employee's salary in equal monthly
28 installments. The protective services employee's employer shall contribute an amount
29 determined by the board to be actuarially required to support the level of benefits specified in
30 section 54-52-17. The employer's contribution must be paid from funds appropriated for salary
31 or from any other funds available for such purposes. If the protective services employee's

1 assessment is paid by the employer under subsection 3 of section 54-52-05, the employer shall
2 contribute, in addition, an amount equal to the required protection services employee's
3 assessment.

4 **SECTION 4. AMENDMENT.** Subsection 3 of section 54-52-17 of the North Dakota Century
5 Code is amended and reenacted as follows:

6 3. Retirement dates are defined as follows:

7 a. Normal retirement date, except for a national guard security officer or firefighter, a
8 firefighter employed by a political subdivision, ~~or a peace officer or correctional~~
9 officer employed by the bureau of criminal investigation or by a political
10 subdivision, or a protective services employee, is:

11 (1) The first day of the month next following the month in which the member
12 attains the age of sixty-five years; or

13 (2) When the member has a combined total of years of service credit and years
14 of age equal to eighty-five and has not received a retirement benefit under
15 this chapter.

16 b. Normal retirement date for members first enrolled after December 31, 2015,
17 except for a national guard security officer or firefighter, a firefighter employed by
18 a political subdivision, a peace officer or correctional officer employed by the
19 bureau of criminal investigation or by a political subdivision, ~~or a supreme court~~
20 or district court judge, or a protective services employee, is:

21 (1) The first day of the month next following the month in which the member
22 attains the age of sixty-five years; or

23 (2) When the member has a combined total of years of service credit and years
24 of age equal to ninety and the member attains a minimum age of sixty and
25 has not received a retirement benefit under this chapter.

26 c. Normal retirement date for a national guard security officer or firefighter is:

27 (1) The first day of the month next following the month in which the national
28 guard security officer or firefighter attains the age of fifty-five years and has
29 completed at least three eligible years of employment; or

- 1 (2) When the national guard security officer or firefighter has a combined total
2 of years of service credit and years of age equal to eighty-five and has not
3 received a retirement benefit under this chapter.
- 4 d. Normal retirement date for a peace officer, firefighter, or correctional officer
5 employed by a political subdivision is:
- 6 (1) The first day of the month next following the month in which the peace
7 officer, firefighter, or correctional officer attains the age of fifty-five years and
8 has completed at least three eligible years of employment; or
- 9 (2) When the peace officer, firefighter, or correctional officer has a combined
10 total of years of service credit and years of age equal to eighty-five and has
11 not received a retirement benefit under this chapter.
- 12 e. Normal retirement date for a peace officer employed by the bureau of criminal
13 investigation is:
- 14 (1) The first day of the month next following the month in which the peace
15 officer attains the age of fifty-five years and has completed at least three
16 eligible years of employment; or
- 17 (2) When the peace officer has a combined total of years of service credit and
18 years of age equal to eighty-five and has not received a retirement benefit
19 under this chapter.
- 20 f. Normal retirement date for a protective services employee is:
- 21 (1) The first day of the month next following the month in which a protective
22 services employee attains the age of fifty-five years and has completed at
23 least three eligible years of employment; or
- 24 (2) When the protective services employee has a combined total of years of
25 service credit and years of age equal to eighty-five and has not received a
26 retirement benefit under this chapter.
- 27 g. Postponed retirement date is the first day of the month next following the month
28 in which the member, on or after July 1, 1977, actually severs or has severed the
29 member's employment after reaching the normal retirement date.
- 30 g.h. Early retirement date, except for a national guard security officer or firefighter, a
31 firefighter employed by a political subdivision, or a peace officer or correctional

1 officer employed by the bureau of criminal investigation or by a political
2 subdivision, or a protective services employee, is the first day of the month next
3 following the month in which the member attains the age of fifty-five years and
4 has completed three years of eligible employment. For a national guard security
5 officer or firefighter, early retirement date is the first day of the month next
6 following the month in which the national guard security officer or firefighter
7 attains the age of fifty years and has completed at least three years of eligible
8 employment. For a firefighter employed by a political subdivision or a peace
9 officer or correctional officer employed by the bureau of criminal investigation or
10 by a political subdivision, or a protective services employee, early retirement date
11 is the first day of the month next following the month in which the peace officer,
12 firefighter, or correctional officer, or protective services employee attains the age
13 of fifty years and has completed at least three years of eligible employment.

14 h-i. Disability retirement date is the first day of the month after a member becomes
15 permanently and totally disabled, according to medical evidence called for under
16 the rules of the board, and has completed at least one hundred eighty days of
17 eligible employment. For supreme and district court judges, permanent and total
18 disability is based solely on a judge's inability to perform judicial duties arising out
19 of physical or mental impairment, as determined pursuant to rules adopted by the
20 board or as provided by subdivision a of subsection 3 of section 27-23-03.

21 (1) A member is eligible to receive disability retirement benefits only if the
22 member became disabled during the period of eligible employment and
23 applies for disability retirement benefits within twelve months of the date the
24 member terminates employment.

25 (2) A member is eligible to continue to receive disability benefits as long as the
26 permanent and total disability continues and the member submits the
27 necessary documentation and undergoes medical testing required by the
28 board, or for as long as the member participates in a rehabilitation program
29 required by the board, or both. If the board determines a member no longer
30 meets the eligibility definition, the board may discontinue the disability
31 retirement benefit. The board may pay the cost of any medical testing or

1 rehabilitation services the board deems necessary and these payments are
2 appropriated from the retirement fund for those purposes. A member's
3 receipt of disability benefits under this section is limited to receipt from the
4 fund to which the member was actively contributing at the time the member
5 became disabled.

6 **SECTION 5. APPROPRIATION.** There is appropriated out of any moneys in the general
7 fund in the state treasury, not otherwise appropriated, the sum of \$1,800,000, or so much of the
8 sum as may be necessary, to the department of corrections and rehabilitation for the purpose of
9 implementing this Act, for the biennium beginning July 1, 2021, and ending June 30, 2023.

21.0148.02000

Sixty-seventh
Legislative Assembly
of North Dakota

BILL NO.

Introduced by

Representative Kasper

1 A BILL for an Act to amend and reenact sections 54-52.1-04, 54-52.1-04.1, 54-52.1-04.2,
2 54-52.1-04.7, 54-52.1-04.8, and 54-52.1-05 of the North Dakota Century Code, relating to
3 public employee uniform group insurance plans; to provide for application; and to declare an
4 emergency.

5 **BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:**

6 **SECTION 1. AMENDMENT.** Section 54-52.1-04 of the North Dakota Century Code is
7 amended and reenacted as follows:

8 **54-52.1-04. Board to contract for insurance - Approval by employee benefits**
9 **programs committee.**

10 1. The board shall receive bids for the providing of hospital benefits coverage, medical
11 benefits coverage, life insurance benefits coverage for a specified term, and employee
12 assistance program services; and may receive bids separately for all or part of the
13 prescription drug benefits coverage component of medical benefits coverage; ~~and~~
14 ~~shall accept one or more bids of and contract with the carriers the board determines~~
15 ~~best serve the interests of the state and the state's eligible employees.~~ Solicitations
16 must be made not later than ninety days before the expiration of an existing uniform
17 group insurance contract. Bids must be solicited by advertisement in a manner
18 selected by the board which will provide reasonable notice to prospective bidders. ~~In~~
19 ~~preparing bid proposals and evaluating bids, the board may utilize the services of~~
20 ~~consultants on a contract basis in order that the bids received may be uniformly~~
21 ~~compared and properly evaluated~~

22 2. After the board identifies which bids of carriers, if any, the board determines best serve
23 the interests of the state and the state's eligible employees, the board shall forward a
24 recommendation and all the bids to the employee benefits programs committee. The

1 board may recommend rejection of one or more bids received under this section.

2 Upon receipt of the board's recommendation, the employee benefits programs

3 committee shall determine which bid, if any, will best serve the interests of eligible

4 employees and the state. In identifying and determining which bid, if any, will best

5 serve the interests of eligible employees and the state, the board and the employee

6 benefits programs committee shall give adequate consideration to the following

7 factors:

8 a. The economy to be effected.

9 b. The ease of administration.

10 c. The adequacy of the coverages.

11 d. The financial position of the carrier, with special emphasis on the solvency of the
12 carrier.

13 e. The reputation of the carrier and any other information available tending to show
14 past experience with the carrier in matters of claim settlement, underwriting, and
15 services.

16 f. The price and contract guarantees.

17 2-3. The boardemployee benefits programs committee may reject any or all bids received
18 under this section. If the boardemployee benefits programs committee rejects all bids
19 received, the board again shall again solicit bids as provided in this section. If the
20 committee does not reject all bids received, the board shall enter a contract with the
21 bidder selected by the committee under this section.

22 3-4. In preparing a bid proposal and evaluating a bid under this section, the board and the
23 employee benefits programs committee may use the services of a consultant on a
24 contract basis so the bids received may be compared uniformly and evaluated
25 properly. The board may not enter a contract for consultant services under this
26 subsection unless the employee benefits programs committee has approved the
27 selection of the consultant.

28 5. Under sections 54-52.1-04.1 and 54-52.1-04.2, following approval by the employee
29 benefits programs committee, the board may contract for health benefits coverage
30 through a health maintenance organization or establish a self-insurance health plan.

1 **SECTION 2. AMENDMENT.** Section 54-52.1-04.1 of the North Dakota Century Code is
2 amended and reenacted as follows:

3 **54-52.1-04.1. Health maintenance organization contract - Membership option.**

4 Notwithstanding the provisions of section 54-52.1-04, but subject to approval by the
5 employee benefits programs committee, the board may contract with one or more health
6 maintenance organizations to provide eligible employees the option of membership in a health
7 maintenance organization. If ~~the board~~ makes such a contract, the board may not require ~~that~~
8 the health maintenance organization be federally qualified if the health maintenance
9 organization has a certificate of authority issued by the North Dakota insurance commissioner.
10 The contract or contracts must be included in the uniform group insurance program.

11 **SECTION 3. AMENDMENT.** Section 54-52.1-04.2 of the North Dakota Century Code is
12 amended and reenacted as follows:

13 **54-52.1-04.2. Self-insurance health plan.**

- 14 1. This section applies to a self-insurance health plan for:
- 15 a. Health insurance and prescription drug benefits coverage;
 - 16 b. Health insurance benefits coverage, excluding all or part of prescription drug
 - 17 benefits coverage; or
 - 18 c. All or part of prescription drug benefits coverage.
- 19 2. Except for prescription drug coverage under subdivision c of subsection 1, a
20 self-insurance health plan established by the board under this section must be
21 provided under an administrative services only (ASO) contract or a third-party
22 administrator (TPA) contract under the uniform group insurance program. The board
23 may not establish a self-insurance health plan unless the ~~board~~employee benefits
24 programs committee determines the self-insurance health plan best serves the
25 interests of the state and the state's eligible employees. ~~Except for prescription drug~~
26 ~~coverage under subdivision c of subsection 1, if the board~~If the employee benefits
27 programs committee determines it is in the best interest of the plan, individual
28 stop-loss coverage insured by a carrier authorized to do business in this state may be
29 made part of a self-insurance health plan.

30 **SECTION 4. AMENDMENT.** Section 54-52.1-04.7 of the North Dakota Century Code is
31 amended and reenacted as follows:

1 **54-52.1-04.7. Uniform group insurance program - Vision and dental plans.**

2 The board may establish a dental plan, a vision plan, or both, for eligible employees. The
3 board shall receive bids for the plan or plans pursuant to section 54-52.1-04. The
4 ~~board~~employee benefits programs committee may reject any or all bids and provide a plan of
5 self-insurance. Premiums for this coverage must be paid by the eligible employee. Any refund,
6 rebate, dividend, experience rating allowance, discount, or other reduction of premium must be
7 credited as provided by section 54-52.1-06.

8 **SECTION 5. AMENDMENT.** Section 54-52.1-04.8 of the North Dakota Century Code is
9 amended and reenacted as follows:

10 **54-52.1-04.8. Uniform group insurance program - Long-term care plan.**

11 The board may establish a long-term care plan for eligible employees. The board shall
12 receive bids for the plan under section 54-52.1-04. The ~~board~~employee benefits programs
13 committee may reject any or all bids and provide a plan of self-insurance. Premiums for this
14 plan must be paid by the eligible employee. Any refund, rebate, dividend, experience rating
15 allowance, discount, or other reduction of premium must be credited as provided by section
16 54-52.1-06.

17 **SECTION 6. AMENDMENT.** Section 54-52.1-05 of the North Dakota Century Code is
18 amended and reenacted as follows:

19 **54-52.1-05. Provisions of contract - Term of contract - Renewal of contract.**

- 20 1. Each uniform group insurance contract entered by the board must be approved by the
21 employee benefits programs committee, must be consistent with the ~~provisions of this~~
22 chapter, must be signed for the state of North Dakota by the chairman of the board,
23 and must include the following:
- 24 a. As many optional coverages as deemed feasible and advantageous by the
25 board.
- 26 b. A detailed statement of benefits offered, including maximum limitations and
27 exclusions, and such other provisions as the board may deem necessary or
28 desirable.
- 29 2. The initial term or the renewal term of a uniform group insurance contract through a
30 contract for insurance, health maintenance organization, or self-insurance health plan

for hospital benefits coverage, medical benefits coverage, or prescription drug benefits coverage may not exceed two years.

a. The board may renew a contract subject to this subsection without soliciting a bid under section 54-52.1-04 if the board ~~determines~~recommends and the employee benefits programs committee approves the renewal in the same manner as provided for approving a contract under section 54-52.1-04. In making a recommendation or determination, the board and employee benefits programs committee shall determine whether the carrier's performance under the existing contract meets the ~~board's~~ expectations of the board and the employee benefits programs committee, the proposed premium renewal amount does not exceed the ~~board's~~ expectations of the board and the employee benefits programs committee, and renewal best serves the interests of the state and the state's eligible employees.

b. In making a recommendation or determination under this subsection, the board or employee benefits programs committee, respectively, shall:

(1) Use the services of a consultant to ~~concurrently and independently~~ prepare concurrently and independently a renewal estimate the board and the employee benefits programs committee shall consider in determining the reasonableness of the proposed premium renewal amount. The board may not enter a contract for consultant services under this subsection unless the employee benefits programs committee has approved the selection of the consultant.

(2) Review the carrier's performance measures, including payment accuracy, claim processing time, member service center metrics, wellness or other special program participation levels, and any other measures the board ~~determines~~and employee benefits programs committee determine relevant to making the determination and shall consider these measures in determining the ~~board's~~ satisfaction with the carrier's performance.

(3) Consider any additional information the board ~~determines~~and the employee benefits programs committee determine relevant to making the determination.

- 1 c. The board may recommend and the employee benefits programs committee may
2 determine the carrier's performance under the existing contract does not meet
3 the board's expectations, the proposed premium renewal amount exceeds the
4 board's expectations, or renewal does not best serve the interests of the state or
5 the state's eligible employees, and the board therefore may recommend or the
6 employee benefits programs committee may decide to solicit a bid under section
7 54-52.1-04.

8 **SECTION 7. APPLICATION.** This Act applies to contracts entered or renewed on or after
9 the effective date of this Act.

10 **SECTION 8. EMERGENCY.** This Act is declared to be an emergency measure.

21.0170.01000

Sixty-seventh
Legislative Assembly
of North Dakota

BILL NO.

Introduced by

Employee Benefits Programs Committee

1 A BILL for an Act to amend and reenact section 54-52.1-04.2 of the North Dakota Century
2 Code, relating to public employee uniform group insurance for health benefits; to provide for
3 application; and to declare an emergency.

4 **BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:**

5 **SECTION 1. AMENDMENT.** Section 54-52.1-04.2 of the North Dakota Century Code is
6 amended and reenacted as follows:

7 **54-52.1-04.2. Self-insurance health plan.**

8 1. This section applies to a self-insurance health plan for:

- 9 a. Health insurance and prescription drug benefits coverage;
10 b. Health insurance benefits coverage, excluding all or part of prescription drug
11 benefits coverage; or
12 c. All or part of prescription drug benefits coverage.

13 2. Except for prescription drug coverage under subdivision c of subsection 1, a
14 self-insurance health plan established by the board under this section must be
15 provided under an administrative services only (ASO) contract or a third-party
16 administrator (TPA) contract under the uniform group insurance program. The board
17 may not establish a self-insurance health plan unless the board determines the self-
18 insurance health plan best serves the interests of the state and the state's eligible
19 employees. ~~Except for prescription drug coverage under subdivision c of subsection 1,~~
20 ~~if~~ if the board determines it is in the best interest of the plan, individual stop-loss
21 coverage insured by a carrier authorized to do business in this state may be made part
22 of a self-insurance health plan.

23 **SECTION 2. APPLICATION.** This Act applies to self-insurance health plans effective on or
24 after the effective date of this Act.

1 **SECTION 3. EMERGENCY.** This Act is declared to be an emergency measure.

21.0183.01000

Sixty-seventh
Legislative Assembly
of North Dakota

BILL NO.

Introduced by

Senator Mathern

1 A BILL for an Act to create and enact section 26.1-36-09.16 of the North Dakota Century Code,
2 relating to accident and health insurance coverage of diabetes drugs and supplies; to amend
3 and reenact section 26.1-36.6-03 of the North Dakota Century Code, relating to public
4 employees self-insurance health plans; to provide for application; to provide an effective date;
5 and to declare an emergency.

6 **BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:**

7 **SECTION 1.** Section 26.1-36-09.16 of the North Dakota Century Code is created and
8 enacted as follows:

9 **26.1-36-09.16. Insulin drug and supply cost-sharing limitations and formulary**
10 **limitations.**

11 1. As used in this section:

12 a. "Insulin drug" means a prescription drug that contains insulin and is used to treat
13 a form of diabetes mellitus. The term does not include an insulin pump, an
14 electronic insulin-administering smart pen, or a continuous glucose monitor, or
15 supplies needed specifically for the use of such electronic devices. The term
16 includes insulin in the following categories:

17 (1) Rapid-acting insulin;

18 (2) Short-acting insulin;

19 (3) Intermediate-acting insulin;

20 (4) Long-acting insulin;

21 (5) Premixed insulin product;

22 (6) Premixed insulin/GLP-1 RA product; and

23 (7) Concentrated human regular insulin.

b. "Medical supplies for insulin dosing and administration" means supplies needed for proper insulin dosing, as well as supplies needed to detect or address medical emergencies in an individual using insulin to manage diabetes mellitus. The term does not include an insulin pump, an electronic insulin-administering smart pen, or a continuous glucose monitor, or supplies needed specifically for the use of such electronic devices. The term includes:

(1) Blood glucose meters;

(2) Blood glucose test strips;

(3) Lancing devices and lancets;

(4) Ketone testing supplies, such as urine strips, blood ketone meters, and blood ketone strips;

(5) Glucagon, injectable or nasal forms;

(6) Insulin pen needles; and

(7) Insulin syringes.

c. "Pharmacy or distributor" means a pharmacy or medical supply company, or other medication or medical supply distributor filling a covered individual's prescriptions.

d. "Policy" means an accident and health insurance policy, contract, or evidence of coverage on a group, individual, blanket, franchise, or association basis.

2. An insurer may not deliver, issue, execute, or renew a policy that provides coverage for an insulin drug or medical supplies for insulin dosing and administration unless the policy complies with this section.

3. The policy must provide cost-sharing for a thirty-day supply of:

a. Prescribed insulin drugs which may not exceed twenty-five dollars per pharmacy or distributor, regardless of the quantity or type of insulin drug used to fill the covered individual's prescription needs.

b. Prescribed medical supplies for insulin dosing and administration, the total of which may not exceed twenty-five dollars per pharmacy or distributor, regardless of the quantity or manufacturer of supplies used to fill the covered individual's prescription needs.

- 1 4. A policy may not allow a pharmacy benefits manager or the pharmacy or distributor to
2 charge, require the pharmacy or distributor to collect, or require a covered individual to
3 make, a cost-sharing payment for a covered insulin drug or medical supplies for insulin
4 dosing and administration in an amount that exceeds the amount of the cost-sharing
5 payment for the prescribed insulin drugs or prescribed medical supplies for insulin
6 dosing and administration under subsection 3.
- 7 5. A policy may not allow for the use of a formulary to determine coverage of an insulin
8 drug or medical supplies for insulin dosing and administration.
- 9 6. Subsection 3 does not require a policy to implement cost-sharing and does not
10 prevent the implementation of cost-sharing in an amount less than the amount
11 specified under subsection 3. Subsection 3 does not limit cost-sharing on an insulin
12 pump, an electronic insulin-administering smart pen, or a continuous glucose monitor.
13 This section does not limit whether a policy classifies an insulin pump, an electronic
14 insulin-administering smart pen, or a continuous glucose monitor as a drug or as a
15 medical device or supply.

16 **SECTION 2. AMENDMENT.** Section 26.1-36.6-03 of the North Dakota Century Code is
17 amended and reenacted as follows:

18 **26.1-36.6-03. Self-insurance health plans - Requirements.**

- 19 1. The following policy provisions apply to a self-insurance health plan or to the
20 administrative services only or third-party administrator, and are subject to the
21 jurisdiction of the commissioner: 26.1-36-03, 26.1-36-03.1, 26.1-36-05, 26.1-36-10,
22 26.1-36-12, 26.1-36-12.4, 26.1-36-12.6, 26.1-36-13, 26.1-36-14, 26.1-36-17,
23 26.1-36-18, 26.1-36-19, 26.1-36-23, 26.1-36-29, 26.1-36-37.1, 26.1-36-38, 26.1-36-39,
24 26.1-36-41, 26.1-36-44, and 26.1-36-46.
- 25 2. The following health benefit provisions applicable to a group accident and health
26 insurance policy under chapter 26.1-36 apply to a self-insurance health plan and are
27 subject to the jurisdiction of the commissioner: 26.1-36-06, 26.1-36-06.1, 26.1-36-07,
28 26.1-36-08, 26.1-36-08.1, 26.1-36-09, 26.1-36-09.1, 26.1-36-09.2, 26.1-36-09.3,
29 26.1-36-09.5, 26.1-36-09.6, 26.1-36-09.7, 26.1-36-09.8, 26.1-36-09.9, 26.1-36-09.10,
30 26.1-36-09.11, 26.1-36-09.12, 26.1-36-09.13, 26.1-36-09.14, 26.1-36-09.15,

1 26.1-36-09.16, 26.1-36-11, 26.1-36-12.2, 26.1-36-20, 26.1-36-21, 26.1-36-22,
2 26.1-36-23.1, and 26.1-36-43.

3 **SECTION 3. APPLICATION.** This Act applies to a policy delivered, issued, executed, or
4 renewed after June 30, 2021.

5 **SECTION 4. EFFECTIVE DATE.** This Act becomes effective July 1, 2021.

6 **SECTION 5. EMERGENCY.** This Act is declared to be an emergency measure.