Friday, November 17, 2023, 8:30 a.m.
WSI Board Room (In-Person)
1600 E Century Ave, Bismarck, ND
Click here to join the meeting

AGENDA

- I. CALL TO ORDER AND ACCEPTANCE OF AGENDA (Board Action)
 - A. Pledge of Allegiance
 - B. Executive Summary
- II. ACCEPTANCE OF MINUTES (October 27, 2023) (Board Action)
- III. INVESTMENTS (90 minutes)
 - A. Quarterly Performance Review (9/30) (Board Action) Callan
 - B. Pathway to Strategy (*Information*) Mr. Anderson
 - C. Benchmark Memo (Board Action) Ms. Eileen Neill, Verus Consulting

(Break)

IV. GOVERNANCE (75 min)

- A. Strategic Communication Plan (Board Action) Ms. Mudder
- B. Governance & Policy Review Committee Update (Information) Dr. Lech, Ms. Murtha
- C. Investment Committee Update (Information) Treasurer Beadle, Mr. Anderson
- V. Quarterly Monitoring Reports (60 minutes) (Board Action)
 - A. Quarterly Audit Activities Report Ms. Seiler
 - B. Quarterly Budget/Expense Report Mr. Skor
 - C. Quarterly TFFR Ends Report Mr. Roberts
 - D. Executive Limitations/Staff Relations Ms. Murtha
 - 1. Awards
 - 2. Employee Engagement Survey

VI. OTHER

Next Meetings:

Securities Litigation Comm – December 5, 2023, at 10:00 a.m. Investment Committee – December 8, 2023, at 9:00 a.m. New Board Member Onboarding – December 15, 2023, at 9:00 a.m.

VII. ADJOURNMENT

EXECUTIVE SUMMARY

SIB Regular Meeting November 17, 2023 – 8:30 a.m. CT

- I. Agenda: The November Board Meeting will be held at the WSI Conference room to accommodate in person attendance; however, a link will also be provided so that Board members and other attendees may join via video conference. The board member video link is included in the email with the Board materials.
 - Attendees are invited to join the Board Chair in the Pledge of Allegiance.
- **II. Minutes (Board Action):** The October 27, 2023, Board meeting minutes are included for review and approval.
- III. A. Quarterly Performance Review (Board Action): Representatives from Callan will review the quarterly investment performance of funds under management.
 - **B. Pathway to Strategy (Information):** Mr. Anderson will review with the board the next steps to roll out the internal investment management initiative this biennium.
 - **C. Benchmark Memo (Board Action):** A representative from Verus will present Benchmark recommendations for board approval.
- **IV. A. Strategic Communication Plan (Board Action):** Ms. Mudder will present a strategic communication plan for board approval.
 - **B.** Governance & Policy Review Committee (Information): The Committee Chair and Ms. Murtha will provide the Board with an update on recent committee activities.
 - **C. Investment Committee (Information):** The Committee Chair and Mr. Anderson will provide the Board an update on recent committee activities.
- V. A-D. Reports (Board Action): Staff will provide monitoring reports for quarterly audit, budget and expense, TFFR ends, and executive limitations/ staff relations.

Adjournment.

NORTH DAKOTA STATE INVESTMENT BOARD MINUTES OF THE

OCTOBER 26, 2023, BOARD MEETING (IN-PERSON)

Tammy Miller, Lt. Governor, Chair **MEMBERS PRESENT:**

Dr. Rob Lech, TFFR Board, Vice Chair

Thomas Beadle, State Treasurer, Parliamentarian

Rep. Glenn Bosch, LBSFAB

Joseph Heringer, Commissioner of Unv. & School Lands

Pete Jahner, Investment Professional

Sen. Jerry Klein, LBSFAB Cody Mickelson, TFFR Board Adam Miller, PERS Board

Dr. Prodosh Simlai, Investment Professional

Susan Sisk, Director of OMB Art Thompson, Director of WSI

STAFF PRESENT: Scott Anderson, CIO

Eric Chin, Deputy CIO

Derek Dukart, Investment Officer

Jennifer Ferderer, Fiscal/Investment Admin. Deneen Gathman. Retirement Accountant

Rachel Kmetz, Accounting Mgr. Missy Kopp, Exec. Assistant

Robbie Morey, Investment Accountant George Moss, Sr. Investment Officer

Sarah Mudder, Communications/Outreach Dir.

Jan Murtha, Exec. Dir.

Matt Posch, Sr. Investment Officer

Emmalee Riegler, Procurement/Records Coor.

Chad Roberts, DED/CRO

Mike Schmitcke, Sr. Investment Accountant

Sara Seiler, Internal Audit Supvr.

Ryan Skor, CFO/COO

Dottie Thorsen, Internal Auditor Nitin Vaidya, Chief Risk Officer Tami Volkert, Compliance Spec.

Susan Walcker, Sr. Financial Accountant

Jason Yu. Risk Officer

Lance Ziettlow, Sr. Investment Officer

GUESTS: Dean DePountis, Attorney General's Office

Candace Johnson, Securities Commission

Brian Kroshus, Tax Department

Scott Miller, PERS

Adam Montgomery, Securities Commission

Max Swango, Invesco Members of the Public

CALL TO ORDER:

Lt. Gov. Miller, Chair, called the State Investment Board (SIB) regular meeting to order at 1:00 p.m. on Thursday, October 26, 2023. The meeting was held in the Workforce Safety and Insurance Board Room, 1600 E Century Ave., Bismarck, ND.

The following members were present representing a quorum: Treasurer Beadle, Rep. Bosch, Commissioner Heringer, Mr. Jahner, Sen. Klein, Dr. Lech, Mr. Mickelson, Lt. Gov. Miller, Mr. Miller, Dr. Simlai, Ms. Sisk, and Mr. Thompson.

ACCEPTANCE OF AGENDA:

The Board considered the agenda for the October 26, 2023, meeting.

IT WAS MOVED BY TREASURER BEADLE AND SECONDED BY DR. LECH AND CARRIED BY A VOICE VOTE TO APPROVE THE AGENDA AS DISTRIBUTED.

AYES: COMMISSIONER HERINGER, TREASURER BEADLE, MR. MILLER, MS. SISK, MR. THOMPSON, DR. SIMLAI, MR. MICKELSON, SEN. KLEIN, DR. LECH, MR. JAHNER, AND LT. GOV. MILLER NAYS: NONE MOTION CARRIED

Ms. Murtha introduced new staff members Deneen Gathman and Robbie Morey.

MINUTES:

The Board considered the minutes of the September 22, 2023, SIB meeting.

IT WAS MOVED BY DR. LECH AND SECONDED BY TREASURER BEADLE AND CARRIED BY A VOICE VOTE TO APPROVE THE SEPTEMBER 22, 2023, MINUTES AS DISTRIBUTED.

AYES: MR. MICKELSON, COMMISSIONER HERINGER, MR. THOMPSON, TREASURER BEADLE, DR. LECH, MR. JAHNER, MS. SISK, SEN. KLEIN, REP. BOSCH, MR. MILLER, DR. SIMLAI, AND LT. GOV. MILLER NAYS: NONE

MOTION CARRIED

EDUCATION:

Real Estate Market:

Mr. Max Swango, Invesco, provided board education on the underlying fundamentals and trends impacting the Real Estate market. Mr. Swango discussed the risk/return spectrum for real estate investment strategies. The SIB is invested in the Core Equity and Value/Add/Opportunistic strategies. The investment objective and portfolio construction of the SIB's real estate investments with Invesco were reviewed. Information was provided on real estate sector fundamentals, secular trends, risks, and opportunities. Board discussion followed.

INVESTMENTS:

Quarterly & Annual Performance Review:

Mr. Anderson provided a performance review for the quarter and fiscal year ended June 30, 2023, and the period ended October 16, 2023. An overview was provided of the trends in the markets this year, including inflations rates. Mr. Anderson reviewed performance for PERS, TFFR, Legacy Fund, and WSI. An update was provided on strategy activities that have been completed and those that are still in progress or upcoming. An updated strategy activities list will be provided at the next meeting. Board discussion followed.

IT WAS MOVED BY TREASURER BEADLE AND SECONDED BY MS. SISK AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE QUARTERLY PERFORMANCE REVIEW.

AYES: REP. BOSCH, SEN. KLEIN, COMMISSIONER HERINGER, DR. SIMLAI, MS. SISK, MR. MICKELSON, MR. MILLER, TREASURER BEADLE, MR. JAHNER, MR. THOMPSON, DR. LECH, AND LT. GOV. MILLER NAYS: NONE MOTION CARRIED

The Board recessed at 2:46 p.m. and reconvened at 3:02 p.m.

GOVERNANCE:

PERS Board Decision & Special Legislative Session:

Ms. Murtha provided a summary of the recent ND Supreme Court opinion in the PERS Board lawsuit vs. the Legislative Assembly. The opinion declared the OMB appropriation bill, HB 2015, void due to the single subject rule in the state constitution. Because that bill was voided, a special legislative session began on October 23, 2023. There was no legislation that directly affection RIO or its programs. A bill was passed that changed the PERS Board composition. There will be a new PERS representative on the SIB once new appointments are made. Mr. Miller will continue to serve on both boards. Board discussion followed.

Governance & Policy Review (GPR) Committee Update:

Dr. Lech provided an update from the October 12, 2023, GPR meeting. The Committee continued their review of the SIB Governance Manual and received an update on the Supreme Court opinion on the PERS Board lawsuit and the need for a special legislative session.

Investment Committee (IC) Update:

Treasurer Beadle provided an update from the October 23, 2023, IC meeting. The IC received a public markets funds management update including an update on the Equity 2.0 project. Mr. Anderson presented a preliminary internal direct investment strategy and the IC heard about private markets portfolio harmonization in executive session. The IC approved the RFP process for a valuation consultant for the private markets harmonization project. Board discussion followed.

Annual SIB Customer Satisfaction Survey Results:

Ms. Seiler shared the results of the Annual SIB Customer Satisfaction Survey. The survey was sent to 19 clients, and we received eight responses. The response rate has been falling. Overall, the respondents were satisfied with the services provided by the SIB. There were comments about the timeliness of performance reports. Ms. Murtha commented that staff take these surveys seriously and are discouraged by some of the comments because quality service is a priority. Going forward, the Communications and Outreach Director will administer this survey. Staff hope to increase the response rate. Board discussion followed.

IT WAS MOVED BY TREASURER BEADLE AND CARRIED BY MR. MICKELSON AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE ANNUAL SIB CUSTOMER SATISFACTION SURVEY RESULTS.

AYES: TREASURER BEADLE, MR. JAHNER, REP. BOSCH, MR. THOMPSON, COMMISSIONER HERINGER, DR. SIMLAI, DR. LECH, MR. MILLER, MS. SISK, SEN. KLEIN, MR. MICKELSON, AND LT. GOV. MILLER NAYS: NONE

MOTION CARRIED

QUARTERLY MONITORING REPORTS:

Annual Budget/Expense Report:

Mr. Skor provided an overview of the annual budget and expense report. The report includes a summary report of continuing appropriation authority for the TFFR and SIB programs. The budget appropriation status is shown with and without the Pioneer Project. Also included are a summary of the pension administration system modernization project and a schedule of consulting and investment expenses. Board discussion followed.

Investment Ends:

Mr. Posch provided the Investment Ends Report for the quarter ended September 30, 2023. Highlights of the quarter include finalizing private equity investments, onboarding of new technology, and the start of the annual compliance process. A new private markets data solution provider was onboarded during the quarter. The public markets team continued to work on the Equity 2.0 project and the transition from Axiom to DFA was finalized. A quarterly monitoring report was included for the Board to review.

Executive Limitations/Staff Relations:

Ms. Murtha provided a staffing update. The Retirement Membership Specialist temporary position is open, and interviews are underway. Internal Audit (IA) staff are working on a plan to implement the recommendations from the consultant to develop the maturity of the IA program. An updated Audit Committee Charter will be discussed at the November meeting. The compensation consultant contract negotiation is still ongoing so the final presentation for that project has been moved back. An all-staff training was held this week. The report included a list of presentations and travel activities of RIO staff. Board discussion followed.

IT WAS MOVED BY TREASURER BEADLE AND SECONDED BY COMMISSIONER HERINGER AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE ANNUAL BUDGET/EXPENSE REPORT, QUARTERLY INVESTMENT ENDS, AND EXECUTIVE LIMITATIONS/STAFF RELATIONS REPORTS.

AYES: MR. MILLER, SEN. KLEIN, MR. MICKELSON, DR. LECH, MR. JAHNER, MS. SISK, MR. THOMPSON, DR. SIMLAI, COMMISSIONER HERINGER, TREASURER BEADLE, REP. BOSCH, AND LT. GOV. MILLER NAYS: NONE MOTION CARRIED

ADJOURNMENT:

With no further business to come before the SIB, Lt. Gov. Miller adjourned the meeting at 3:37 p.m.

Prepared by: Missy Kopp, Assistant to the Board

Callan



November 17, 2023

North Dakota State Investment Board

Performance Evaluation as of September 30, 2023

Alex Browning
Senior Vice President

Craig Chaikin, CFA
Senior Vice President

Callan

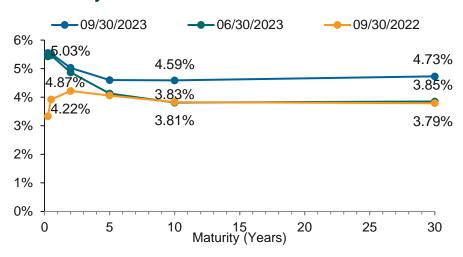
Market Update

U.S. Economy

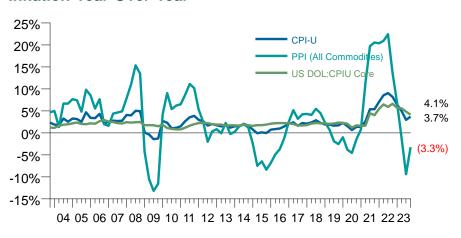
Third Quarter 2023

- ► U.S. economy grew 4.9% in Q3 driven by consumer spending on both services and goods.
- ► Headline inflation increased to 3.7% year-over-year at the end of September, up from 3.0% at the end of June.
- ► Following a 25 bp rate hike in July, the Federal Reserve held rates steady at their September meeting (target range 5.25-5.50%).
- Unemployment increased slightly to 3.8% in the third quarter. There was a gain in the labor force of more than 700,000 workers.

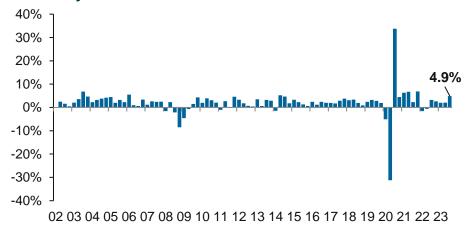
U.S. Treasury Yield Curves



Inflation Year-Over-Year



Quarterly Real GDP Growth

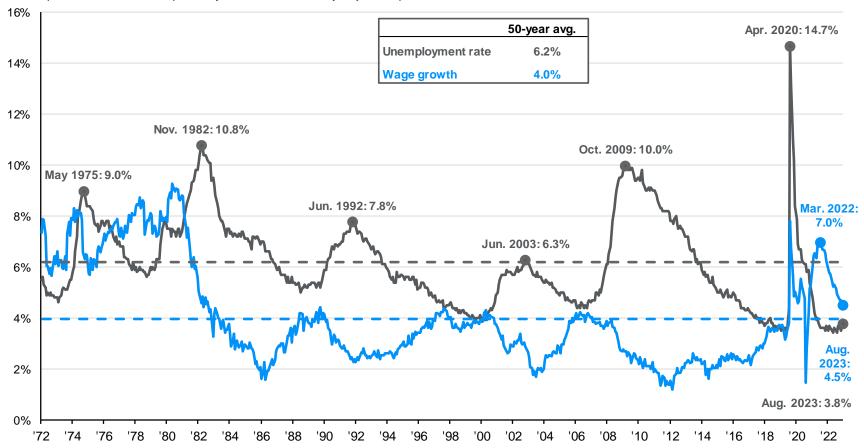




Unemployment and Wages

Civilian unemployment rate and year-over-year wage growth

Private production and non-supervisory workers, seasonally adjusted, percent



▶ Wage growth remains above long-term averages, but slow from its recent peak.



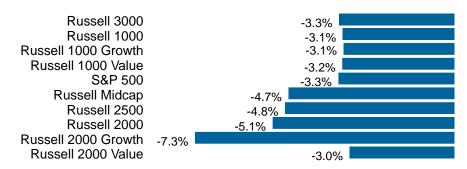
Source: JP Morgan Asset Management (3Q23 Guide to the Markets), BLS, FactSet. As of September 30, 2023

U.S. Equity Performance: 3Q23

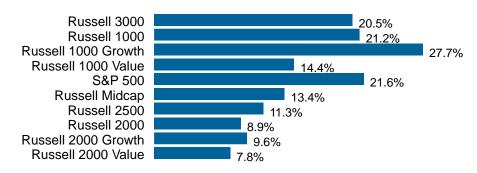
The U.S. equity markets cooled in 3Q after an exuberant start to the year

- ► All U.S. equity indices posted losses during 3Q23. August and September were marked by investor fears about the potential of a "higher for longer" interest rate environment, leading to broader market declines.
- While all indices were negative, the Russell 2000 Value Index led the pack during the quarter, a reversal of the previous two quarters when the Russell 1000 Growth Index led.
- Only two of the 11 S&P 500 Index sectors generated positive 3Q returns; Energy was up 12% and Communication Services was up 3%. However, on a YTD basis, six sectors generated positive returns, with Information Technology, Communication Services and Consumer Discretionary substantially leading the group.

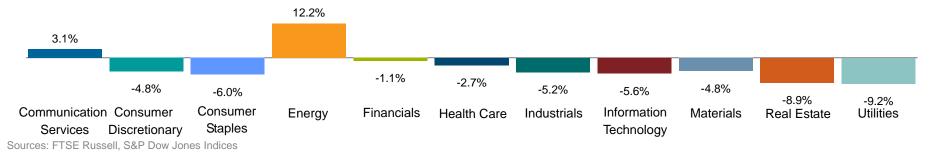
U.S. Equity: Quarter Ended 9/30/23



U.S. Equity: One-Year Returns Ended 9/30/23



Industry Sector Quarterly Performance (S&P 500) as of 9/30/23



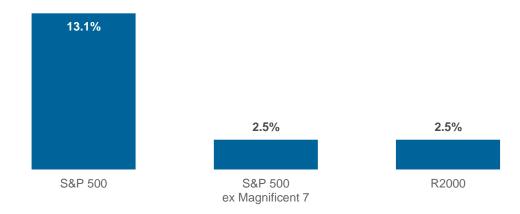


U.S. Equity Overview

Active management remains challenging for U.S. large cap

- Index concentration remains notable within the S&P 500 as the top 10 issuers comprised 30% of the benchmark.
 Concentration within the Russell 1000 Growth Index is even greater; top 10 issuers comprised 51% of the index and the top 5 issuers comprised 40% of the index.
- YTD, 97% of the S&P 500's 13.1% return has been driven by the 10 largest weighted stocks.
- The "Magnificent 7" has buoyed large cap index returns and has outperformed the broader market significantly. YTD, the Magnificent 7 alone is up 83%.
- No exposures or significant underweights to top benchmark names have been disadvantageous to absolute and relative performance for managers' portfolios.
- Mega cap or bust: As performance has heavily favored mega caps, managers who seek to be opportunistic across the market capitalization and take a benchmark-agnostic approach in general may have struggled against this market backdrop.

YTD Returns of S&P 500 Boosted by 'Magnificent 7' Performance



Concentration of Returns Within the S&P 500 Rests with Mega Caps Annual S&P 500 Contribution of 10 largest weights during positive performance years

Year	Top 10 as % of Total	S&P 500 % Performance	Year	Top 10 as % of Total	S&P 500 % Performance
YTD 2023	96.5%	11.7%	2003	23.6%	26.4%
2007	78.7%	3.5%	1995	22.3%	34.1%
2020	58.9%	16.3%	2014	22.2%	11.4%
1999	54.5%	19.5%	2004	21.1%	9.0%
2021	45.0%	26.9%	2005	20.5%	3.0%
1998	36.8%	26.7%	2010	19.6%	12.8%
1996	33.9%	20.3%	2012	19.2%	13.4%
2017	33.3%	19.4%	1997	19.1%	31.0%
2019	32.8%	28.9%	2013	17.6%	29.6%
1991	28.6%	26.3%	2009	15.5%	23.5%
2006	27.6%	13.6%	1992	14.9%	4.5%
2016	26.6%	9.5%	1993	12.2%	7.1%

Sources: Furey Research Partners, Westfield Capital, Factset; Strategas Research Partners *Magnificent 7 are Apple, Microsoft, Amazon, Nvidia, Alphabet, Tesla, and Meta



Global/Global ex-U.S. Equity Performance: 3Q23

Global growth concerns

▶ Most global markets were in the red for 3Q23.

Narrow market

- Global markets retreated in 3Q23 amid fears of a global recession driven by higher interest rates and slowing growth in regions outside the U.S.
- Emerging markets outperformed developed markets, buoyed by good results from India, whose economy grew nearly 8% on the heels of supportive infrastructure spending.
- Japan was strong again in local currency as it continues to benefit from post-COVID exuberance, easy monetary policy, and a new economic stimulus plan.

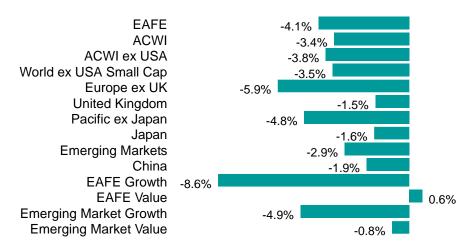
Growth vs. value

With energy as a strong outperformer on the heels of oil price increases, value outpaced growth by a wide margin in global ex-U.S. markets.

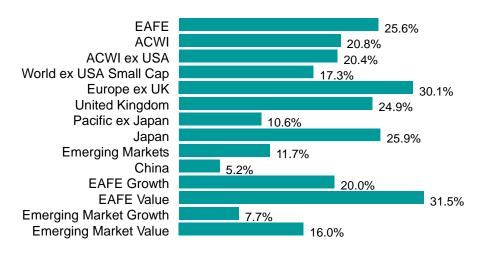
U.S. dollar vs. other currencies

► The stronger U.S. dollar, which gained 3% over the quarter, was a notable headwind for the period.

Global Equity Returns: Quarter Ended 9/30/23



Global Equity Returns: One Year Ended 9/30/23







U.S. Fixed Income Performance: 3Q23

Yields continue to march upward as spreads remain range-bound

U.S. fixed income fell for a second straight quarter

 The Bloomberg Aggregate Index is on track for a third calendar year of negative returns, with the rise in yields continuing to detract from performance.

U.S. Treasury 10-year yield climbed roughly 80 bps

- 10-year ended the quarter at 4.59%, its highest level since 2007.
- The yield curve's inversion narrowed as long-term rates rose more than short-term rates.

TIPS outperformed nominal Treasuries

- 10-year break-even spreads widened over 10 bps.

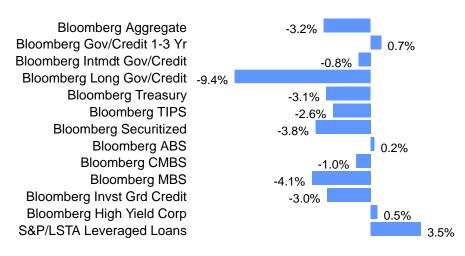
Fed policy rate held to 5.25%-5.50%

 The updated dot plot suggested an additional rate hike may be in the cards before year-end.

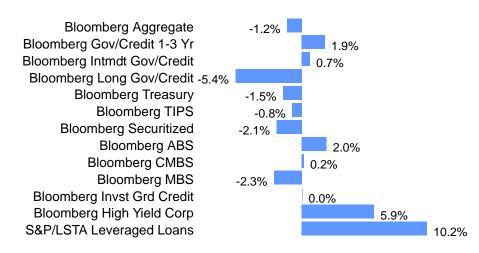
Lower-quality credit continued to outperform

- High yield spreads were flat, but the sector was buoyed by strong performance in July. Additionally, a combination of higher yields and no duration continued to drive bank loan outperformance.
- IG corporate spreads tightened slightly and remained close to their 10-year average.
- Agency RMBS underperformed other securitized sectors as interest rate volatility weighed on the sector.

U.S. Fixed Income Returns: Quarter Ended 9/30/23



U.S. Fixed Income Returns: YTD Ending 9/30/23



Sources: Bloomberg, S&P Dow Jones Indices



U.S. Private Real Estate Performance: 3Q23

Income returns positive but appreciation returns negative once again

Valuations reflect higher interest rates

- Income returns were positive across sectors and regions.
- All property sectors and regions experienced negative appreciation.
- Valuations are reflective of higher interest rates, which have put upward pressure on capitalization rate and discount rate assumptions.
- Return dispersion by manager within the ODCE Index was due to the composition of underlying portfolios.

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
NCREIF ODCE	-2.1%	-12.9%	6.2%	4.7%	7.2%
Income	0.7%	2.0%	2.8%	3.0%	3.3%
Appreciation	-2.8%	-15.2%	3.3%	1.7%	3.8%
NCREIF Property Index	-1.4%	-8.4%	6.0%	5.3%	7.4%
Income	1.1%	4.1%	4.1%	4.2%	4.6%
Appreciation	-2.4%	-12.1%	1.9%	1.0%	2.7%

Returns are geometrically linked

NCREIF Property Index Quarterly Returns by Region and Property Type



Source: NCREIF, ODCE return is net



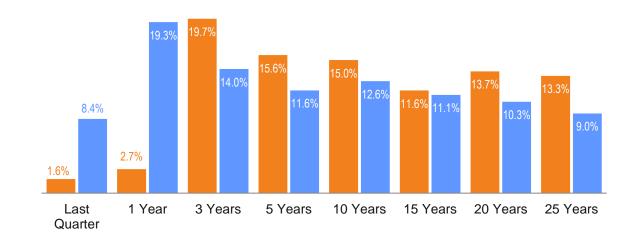
Private Equity Performance

Volatility enhances differences in short-term private and public equity returns

- The strong recovery in public equity indices led by the "Magnificent 7" technology stocks left private equity returns in its wake (along with most other public stocks).
- During short-term periods in both up and down markets, the appraisal smoothing effect will tend to make private equity returns lag in magnitude of movement.
- Over longer periods (3-year horizon-plus) broad private equity has consistently outperformed public equity.
- After peaking at exuberant valuations in late 2021, venture capital continues to decline, with 2Q being modestly negative.
 Buyouts and other corporate finance strategies continued their rally for a third consecutive quarter.
- Portfolio companies are typically valued internally by the manager on a quarterly basis. Valuations are based on the operating metrics of the company, recent comparable transactions, and public market comps.

Pooled Horizon Net IRRs as of 06/30/23

■ Private Equity ■ Russell 3000 PME



Net IRRs by Strategy as of 06/30/23

	Last					
Strategy	Quarter	1 Year	3 Years	5 Years	10 Years	20 Years
Venture Capital	-0.7%	-9.3%	20.2%	18.9%	18.2%	12.6%
Growth Equity	1.3%	-0.3%	17.2%	15.6%	15.0%	14.1%
Buyouts	2.6%	8.1%	21.1%	15.7%	15.3%	14.8%
Mezzanine	3.2%	10.7%	15.0%	11.1%	11.2%	11.3%
Credit Opportunities	1.4%	7.4%	11.9%	7.1%	7.6%	9.4%
Control-Oriented Distressed	1.2%	4.9%	22.4%	13.6%	12.0%	11.7%
Total Private Equity	1.6%	2.7%	19.7%	15.6%	15.0%	13.7%

Source: Refinitiv/Cambridge



Private Equity Overview

Fundraising remains steady

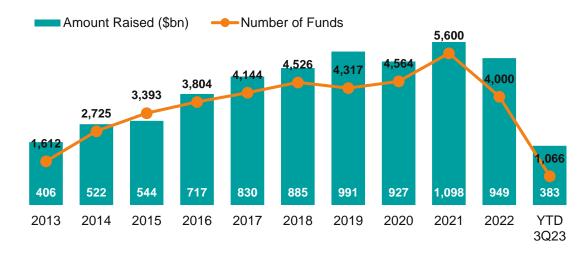
Fundraising varies by strategy type

- 2023 will be another down year for fundraising after a frenzied peak in the last two years.
- 3Q23 is showing some signs of improvement as dollar volumes closely match 2Q, rather than dropping further. However, the number of GPs funded continues to fall.
- LPs are being selective as portfolio consolidations continue. The current period offers LPs a good opportunity to add previously hard-to-access top-tier GPs.
- GPs are reticent to come to market given commitment scarcity, so only the highly confident and those that must be are in the market.

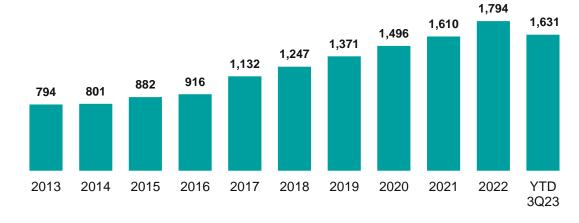
Dry powder is declining

- Level of dry powder influenced by two factors: fundraising and capital deployment.
- Uncalled commitments are declining from surfeit levels peaking in 2022, which may ultimately provide a healthier environment for new investments.

Funds Holding Final Closes by Year



Dry Powder (\$billions)



Source: PitchBook



Private Equity Key Themes

Capital deployment continues to decline

- The bar charts represent all venture and buyout investments combined.
- New investments are on pace to reach the \$1.1 to \$1.2 billion levels that were normal in the 2015 to 2020 period.

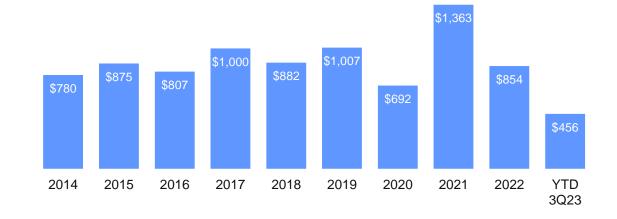
Exits slow but are an area of focus

- The bar charts represent all venture and buyout exits combined (both private sales and IPOs).
- Private equity exits appear to be tracking to just over \$600 billion, which is modest compared to the last 10 years but still demonstrates that M&A markets are functioning.
- GPs keenly feel LPs' desire for liquidity and are focused on positioning companies for exits in the new capital markets regime.
- LP capital calls may persist in outpacing distributions in the near term.

Private Equity Deal Activity (\$bn)



Private Equity Exits (\$bn)



Source: PitchBook



Callan

NDSIB Total Performance & Asset Allocation Summary

Conclusions and Observations

- 1. Are the Plans' assets invested as outlined in the Plan's Investment Policy Statement?
 - Each of the Trust's asset allocation were within policy ranges as of September 30, 2023.
- 2. Are the Plans' cash flows being managed consistent with the Plan's strategic asset allocation policy?
 - Each Trust's cash flows were managed to rebalance towards strategic targets as of September 30, 2023.
- 3. Are the Plans' investment results meeting strategic objectives?
 - All Total Fund returns have each exceeded their respective static benchmarks on a net-of-fee basis for the trailing five-year period ended September 30, 2023.
- 4. Are the fees paid to managers reasonable given the competitive landscape and given the value delivered?
 - In most cases, Total Fund net-of-fee results exceed benchmark.
- 5. Are any corrective steps necessary to bring the Plan back into compliance with long-term objectives?
 - No action steps are recommended as the Plans are meeting objectives.

Corridor Benchmarking

1. What is corridor benchmarking?

- Adjusting a portfolio's benchmark weights to reflect the actual weights of private market and less liquid investments.
- Any increase or decrease from the strategic target weights to private/less liquid investments will be offset by an equal magnitude decrease/increase to the benchmark weight in public equity and/or fixed income.

2. Why would this be used?

- Performance attribution from asset allocation would more clearly reflect the Investment team's decisions.
- Staff does not have direct control of private/less liquid strategy cash flows, i.e. managers call and distribute capital as deals are executed.
- Therefore, the inability to rebalance generates an asset allocation effect that is outside of Staff and the Board's control.

3. How will weights be adjusted?

- Private equity will be rebalanced to public equity.
- Real assets, including real estate and infrastructure, will be rebalanced to 50% public fixed income and 50% public equity.

NDSIB Consolidated Gross Performance Summary

As of September 30, 2023

	Last Quarter	Last Year	Last 5 Years
Consolidated Pension Trust	-2.27%	9.49%	6.11%
Consolidated Pension Trust Target	-2.47%	9.59%	5.84%
Consolidated Pension Trust Corridor Target	-2.47%	8.79%	5.41%
Relative Performance vs. Target	0.20%	-0.10%	0.27%
Relative Performance vs. Corridor Target	0.20%	0.70%	0.70%
PERS Total Fund	-2.35%	9.77%	6.16%
NDSIB PERS Total Fund Target	-2.52%	9.92%	5.78%
NDSIB PERS Total Fund Corridor Target	-2.54%	9.08%	5.43%
Relative Performance vs. Target	0.17%	-0.15%	0.38%
Relative Performance vs. Corridor Target	0.19%	0.69%	0.73%
TFFR Total Fund	-2.16%	9.12%	6.08%
NDSIB TFFR Total Fund Target	-2.40%	9.23%	5.96%
NDSIB TFFR Total Fund Corridor Target	-2.37%	8.45%	5.41%
Relative Performance vs. Target	0.24%	-0.11%	0.12%
Relative Performance vs. Corridor Target	0.21%	0.67%	0.67%
WSI Total Fund	-2.66%	4.74%	2.73%
NDSIB WSI Total Fund Target	-2.95%	3.91%	2.25%
Relative Performance vs. Target	0.29%	0.83%	0.48%
Legacy - Total Fund	-2.65%	10.69%	4.66%
NDSIB Legacy - Total Fund Target	-2.83%	8.96%	3.98%
NDSIB Legacy - Total Fund Corridor Target	-0.03%	0.09%	0.04%
Relative Performance vs. Target	0.18%	1.73%	0.68%
Relative Performance vs. Corridor Target	-2.62%	10.60%	4.62%
Dudget Total Fund	4 450/	F 000/	4.0007
Budget - Total Fund	1.45%	5.66%	1.93%
NDSIB Budget - Total Fund Target	0.73%	2.78%	1.21%
Relative Performance vs. Target	0.72%	2.88%	0.72%



Knowledge. Experience. Integrity.

PERS Returns

Static vs. Corridor Benchmark Net of Fee Value-Added

Static Benchmark Net Value-Added

Returns for 1 Year Ended 09/30/2023	Returns for 3 Years Ended 09/30/2023	Retu
Neturis for a real Effacta ostsoredes	INCLUITIS TOLO LOGIS ETTACA OSISOLEUZO	IVCLU

Returns for 5 Years Ended 09/30/2023

Return Type	Return (%)
Gross	9.77%
Net of fees	9.55%
Target	9.92%
Net added	-0.37%

Return Type	Return (%)
Gross	6.27%
Net of fees	6.02%
Target	5.88%
Net added	0.14%

Return Type	Return (%)
Gross	6.16%
Net of fees	5.91%
Target	5.78%
Net added	0.13%

Corridor Benchmark Net Value-Added

Return Type	Return (%)
Gross	9.77%
Net of fees	9.55%
Target	9.08%
Net added	0.47%

Return Type	Return (%)
Gross	6.27%
Net of fees	6.02%
Target	5.52%
Net added	0.50%

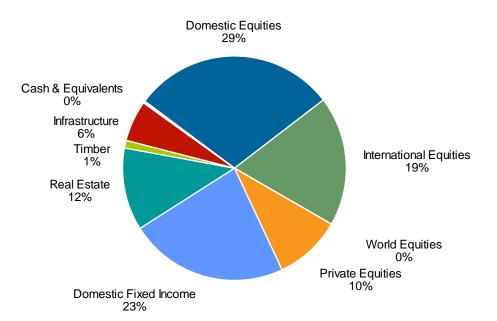
Return Type	Return (%)
Gross	6.16%
Net of fees	5.91%
Target	5.43%
Net added	0.48%

Returns for 5 Years Ended 09/30/2023

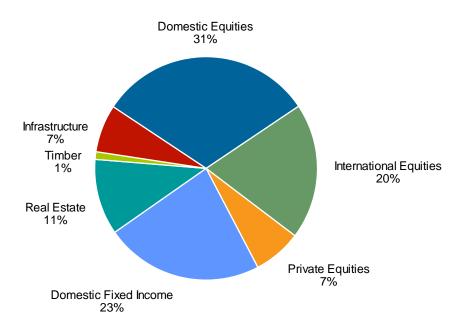
PERS Allocation

As of September 30, 2023

Actual Asset Allocation



Target Asset Allocation



	\$000s	Weight		Percent	\$000s
Asset Class	Actual	Actual	Target	Difference	Difference
Domestic Equities	1,156,791	29.4%	31.3%	(1.9%)	(74,562)
International Equities	736,346	18.7%	19.7%	(1.0%)	(37,358)
World Equities •	25	0.0%	0.0%	0.0%	25
Private Equities	382,480	9.7%	7.0%	2.7%	107,276
Domestic Fixed Income	904,973	23.0%	23.0%	0.0%	732
Real Estate	466,823	11.9%	11.0%	0.9%	34,360
Timber	42,805	1.1%	1.1%	0.0%	5
Infrastructure	230,797	5.9%	6.9%	(1.0%)	(40,922)
Cash & Equivalents	10,443	0.3%	0.0%	0.3%	10,443
Total	3,931,482	100.0%	100.0%		

TFFR Returns

Static vs. Corridor Benchmark Net of Fee Value-Added

Static Benchmark Net Value-Added

Returns	for 1	Year	Ended	09/30/2023
IXCLUIIIS	101 1	ı Cai	LIIGCG	UJIJUIZUZU

Returns for 3 Years Ended 09/30/2023

Returns for 5 Years Ended 09/30/2023

Return Type	Return (%)
Gross	9.12%
Net of fees	8.92%
Target	9.23%
Net added	-0.31%

Return Type	Return (%)
Gross	6.15%
Net of fees	5.91%
Target	6.21%
Net added	-0.30%

Return Type	Return (%)
Gross	6.08%
Net of fees	5.84%
Target	5.96%
Net added	-0.12%

Corridor Benchmark Net Value-Added

Returns for 1 Year Ended 09/30/2023

Returns for 3 Years Ended 09/30/2023

Returns for 5 Years Ended 09/30/2023

Return Type	Return (%)
Gross	9.12%
Net of fees	8.92%
Target	8.45%
Net added	0.47%

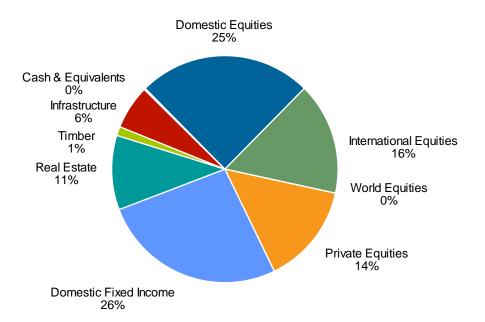
Return Type	Return (%)
Gross	6.15%
Net of fees	5.91%
Target	5.54%
Net added	0.37%

Return Type	Return (%)
Gross	6.08%
Net of fees	5.84%
Target	5.41%
Net added	0.43%

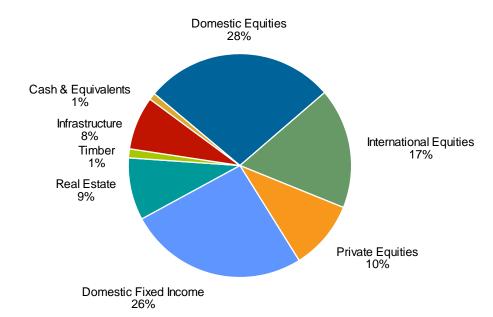
TFFR Allocation

As of September 30, 2023

Actual Asset Allocation



Target Asset Allocation



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equities	752,182	24.9%	27.6%	(2.7%)	(82,019)
International Equities	482,795	16.0%	17.4%	(1.4%)	(41,363)
World Equities '	226	0.0%	0.0%	`0.0%′	226
Private Equities	433,885	14.4%	10.0%	4.4%	132,027
Domestic Fixed Income	797,363	26.4%	26.0%	0.4%	12,533
Real Estate	320,220	10.6%	9.0%	1.6%	48,548
Timber	38,209	1.3%	1.3%	0.0%	48
Infrastructure	189,069	6.3%	7.7%	(1.5%)	(44,443)
Cash & Equivalents	4,628	0.2%	1.0%	(0.8%)	(25,558)
Total	3,018,576	100.0%	100.0%		

WSI Fund Returns

Static vs. Corridor Benchmark Net of Fee Value-Added

Static Benchmark Net Value-Added

D	ofurne	for 1	Voor	Endod	09/30/2023	
К	eturns	101 1	rear	Enaea	U9/3U/ZUZ3	

Returns for 3 Years Ended 09/30/2023

Returns for 5 Years Ended 09/30/2023

Return Type	Return (%)
Gross	4.74%
Net of fees	4.56%
Target	3.91%
Net added	0.65%

Return Type	Return (%)
Gross	-0.36%
Net of fees	-0.53%
Target	-1.05%
Net added	0.52%

Return Type	Return (%)
Gross	2.73%
Net of fees	2.55%
Target	2.25%
Net added	0.30%

Corridor Benchmark Net Value-Added

Returns for 1 Year Ended 09/30/2023

Returns	for 3	Years	Ended	09/30/20	23

Return Type	Return (%)
Gross	4.74%
Net of fees	4.56%
Target	3.62%
Net added	0.94%

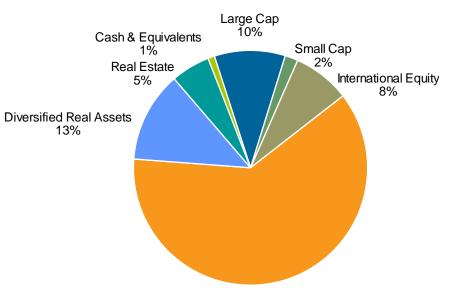
Return Type	Return (%)
Gross	-0.36%
Net of fees	-0.53%
Target	-1.10%
Net added	0.57%

Return Type	Return (%)
Gross	2.73%
Net of fees	2.55%
Target	2.22%
Net added	0.33%

WSI Allocation

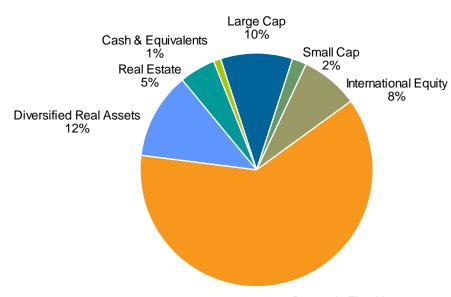
As of September 30, 2023

Actual Asset Allocation



Domestic Fixed Income 62%

Target Asset Allocation



Domestic Fixed Income 62%

Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Large Cap	196,299	9.8%	10.0%	(0.2%)	(3,464)
Small Cap	34,993	1.8%	2.0%	(0.2%)	(4,959)
International Equity	157,368	7.9%	8.0%	(0.1%)	(2,442)
Domestic Fixed Income	1,232,547	61.7%	62.0%	(0.3%)	(5,981)
Diversified Real Assets	249,718	12.5%	12.0%	0.5%	10,003
Real Estate	108,128	5.4%	5.0%	0.4%	8,247
Cash & Equivalents	18,573	0.9%	1.0%	(0.1%)	(1,403)
Total	1,997,626	100.0%	100.0%		

Legacy Fund Returns

Static vs. Corridor Benchmark Net of Fee Value-Added

Static Benchmark Net Value-Added

Raturne	for 1	Voar	Ended	09/30/2023
Verniis	101 1	Itai	Lilueu	USISUIZUZS

Returns for 3 Years Ended 09/30/2023

Returns for 5 Years Ended 09/30/2023

Return Type	Return (%)
Gross	10.69%
Net of fees	10.51%
Target	8.96%
Net added	1.55%

Return Type	Return (%)
Gross	3.64%
Net of fees	3.43%
Target	2.56%
Net added	0.87%

Return Type	Return (%)
Gross	4.66%
Net of fees	4.45%
Target	3.98%
Net added	0.47%

Corridor Benchmark Net Value-Added

Returns for 1 Year Ended 09/30/2023

Return Type	Return (%)
Gross	10.69%
Net of fees	10.51%
Target	9.12%
Net added	1.39%

Returns for 3 Years Ended 09/30/2023

Return Type	Return (%)
Gross	3.64%
Net of fees	3.43%
Target	2.63%
Net added	0.80%

Returns for 5 Years Ended 09/30/2023

Return Type	Return (%)
Gross	4.66%
Net of fees	4.45%
Target	4.00%
Net added	0.45%

Legacy Fund Allocation

As of September 30, 2023

Actual Asset Allocation Target Asset Allocation Large Cap Large Cap 24% **Ž**4% Residual Holdings Real Estate Small Cap Small Cap Real Estate 5% 5% Cash & Equivalents **Diversified Real Assets Diversified Real Assets** 10% 10% International Equity International Equity 20% Transition Account Private Equity Private Equity Domestic Fixed Income Domestic Fixed Income 1% 34% \$000s Weight \$000s Percent **Asset Class** Difference Actual Actual **Target** Difference 24.3% 23.8% 0.5% Large Cap 2.175.624 47.992 4.3% 4.2% 0.1% Small Cap 384.316 8.851 International Equity 19.7% 19.0% 0.7% 1.760.277 61.747 Transition Account 0.0% 0.0% 43 0.0% 43 Private Equity 106.685 1.2% 3.0% (1.8%)(161,503)3,076,895 35.0% Domestic Fixed Income 34.4% (0.6%)(51,976) **Diversified Real Assets** 862,853 9.7% 10.0% (0.3%) (31,110) Cash & Equivalents 120,768 1.4% 0.0% 1.4% 120,768 Real Estate 450,014 5.0% 5.0% 0.0% 3,033

0.0%

100.0%

0.0%

100.0%

Total

2.156

8,939,632

Residual Holdings

2,156

0.0%

Consolidated Pension Trusts Quarterly Attribution Analysis

- Public Employees Retirement System
- Teachers' Fund for Retirement

PERS Attribution – Strategic and Corridor Target

As of September 30, 2023

One Year Relative Attribution Effects

	Effective Actual	Effective Target	Actual	Target	Manager	Asset	Total Relative
Asset Class	Weight	Weight	Return	Return	Effect	Allocation	Return
Domestic Equities	29%	31%	20.89%	19.36%	0.40%	(0.49%)	(0.09%)
International Equities	19%	20%	22.11%	20.19%	0.27%	(0.13%)	0.14%
World Equities	0%	0%	(27.47%)	(27.47%)	0.00%	0.13%	0.13%
Private Equities	9%	7%	5.66%	5.66%	0.00%	(0.11%)	(0.11%)
Domestic Fixed Income	e 22%	23%	3.21%	3.52%	(0.06%)	0.04%	(0.02%)
Real Estate	13%	11%	(11.98%)	(8.39%)	(0.51%)	(0.64%)	(1.15%)
Timber	1%	1%	`(0.72%)	10.03%	(0.14%)	(0.01%)	(0.15%)
Infrastructure	6%	7%	10.01%	(5.36%)	0.93%	0.16%	1.09%
Cash & Equivalents	0%	0%	4.56%	4.56%	0.00%	(0.02%)	_(0.02%)
Total			9.77% =	9.96% +	0.88% +	(1.07%)	(0.18%)

One Year Corridor Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	29%	28%	20.89%	19.36%	0.40%	(0.14%)	0.26%
International Equities	19%	20%	22.11%	20.19%	0.27%	(0.15%)	0.11%
World Equities	0%	0%	(27.47%)	(27.47%)	0.00%	0.13%	0.13%
Private Equities	9%	9%	5.66%	5.66%	0.00%	0.00%	0.00%
Domestic Fixed Income		22%	3.21%	3.52%	(0.06%)	(0.05%)	(0.11%)
Real Estate	13%	13%	(11.98%)	(8.39%)	(0.51%)	0.00%	(0.51%)
Timber	1%	1%	(0.72%)	10.03%	(0.14%)	0.00%	(0.14%)
Infrastructure	6%	6%	10.01%	(5.36%)	0.93%	0.00%	0.93%
Cash & Equivalents	0%	0%	4.56%	4.56%	0.00%	(0.02%)	(0.02%)

Total $9.77\% = 9.12\% + 0.88\% + (0.22\%)$	0.66%
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PERS Attribution – Strategic and Corridor Target

As of September 30, 2023

Three Year Annualized Relative Attribution Effects

	Effective Actual	Effective Target	Actual	Target	Manager	Asset	Total Relative
Asset Class	Weight	Weight	Return	Return	Effect	Allocation	Return
Domestic Equities	26%	26%	9.62%	9.47%	0.08%	(0.15%)	(0.07%)
International Equities	17%	18%	3.35%	3.98%	(0.09%)	0.07%	(0.03%)
World Equities •	8%	7%	(7.62%)	(9.11%)	0.22%	0.05%	0.26%
Private Equities	7%	7%	21.51%	21.51%	0.00%	(0.14%)	(0.14%)
Domestic Fixed Income	e 23%	23%	(1.58%)	(3.10%)	0.39%	(0.05%)	0.34%
Real Estate	12%	11%	6.28%	6.04%	0.02%	(0.11%)	(0.10%)
Timber	1%	1%	3.78%	9.15%	(0.07%)	(0.01%)	(0.08%)
Infrastructure	5%	7%	10.97%	6.26%	0.27%	(0.06%)	0.21%
Cash & Equivalents	0%	0%	1.78%	1.78%	0.00%	(0.02%)	(0.02%)
Total			6.27% =	5.90%	+ 0.81% +	(0.43%)	0.38%

Three Year Corridor Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	26%	26%	9.62%	9.47%	0.08%	(0.18%)	(0.11%)
International Equities	17%	18%	3.35%	3.98%	(0.09%)	`0.06%	(0.04%)
World Equities .	8%	7%	(7.62%)	(9.11%)	0.22%	0.06%	0.27%
Private Equities	7%	7%	21.51%	21.51%	0.00%	0.00%	0.00%
Domestic Fixed Income		23%	(1.58%)	(3.10%)	0.39%	0.02%	0.41%
Real Estate	12%	12%	6.28%	6.04%	0.02%	0.00%	0.02%
Timber	1%	1%	3.78%	9.15%	(0.07%)	0.00%	(0.07%)
Infrastructure	5%	5%	10.97%	6.26%	0.27%	0.00%	0.27%
Cash & Equivalents	0%	0%	1.78%	1.78%	0.00%	(0.02%)	(0.02%)

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PERS Attribution – Strategic and Corridor Target

As of September 30, 2023

Five Year Annualized Relative Attribution Effects

Assat Class	Effective Actual	Effective Target	Actual	Target	Manager	Asset	Total Relative
Asset Class	Weight	Weight	Return	Return	Effect	Allocation	Return
Domestic Equities	25%	24%	9.51%	8.23%	0.29%	(0.10%)	0.19%
International Equities	16%	16%	3.84%	2.67%	0.19%	0.02%	0.21%
World Equities '	11%	11%	(4.59%)	(3.33%)	(0.24%)	(0.01%)	(0.25%)
Private Equities	6%	7%	14.71%	14.71%	0.00%	(0.13%)	(0.13%)
Domestic Fixed Income	e 23%	23%	2.31%	1.03%	0.32%	(0.02%)	0.30%
Real Estate	12%	11%	5.45%	5.26%	0.02%	(0.11%)	(0.09%)
Timber	2%	2%	4.34%	5.87%	(0.01%)	(0.02%)	(0.03%)
Infrastructure	5%	6%	8.42%	4.58%	0.22%	(0.04%)	0.18%
Cash & Equivalents	0%	0%	1.73%	1.73%	0.00%	(0.01%)	_(0.01%)
Total			6.16% =	5.79% +	- 0.79% +	(0.42%)	0.38%

Five Year Corridor Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	25%	25%	9.51%	8.23%	0.29%	(0.07%)	0.22%
International Equities	16%	16%	3.84%	2.67%	0.19%	0.02%	0.20%
World Equities .	11%	11%	(4.59%)	(3.33%)	(0.24%)	(0.00%)	(0.24%)
Private Equities	6%	6%	14.71%	14.71%	`0.00%	`0.00%	0.00%
Domestic Fixed Income	23%	23%	2.31%	1.03%	0.32%	(0.00%)	0.32%
Real Estate	12%	12%	5.45%	5.26%	0.02%	`0.00%	0.02%
Timber	2%	2%	4.34%	5.87%	(0.01%)	0.00%	(0.01%)
Infrastructure	5%	5%	8.42%	4.58%	0.22%	0.00%	0.22%
Cash & Equivalents	0%	0%	1.73%	1.73%	0.00%	(0.00%)	(0.00%)
Total			6.16% =	5.44% -	+ 0.79% +	(0.07%)	0.73%

TFFR Attribution – Strategic and Corridor Target

As of September 30, 2023

One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative <u>Return</u>
Domestic Equities	25%	27%	20.92%	19.36%	0.35%	(0.46%)	(0.10%)
International Equities	16%	18%	22.34%	20.19%	0.25%	(0.21%)	0.05%
World Equities	0%	0%	(27.57%)	(27.57%)	0.00%	0.11%	0.11%
Private Equities	13%	10%	5.67%	5.67%	0.00%	(0.09%)	(0.09%)
Domestic Fixed Income	25%	26%	3.17%	3.55%	(0.09%)	(0.00%)	(0.10%)
Real Estate	11%	9%	(11.98%)	(8.39%)	(0.45%)	(0.58%)	(1.03%)
Timber	1%	1%	(0.72%)	10.03%	(0.16%)	(0.01%)	(0.17%)
Infrastructure	6%	8%	10.01%	(5.36%)	0.95%	0.28%	1.24%
Cash & Equivalents	1%	1%	4.66%	4.47%	0.00%	(0.03%)	(0.03%)
Other DM Regional	0%	0%	-	-	0.00%	0.02%	0.02%

Total	9.12% =	9.23% +	0.86% +	(0.97%)	(0.10%)
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One Year Corridor Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	25%	24%	20.92%	19.36%	0.35%	(0.03%)	0.33%
International Equities	16%	18%	22.34%	20.19%	0.25%	(0.22%)	0.03%
World Equities	0%	0%	(27.57%)	(27.57%)	0.00%	0.11%	0.11%
Private Equities	13%	13%	` 5.67%´	` 5.67% [′]	0.00%	0.00%	0.00%
Domestic Fixed Income	25%	26%	3.17%	3.55%	(0.09%)	(0.05%)	(0.14%)
Real Estate	11%	11%	(11.98%)	(8.39%)	(0.45%)	0.00%	(0.45%)
Timber	1%	1%	(0.72%)	10.03%	(0.16%)	0.00%	(0.16%)
Infrastructure	6%	6%	10.01%	(5.36%)	0.95%	0.00%	0.95%
Cash & Equivalents	1%	1%	4.66%	4.47%	0.00%	(0.02%)	(0.02%)
Other DM Regional	0%	0%	18.60%	18.60%	0.00%	0.02%	0.02%

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TFFR Attribution – Strategic and Corridor Target

As of September 30, 2023

Three Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	23%	9.62%	9.44%	0.05%	(0.16%)	(0.11%)
International Equities	15%	15%	3.45%	3.97%	(0.07%)	0.01%	(0.06%)
World Equities	8%	7%	(7.65%)	(9.15%)	0.22%	0.06%	0.28%
Private Equities	10%	10%	21.52%	21.52%	0.00%	(0.45%)	(0.45%)
Domestic Fixed Income	26%	26%	(2.01%)	(3.09%)	0.32%	(0.07%)	0.25%
Real Estate	10%	9%	6.28%	6.04%	0.02%	(0.08%)	(0.06%)
Timber	2%	2%	3.78%	9.15%	(0.08%)	(0.01%)	(0.09%)
Infrastructure	5%	7%	10.96%	6.26%	0.28%	(0.07%)	0.21%
Cash & Equivalents	1%	1%	1.81%	1.70%	0.00%	(0.03%)	(0.03%)
Other DM Regional	0%	0%	-	-	0.00%	0.01%	0.01%

Total	6.15% =	6.21% +	0.74% +	(0.80%)	(0.05%)
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Three Year Corridor Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	24%	9.62%	9.44%	0.05%	(0.19%)	(0.14%)
International Equities	15%	15%	3.45%	3.97%	(0.07%)	0.01%	(0.06%)
World Equities	8%	7%	(7.65%)	(9.15%)	0.22%	0.07%	0.29%
Private Equities	10%	10%	21.52%	21.52%	0.00%	0.00%	0.00%
Domestic Fixed Income	26%	26%	(2.01%)	(3.09%)	0.32%	0.00%	0.33%
Real Estate	10%	10%	6.28%	6.04%	0.02%	0.00%	0.02%
Timber	2%	2%	3.78%	9.15%	(0.08%)	0.00%	(0.08%)
Infrastructure	5%	5%	10.96%	6.26%	0.28%	0.00%	0.28%
Cash & Equivalents	1%	1%	1.81%	1.70%	0.00%	(0.03%)	(0.03%)
Other DM Regional	0%	0%	-	-	0.00%	0.01%	0.01%

Total $6.15\% = 5.54\% + 0.74\% + (0.13\%)$	0.62%
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TFFR Attribution – Strategic and Corridor Target

As of September 30, 2023

Five Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative <u>Return</u>
Domestic Equities	23%	22%	9.55%	8.25%	0.28%	(0.12%)	0.15%
International Equities	15%	15%	3.79%	2.57%	0.20%	(0.00%)	0.20%
World Equities	11%	11%	(4.61%)	(3.36%)	(0.23%)	(0.00%)	(0.23%)
Private Equities	8%	8%	14.71%	14.71%	0.00%	(0.31%)	(0.31%)
Domestic Fixed Income	25%	25%	2.02%	1.04%	0.27%	(0.04%)	0.24%
Real Estate	10%	9%	5.45%	5.26%	0.02%	(0.09%)	(0.07%)
Timber	2%	2%	4.34%	5.87%	(0.01%)	(0.02%)	(0.03%)
Infrastructure	5%	7%	8.42%	4.58%	0.22%	(0.05%)	0.17%
Cash & Equivalents	1%	1%	1.75%	1.72%	0.00%	(0.01%)	(0.01%)
Other DM Regional	0%	0%	-	-	0.00%	0.00%	0.00%

Total	6.08% =	5.96% +	0.75% +	(0.63%)	0.12%
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Five Year Corridor Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	23%	9.55%	8.25%	0.28%	(0.08%)	0.19%
International Equities	15%	15%	3.79%	2.57%	0.20%	0.00%	0.20%
World Equities	11%	11%	(4.61%)	(3.36%)	(0.23%)	0.01%	(0.22%)
Private Equities	8%	8%	14.71%	14.71%	0.00%	0.00%	0.00%
Domestic Fixed Income	25%	25%	2.02%	1.04%	0.27%	(0.01%)	0.26%
Real Estate	10%	10%	5.45%	5.26%	0.02%	0.00%	0.02%
Timber	2%	2%	4.34%	5.87%	(0.01%)	0.00%	(0.01%)
Infrastructure	5%	5%	8.42%	4.58%	0.22%	0.00%	0.22%
Cash & Equivalents	1%	1%	1.75%	1.72%	0.00%	(0.01%)	(0.01%)
Other DM Regional	0%	0%	-	-	0.00%	0.00%	0.00%

Total	6.08% =	5.41% +	0.75% +	(0.09%)	0.67%
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Insurance Trust Quarterly Attribution Analysis

- Workforce Safety and Insurance Legacy Fund
- Budget Stabilization Fund

Consolidated Insurance Trust Attribution – Strategic and Corridor Target

As of September 30, 2023

One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	7%	8%	22.65%	21.19%	0.09%	(0.13%)	(0.04%)
Smăll Cap	1%	2%	13.84%	8.93%	0.06%	(0.04%)	0.02%
International Equity	6%	6%	23.27%	20.19%	0.13%	(0.13%)	(0.00%)
Domestic Fixed Income	44%	44%	2.04%	0.64%	0.63%	(0.02%)	0.62%
Diversified Real Assets	9%	8%	4.50%	0.64%	0.34%	(0.01%)	0.32%
Real Estate	4%	3%	(12.87%)	(8.39%)	(0.19%)	(0.12%)	(0.31%)
Short Term Fixed Incor	ne 27%	27%	5.65%	2.77%	0.78%	(0.05%)	0.74%
Cash & Equivalents	1%	1%	4.49%	4.47%	0.00%	0.01%	0.01%
Total			5.28% =	3.92% +	1.86% +	(0.50%)	1.36%

One Year Corridor Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	7%	7%	22.65%	21.19%	0.09%	(0.05%)	0.04%
Small Cap	1%	2%	13.84%	8.93%	0.06%	(0.03%)	0.03%
International Equity	6%	6%	23.27%	20.19%	0.13%	(0.14%)	(0.01%)
Domestic Fixed Incom	e 44%	44%	2.04%	0.64%	0.63%	(0.03%)	0.61%
Diversified Real Asset	s 9%	9%	4.50%	0.64%	0.34%	0.00%	0.34%
Real Estate	4%	4%	(12.87%)	(8.39%)	(0.19%)	0.00%	(0.19%)
Short Term Fixed Inco	me 27%	27%	5.65%	2.77%	0.78%	(0.05%)	0.73%
Cash & Equivalents	1%	1%	4.49%	4.47%	0.00%	0.01%	0.01%
Total			5.28% =	3.73% -	+ 1.86% +	(0.31%)	1.55%



Consolidated Insurance Trust Attribution – Strategic and Corridor Target

As of September 30, 2023

Three Year Annualized Relative Attribution Effects

ffective Actual Neight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
8%	8%	11.22%	9.53%	0.12%	0.00%	0.13%
2%	2%	7.91%	7.16%	(0.03%)	0.04%	0.01%
6%	6%	4.65%	4.98%	(0.03%)	(0.04%)	(0.06%)
45%	45%	(4.25%)	(5.21%)	0.44%	(0.01%)	0.43%
9%	9%	1.02%	0.89%	0.00%	0.01%	0.01%
4%	4%	6.34%	6.04%	0.02%	(0.03%)	(0.00%)
26%	26%	0.43%	(0.72%)	0.31%	(0.05%)	0.26%
1%	1%	1.70%	1.70%	0.00%	0.00%	0.00%
	Actual <u>Neight</u> 8% 2% 6% 45% 9% 4% 26%	Actual Veight Target Weight 8% 8% 2% 2% 6% 6% 45% 45% 9% 9% 4% 4% 26% 26%	Actual Veight Target Weight Actual Return 8% 8% 11.22% 2% 2% 7.91% 6% 6% 4.65% 45% 45% (4.25%) 9% 9% 1.02% 4% 4% 6.34% 26% 26% 0.43%	Actual Veight Target Weight Actual Return Target Return 8% 8% 11.22% 9.53% 2% 2% 7.91% 7.16% 6% 6% 4.65% 4.98% 45% 45% (4.25%) (5.21%) 9% 9% 1.02% 0.89% 4% 4% 6.34% 6.04% 26% 26% 0.43% (0.72%)	Actual Veight Target Return Actual Return Target Effect Manager Effect 8% 8% 11.22% 9.53% 0.12% 2% 2% 7.91% 7.16% (0.03%) 6% 6% 4.65% 4.98% (0.03%) 45% 45% (4.25%) (5.21%) 0.44% 9% 9% 1.02% 0.89% 0.00% 4% 4% 6.34% 6.04% 0.02% 26% 26% 0.43% (0.72%) 0.31%	Actual Veight Target Return Actual Return Target Effect Manager Allocation 8% 8% 11.22% 9.53% 0.12% 0.00% 2% 2% 7.91% 7.16% (0.03%) 0.04% 6% 6% 4.65% 4.98% (0.03%) (0.04%) 45% 45% (4.25%) (5.21%) 0.44% (0.01%) 9% 9% 1.02% 0.89% 0.00% 0.01% 4% 4% 6.34% 6.04% 0.02% (0.03%) 26% 26% 0.43% (0.72%) 0.31% (0.05%)

Total	0.01% = (0.76%) +	0.85% + (0.08%)	0.77%
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Three Year Corridor Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	8%	8%	11.22%	9.53%	0.12%	(0.01%)	0.12%
Smăll Caṗ	2%	2%	7.91%	7.16%	(0.03%)	0.04%	0.01%
International Equity	6%	6%	4.65%	4.98%	(0.03%)	(0.04%)	(0.06%)
Domestic Fixed Income	45%	45%	(4.25%)	(5.21%)	0.44%	(0.01%)	0.43%
Diversified Real Assets	9%	9%	1.02%	0.89%	0.00%	0.00%	0.00%
Real Estate	4%	4%	6.34%	6.04%	0.02%	0.00%	0.02%
Short Term Fixed Incor	ne 26%	26%	0.43%	(0.72%)	0.31%	(0.04%)	0.26%
Cash & Equivalents	1%	1%	1.70%	1.70%	0.00%	0.00%	0.00%

Total	0.01% = (0.78%) +	0.85% + (0.06%)	0.79%
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Consolidated Insurance Trust Attribution – Strategic and Corridor Target

As of September 30, 2023

Five Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	8%	9%	10.11%	9.63%	0.04%	(0.05%)	(0.01%)
Small Cap	2%	2%	2.20%	2.40%	(0.03%)	(0.00%)	(0.03%)
International Equity	6%	6%	3.43%	2.79%	`0.04%´	(0.04%)	(0.00%)
Domestic Fixed Income	47%	46%	0.85%	0.10%	0.33%	0.01%	0.34%
Diversified Real Assets	9%	9%	2.99%	2.91%	(0.00%)	0.01%	0.00%
Real Estate	4%	4%	5.22%	5.26%	0.02%	(0.01%)	0.01%
Short Term Fixed Incon	ne 22%	22%	1.93%	1.21%	0.17%	(0.04%)	0.14%
Cash & Equivalents	2%	2%	1.63%	1.72%	(0.00%)	(0.03%)	(0.03%)

Total	2.61% =	2.21% +	0.55% +	(0.15%)	0.40%
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Five Year Corridor Relative Attribution Effects

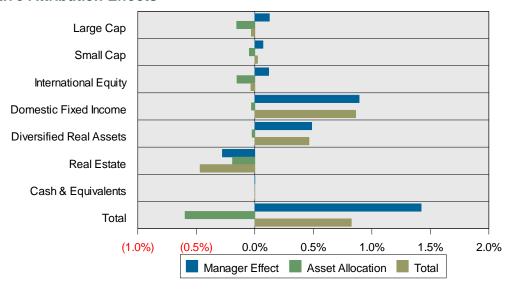
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	8%	8%	10.11%	9.63%	0.04%	(0.06%)	(0.03%)
Smăll Cap	2%	2%	2.20%	2.40%	(0.03%)	(0.01%)	(0.04%)
International Equity	6%	6%	3.43%	2.79%	0.04%	(0.04%)	(0.00%)
Domestic Fixed Income	47%	46%	0.85%	0.10%	0.33%	0.01%	0.34%
Diversified Real Assets	9%	9%	2.99%	2.91%	(0.00%)	0.00%	(0.00%)
Real Estate	4%	4%	5.22%	5.26%	0.02%	0.00%	0.02%
Short Term Fixed Incon	ne 22%	22%	1.93%	1.21%	0.17%	(0.03%)	0.14%
Cash & Equivalents	2%	2%	1.63%	1.72%	(0.00%)	(0.03%)	(0.03%)
		<u> </u>	<u> </u>	<u> </u>	•		,

Total	2.61% =	2.21% +	0.55% +	(0.15%)	0.40%
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WSI Performance and Attribution

As of September 30, 2023

One Year Relative Attribution Effects



Returns for 1 Year Ended 09/30/2023

Return Type	Return (%)
Gross	4.74%
Net of fees	4.56%
Target	3.91%
Net added	0.65%

One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	10%	10%	22.67%	21.19%	0.13%	(0.16%)	(0.03%)
Small Cap	2%	2%	13.87%	8.93%	0.07%	(0.05%)	0.02%
International Equity	8%	8%	22.25%	20.19%	0.12%	(0.15%)	(0.03%)
Domestic Fixed Income	e 61%	62%	2.07%	0.64%	0.89%	(0.03%)	`0.86%
Diversified Real Assets	s 12%	12%	4.51%	0.60%	0.49%	(0.02%)	0.46%
Real Estate	6%	5%	(12.87%)	(8.39%)	(0.28%)	(0.19%)	(0.47%)
Cash & Equivalents	1%	1%	4.48%	4.47%	0.00%	(0.00%)	`0.00%´

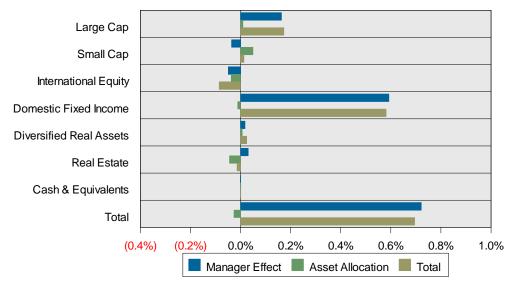
Total	4.74% =	3.91% +	1.42% +	(0.60%)	0.
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0.83%

WSI Performance and Attribution

As of September 30, 2023

Three Year Annualized Relative Attribution Effects



Returns for 3 Years Ended 09/30/2023

Return Type	Return (%)
Gross	-0.36%
Net of fees	-0.53%
Target	-1.05%
Net added	0.52%

Three Year Annualized Relative Attribution Effects

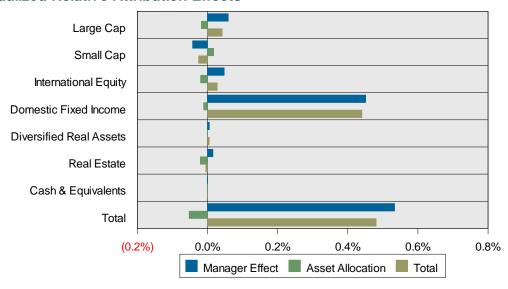
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	10%	11%	11.23%	9.53%	0.16%	0.01%	0.17%
Smăll Cap	2%	3%	7.92%	7.16%	(0.04%)	0.05%	0.01%
International Equity	8%	8%	4.39%	4.98%	(0.05%)	(0.04%)	(0.09%)
Domestic Fixed Income	e 61%	61%	(4.25%)	(5.21%)	0.59%	(0.01%)	0.58%
Diversified Real Assets	s 12%	12%	`1.06%´	`0.89%´	0.02%	0.01%	0.02%
Real Estate	5%	5%	6.34%	6.04%	0.03%	(0.04%)	(0.01%)
Cash & Equivalents	1%	1%	1.69%	1.70%	0.00%	`0.00%	`0.00%´

Total $(0.36\%) = (1.05\%) + 0.72\% + (0.03\%)$	0.70%
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WSI Performance and Attribution

As of September 30, 2023

Five Year Annualized Relative Attribution Effects



Returns for 5 Years Ended 09/30/2023

Return Type	Return (%)
Gross	2.73%
Net of fees	2.55%
Target	2.25%
Net added	0.30%

Five Year Annualized Relative Attribution Effects

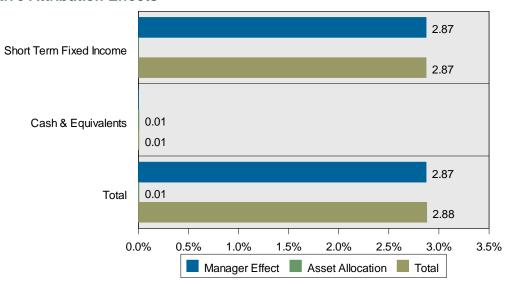
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	11%	11%	10.16%	9.63%	0.06%	(0.02%)	0.04%
Smăll Cap	3%	3%	2.12%	2.40%	(0.04%)	0.02%	(0.03%)
International Equity	8%	8%	3.31%	2.79%	0.05%	(0.02%)	0.03%
Domestic Fixed Income	e 61%	60%	0.89%	0.10%	0.45%	(0.01%)	0.44%
Diversified Real Assets	s 12%	12%	3.01%	2.91%	0.01%	(0.00%)	0.01%
Real Estate	5%	5%	5.22%	5.26%	0.02%	(0.02%)	(0.00%)
Cash & Equivalents	1%	1%	1.63%	1.72%	(0.00%)	(0.00%)	_(0.00%)_

Total	2.73% =	2.25% +	0.53% +	(0.05%)	0.48%
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Budget Stabilization Fund Performance and Attribution

As of September 30, 2023

One Year Relative Attribution Effects



Returns for 1 Year Ended 09/30/2023

Return Type	Return (%)
Gross	5.66%
Net of fees	5.55%
Target	2.78%
Net added	2.77%

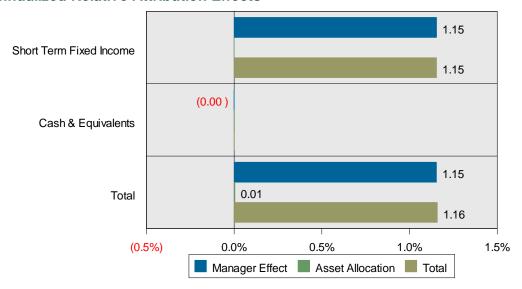
One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative <u>Return</u>
Short Term Fixed Inc		100%	5.66% 4.52%	2.77% 4.47%	2.87%	0.00%	2.87%
Cash & Equivalents	0%	0%	4.32%	4.47 %	0.00%	0.01%	0.01%
Total			5.66% =	2.78% +	2.87% +	0.01%	2.88%

Budget Stabilization Fund Performance and Attribution

As of September 30, 2023

Three Year Annualized Relative Attribution Effects



Returns for 3 Years Ended 09/30/2023

Return Type	Return (%)
Gross	0.46%
Net of fees	0.35%
Target	-0.70%
Net added	1.05%

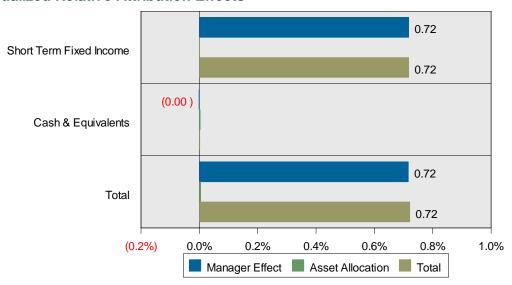
Three Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Short Term Fixed Inco Cash & Equivalents	ome 99% 1%	99% 1%	0.44% 1.71%	(<mark>0.72%)</mark> 1.70%	1.15% (0.00%)	0.00% 0.00%	1.15% 0.00%
Total			0.46% =	(0.70%) +	1.15% +	0.01%	1.16%

Budget Stabilization Fund Performance and Attribution

As of September 30, 2023

Five Year Annualized Relative Attribution Effects



Returns for 5 Years Ended 09/30/2023

Return Type	Return (%)
Gross	1.93%
Net of fees	1.82%
Target	1.21%
Net added	0.61%

Five Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Short Term Fixed Inco	ome 99% 1%	99% 1%	1.93% 1.64%	1.21% 1.72%	0.72% (0.00%)	0.00% 0.00%	0.72% 0.00%
Total	170	. 70	1.93% =	1.21% +	0.72% +	0.00%	0.72%

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Legacy Fund Quarterly Attribution Analysis

Legacy Fund Attribution – Strategic and Corridor Target

As of September 30, 2023

One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	25%	24%	22.52%	21.19%	0.30%	0.05%	0.35%
Small Cap	4%	4%	13.83%	8.93%	0.19%	(0.05%)	0.15%
International Equity	19%	4% 19%	21.80%	20.19%	0.26%	(0.03%)	0.23%
Private Equity .	1%	3%	3.69%	3.69%	0.00%	0.07%	0.07%
Domestic Fixed Income		35%	2.81%	0.64%	0.78%	0.05%	0.83%
Diversified Real Assets		10%	6.20%	(0.81%)	0.70%	0.01%	0.71%
Real Estate	5%	5%	(12.15%)	(8.39%)	(0.22%)	(0.27%)	(0.49%)
Cash & Equivalents	1%	0%	4.51%	`4.51%´	`0.00%′	(0.11%)	(0.11%)

Total 10.69% = 8.96% + 2.02% + (0.29)	%) 1.73%
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One Year Corridor Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	25%	26%	22.52%	21.19%	0.30%	(0.25%)	0.04%
Small Cap	4%	5%	13.83%	8.93%	0.19%	(0.03%)	0.17%
International Equity	19%	19%	21.80%	20.19%	0.26%	(0.03%)	0.23%
Private Equity	1%	1%	3.69%	3.69%	0.00%	0.00%	0.00%
Domestic Fixed Income	e 34%	35%	2.81%	0.64%	0.78%	(0.01%)	0.77%
Diversified Real Assets		10%	6.20%	(0.81%)	0.70%	`0.00%	0.70%
Real Estate	5%	5%	(12.15%)	(8.39%)	(0.21%)	0.00%	(0.21%)
Cash & Equivalents	1%	0%	4.51%	4.51%	0.00%	(0.13%)	(0.13%)

Total	10.69% = 9.1	1% +	2.02% +	(0.45%)	1.58%
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Legacy Fund Attribution – Strategic and Corridor Target

As of September 30, 2023

Three Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Small Cap International Equity	23% 7% 20%	23% 6% 20%	11.04% 7.56% 3.73%	9.53% 7.16% 4.98%	0.32% (0.08%) (0.24%)	0.00% 0.05% 0.01%	0.33% (0.02%) (0.22%) 0.02%
Private Equity Domestic Fixed Incom Diversified Real Asset Real Estate Cash & Equivalents		1% 35% 10% 5% 0%	6.16% (3.09%) 4.14% 6.65% 1.70%	6.16% (5.21%) 2.12% 6.04% 1.70%	0.00% 0.76% 0.18% 0.05% 0.00%	0.02% 0.03% 0.02% (<mark>0.06%)</mark> 0.00%	0.02% 0.79% 0.20% (0.01%) 0.00%
Total	1 70	J 70	3.64% =		+ 1.00% +	0.08%	1.08%

Three Year Corridor Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	23%	23%	11.04%	9.53%	0.32%	(0.11%)	0.21%
Small Cap	7%	7%	7.56%	7.16%	(0.08%)	0.07%	(0.02%)
International Equity	20%	20%	3.73%	4.98%	(0.24%)	0.02%	(0.22%)
Private Equity '	1%	0%	6.16%	6.16%	`0.00%	0.00%	`0.00%
Domestic Fixed Incom	e 34%	35%	(3.09%)	(5.21%)	0.76%	0.04%	0.81%
Diversified Real Asset	s 10%	10%	`4.14%´	`2.12%´	0.18%	0.00%	0.18%
Real Estate	5%	5%	6.65%	6.04%	0.05%	0.00%	0.05%
Cash & Equivalents	1%	0%	1.70%	1.70%	0.00%	0.00%	0.00%
Total			3.64% =	2.63%	+ 0.99% +	0.02%	1.01%

Legacy Fund Attribution – Strategic and Corridor Target

As of September 30, 2023

Five Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	23%	22%	10.01%	9.63%	0.09%	(0.03%)	0.07%
Small Cap	7%	7%	2.22%	2.40%	(0.08%)	`0.00%	(0.08%)
International Equity	20%	20%	3.08%	2.79%	`0.08%	0.03%	`0.10%´
Private Equity	0%	1%	-	-	0.00%	0.01%	0.01%
Domestic Fixed Incom	e 35%	35%	1.56%	0.10%	0.46%	0.00%	0.47%
Diversified Real Assets		10%	5.67%	3.87%	0.16%	(0.00%)	0.16%
Real Estate	5%	5%	5.36%	5.26%	0.02%	(0.04%)	(0.02%)
Cash & Equivalents	1%	0%	1.63%	1.63%	0.00%	(0.02%)	(0.02%)
Total			4.66% =	3.98%	+ 0.74% +	(0.06%)	0.68%

Five Year Corridor Relative Attribution Effects

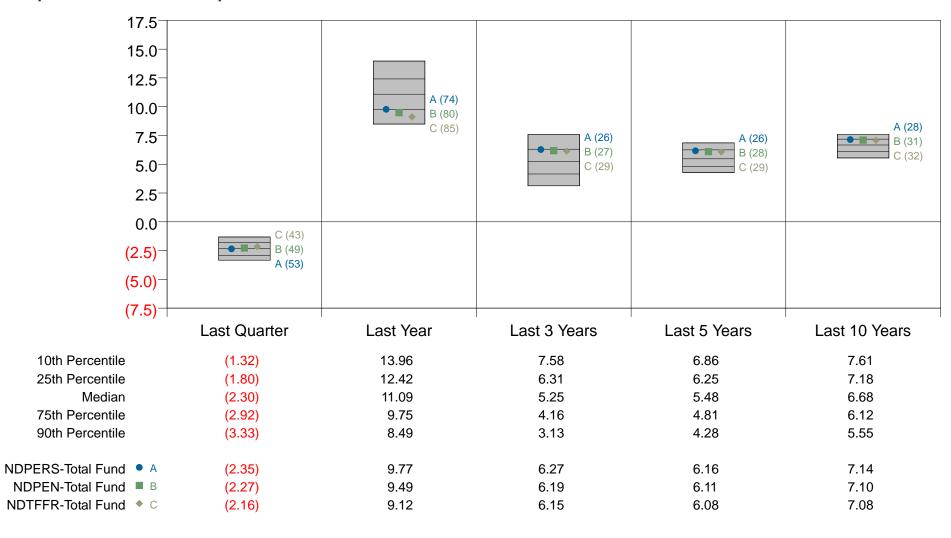
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	23%	23%	10.01%	9.63%	0.09%	(0.09%)	0.00%
Small Cap	7%	7%	2.22%	2.40%	(0.08%)	`0.02%´	(0.07%)
International Equity	20%	20%	3.08%	2.79%	`0.08%	0.03%	`0.11%´
Private Equity '	0%	0%	-	-	0.00%	0.00%	0.00%
Domestic Fixed Income		35%	1.56%	0.10%	0.46%	(0.00%)	0.46%
Diversified Real Assets		10%	5.67%	3.87%	0.16%	`0.00%	0.16%
Real Estate	5%	5%	5.36%	5.26%	0.02%	0.00%	0.02%
Cash & Equivalents	1%	0%	1.63%	1.63%	0.00%	(0.02%)	(0.02%)
Total			4.66% =	4.00%	+ 0.73% +	(0.07%)	0.66%

Appendix



Consolidated Pension Trust, PERS, and TFFR Performance Rankings

Returns for Periods Ended September 30, 2023 Group: Callan Public Fund Sponsor Database





Consolidated Pension Trust Attribution – Strategic and Corridor Target

As of September 30, 2023

One Year Relative Attribution Effects

	Effective Actual	Effective Target	Actual	Target	Manager	Asset	Total Relative
Asset Class	Weight	Weight	Return	Return	Effect	Allocation	Return
Domestic Equities	27%	29%	20.83%	19.36%	0.37%	(0.46%)	(0.10%)
International Equities	18%	19%	22.13%	20.19%	0.26%	(0.15%)	0.11%
World Equities ·	0%	0%	_	-	0.00%	0.13%	0.13%
Private Equities	11%	8%	5.67%	5.67%	0.00%	(0.09%)	(0.09%)
Domestic Fixed Income	e 24%	25%	3.14%	3.50%	(0.08%)	0.01%	(0.07%)
Real Estate	12%	10%	(11.98%)	(8.39%)	(0.48%)	(0.58%)	(1.07%)
Timber	1%	1%	(0.72%)	10.03%	(0.15%)	(0.01%)	(0.16%)
Infrastructure	6%	7%	10.01%	(5.36%)	0.95%	0.21%	1.16%
Cash & Equivalents	1%	0%	4.65%	4.47%	0.00%	(0.03%)	_(0.03%)_
Total			9.49% =	9.61%	+ 0.85% +	(0.97%)	(0.12%)

One Year Corridor Relative Attribution Effects

	Effective Actual	Effective Target	Actual	Target	Manager	Asset	Total Relative
Asset Class	Weight	Weight	Return	Return	Effect	Allocation	Return
Domestic Equities	27%	26%	20.83%	19.36%	0.37%	(0.08%)	0.29%
International Equities	18%	19%	22.13%	20.19%	0.26%	(0.16%)	0.09%
World Equities .	0%	0%	-	-	0.00%	0.14%	0.14%
Private Equities	11%	11%	5.67%	5.67%	0.00%	0.00%	0.00%
Domestic Fixed Income		24%	3.14%	3.50%	(0.08%)	(0.05%)	(0.13%)
Real Estate	12%	12%	(11.98%)	(8.39%)	(0.48%)	`0.00%´	(0.48%)
Timber	1%	1%	`(0.72%)	10.03%	(0.15%)	0.00%	(0.15%)
Infrastructure	6%	6%	10.01%	(5.36%)	0.95%	0.00%	0.95%
Cash & Equivalents	1%	0%	4.65%	4.47%	0.00%	(0.03%)	(0.02%)
Total			9.49% =	8.81% +	+ 0.85% +	(0.18%)	0.68%

Consolidated Pension Trust Attribution – Strategic and Corridor Target

As of September 30, 2023

Three Year Annualized Relative Attribution Effects

	Effective Actual	Effective Target	Actual	Target	Manager	Asset	Total Relative
Asset Class	Weight	Weight	Return	Return	Effect	Allocation	Return
Domestic Equities	25%	25%	9.64%	9.46%	0.07%	(0.16%)	(0.09%)
International Equities	16%	17%	3.36%	3.98%	(0.09%)	`0.04%′	(0.05%)
World Equities .	8%	7%	-	-	0.21%	0.05%	0.27%
Private Equities	8%	8%	21.51%	21.51%	0.00%	(0.27%)	(0.27%)
Domestic Fixed Income	25%	24%	(1.79%)	(3.12%)	0.37%	(0.06%)	0.31%
Real Estate	11%	10%	6.28%	6.04%	0.02%	(0.09%)	(0.07%)
Timber	1%	1%	3.78%	9.15%	(0.07%)	(0.01%)	(0.09%)
Infrastructure	5%	7%	10.96%	6.26%	0.27%	(0.06%)	0.21%
Cash & Equivalents	1%	0%	1.80%	1.70%	0.00%	(0.04%)	_(0.04%)
Total			6.19% =	5.99% +	0.79% +	(0.59%)	0.20%

Three Year Corridor Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	25%	25%	9.64%	9.46%	0.07%	(0.18%)	(0.11%)
International Equities	16%	17%	3.36%	3.98%	(0.09%)	0.04%	(0.05%)
World Equities '	8%	7%	-	-	`0.21%′	0.07%	0.28%
Private Equities	8%	8%	21.51%	21.51%	0.00%	0.00%	0.00%
Domestic Fixed Income	e 25%	25%	(1.79%)	(3.12%)	0.37%	0.01%	0.38%
Real Estate	11%	11%	6.28%	`6.04%´	0.02%	0.00%	0.02%
Timber	1%	1%	3.78%	9.15%	(0.07%)	0.00%	(0.07%)
Infrastructure	5%	5%	10.96%	6.26%	0.27%	0.00%	0.27%
Cash & Equivalents	1%	0%	1.80%	1.70%	0.00%	(0.04%)	_(0.04%)
<u> </u>							,
Total			6.19% =	5.50%	+ 0.79% +	(0.10%)	0.68%



Consolidated Pension Trust Attribution – Strategic and Corridor Target

As of September 30, 2023

Five Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	24%	23%	9.50%	8.22%	0.28%	(0.11%)	0.17%
International Equities	16%	16%	3.79%	2.63%	0.18%	0.01%	0.20%
World Equities '	11%	11%	-	-	(0.24%)	(0.00%)	(0.24%)
Private Equities	7%	7%	14.71%	14.71%	`0.00%	(0.20%)	(0.20%)
Domestic Fixed Income	24%	24%	2.18%	1.03%	0.31%	(0.02%)	0.28%
Real Estate	11%	10%	5.45%	5.26%	0.02%	(0.10%)	(0.08%)
Timber	2%	2%	4.34%	5.87%	(0.01%)	(0.02%)	(0.03%)
Infrastructure	5%	7%	8.42%	4.58%	0.22%	(0.04%)	0.18%
Cash & Equivalents	1%	0%	1.73%	1.72%	0.00%	(0.02%)	_(0.02%)_
·							

6.11% = 5.84% +

Five Year Corridor Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	24%	24%	9.50%	8.22%	0.28%	(0.08%)	0.20%
International Equities	16%	16%	3.79%	2.63%	0.18%	0.01%	0.20%
World Equities ·	11%	11%	-	-	(0.24%)	0.01%	(0.23%)
Private Equities	7%	7%	14.71%	14.71%	`0.00%	0.00%	`0.00%´
Domestic Fixed Income	e 24%	24%	2.18%	1.03%	0.31%	(0.00%)	0.30%
Real Estate	11%	11%	5.45%	5.26%	0.02%	`0.00%	0.02%
Timber	2%	2%	4.34%	5.87%	(0.01%)	0.00%	(0.01%)
Infrastructure	5%	5%	8.42%	4.58%	0.22%	0.00%	0.22%
Cash & Equivalents	1%	0%	1.73%	1.72%	0.00%	(0.02%)	(0.02%)
Total			6.11% =	5.42% -	+ 0.77% +	(0.08%)	0.69%



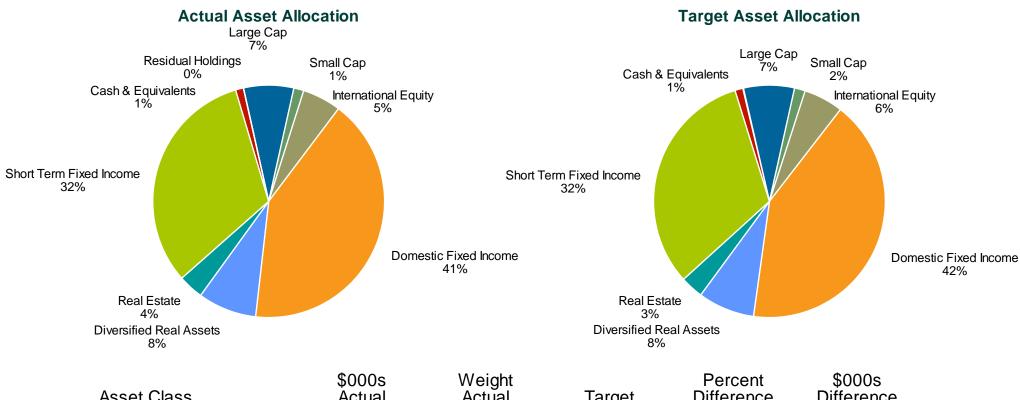
Total

0.26%

0.77% + (0.51%)

Consolidated Insurance Trust Allocation

As of September 30, 2023



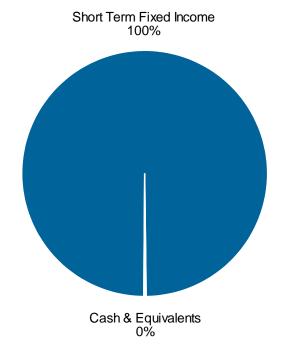
	\$000s	Weight		Percent	\$000s
Asset Class	Actual	Actual	Target	Difference	Difference
Large Cap	214,424	7.0%	7.1%	(0.1%)	(3,456)
Smăll Cap	42,508	1.4%	1.5%	(0.2%)	(4,955)
International Equity	167,544	5.4%	5.5%	(0.1%)	(2,440)
Domestic Fixed Income	1,277,850	41.5%	41.7%	(0.2%)	(6,085)
Diversified Real Assets	253,870	8.2%	7.9%	0.3%	10,017
Real Estate	108,360	3.5%	3.2%	0.3%	8,228
Short Term Fixed Income	982,645	31.9%	31.9%	(0.0%)	(29)
Cash & Equivalents	33,837	1.1%	1.1%	(0.1%)	(1,586)
Residual Holdings	305	0.0%	0.0%	0.0%	305
Total	3,081,344	100.0%	100.0%		



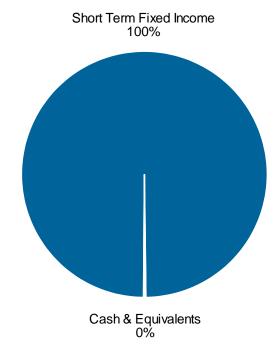
Budget Stabilization Fund Allocation

As of September 30, 2023

Actual Asset Allocation



Target Asset Allocation



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Short Term Fixed Income	924,249	99.7%	99.7%	(0.0%)	(310)
Cash & Equivalents	3,092	0.3%	0.3%	0.0%	310
Total	927,341	100.0%	100.0%		

Callan Update

Published Research Highlights from 3Q23

Office-to-Residential Conversions: Vast Opportunity or Unfeasible Challenge?



Four-Part Series: The ESG Rule Explained



Callan Discount Rate Reporter: Regular Update on Corporate DB Plans



How Your Public DB Plan's Returns Compare: Quarterly Update



Recent Blog Posts

An Investor's Guide to the Nasdaq-100's Special Rebalance

Mark Wood

A Deeper Dive Into the Tradeoff Between Return and Risk

Kevin Machiz

S&P Global Moves Away from Numeric ESG Credit Indicators

Kristin Bradbury

Additional Reading

Alternatives Focus quarterly newsletter
Active vs. Passive quarterly charts
Capital Markets Review quarterly newsletter
Monthly Updates to the Periodic Table
Market Pulse Flipbook quarterly markets update
Real Estate Indicators market outlook



Callan Institute Events

Upcoming conferences, workshops, and webinars

Callan College

Intro to Investments—Learn the Fundamentals

This course is for institutional investors, including trustees and staff members of public plans, corporate plans, and nonprofits. This session familiarizes trustees and staff with basic investment theory, terminology, and practices.

- November 1-2, 2023 Atlanta, Georgia
- March 5-7, 2024 Virtual Session via Zoom

Intro to Alternatives

This course is for institutional investors, including trustees and staff members of public plans, corporate plans, and nonprofits. This session familiarizes trustees and staff with alternative investments like private equity, hedge funds, and real estate and how they can play a key role in any portfolio. You will learn about the importance of allocations to alternatives and how to consider integrating, evaluating, and monitoring them.

- February 21-22, 2024 - Virtual Session via Zoom

Please visit our website at <u>callan.com/events-education</u> as we add dates to our 2023 and 2024 calendar!

Mark Your Calendar

2023 Regional Workshops

October 24, 2023 – New York October 26, 2023 – Chicago

2024 National Conference

April 8-10, 2024 - San Francisco

2024 Regional Workshops

June 25, 2024 – Atlanta June 27, 2024 – San Francisco

Watch your email for further details and an invitation.

Webinars & Research Café Sessions

Webinar: ESG Study

November 7, 2023 - Virtual Session via Zoom

Webinar: The Retirement Conundrum

November 15, 2023 – Virtual Session via Zoom

Research Café: Conversion of Commercial Real Estate

December 6, 2023 - Virtual Session via Zoom





SIB Performance Report Appendix November 2023

Performance Reports prepared by Callan for quarter ending September 30, 2023, are available on the RIO website at:

Newsletters & Reports | Retirement Investment Office (nd.gov)

PATHWAY TO STRATEGY

ROADMAP FOR SUCCESS



CAPABILITIES FOR SUCCESS

- DELEGATED AUTHORITY
- INCENTIVE COMP SYSTEM
- DIRECT INVESTMENT TEAM
- INDEPENDENT BENCHMARK CONSULTANT
- PRIVATE MARKETS BENCHMARK CORRIDOR
- FUND POOLING

- DAILY FUND VALUES AND RETURNS
- ADVANCED OPERATIONS
- AUDIT PROCESSES AND COMPLIANCE
- NEW INVESTMENT PROCESSES
- FUND AND LIQUIDITY MANAGEMENT
- DERIVATIVES OVERLAYS

- VALUATION AND EXPOSURE MANAGEMENT
- INVESTMENT DATA WAREHOUSE
- ORDER MANAGEMENT SYSTEM
- PORTFOLIO MANAGEMENT ANALYTICS
- INTEGRATED DATA AND MESSAGES
- KNOWLEDGE MANAGEMENT SYSTEM

NECESSARY CAPABILITIES FOR SUCCESS

GOVERNANCE	A governance hierarchy including a staff run investment committee with some delegation as well as board level investment expertise
TALENT MANAGEMENT	Specific investment role recognition as well as a total rewards package that is competitive with similar investment organizations
OPERATIONS	Appropriate staffing and skills or outsourcing of critical investment accounting, and transaction processing capabilities
DATA AND TECHNOLOGY INFRASTRUCTURE	High frequency and high-quality data as well as infrastructure to support data throughput and processing speeds
RESEARCH AND KNOWLEDGE MANAGEMENT	A culture of research, learning, creativity and knowledge management supported by expectations, resources, and recognition

NEAR TERM TIMELINE OF ACTIVITIES

November	December	January	February	March	April	May	June
 Begin incentive and unclassified role project 	 Present private markets strategy to Legacy Fund 	 Determine Private Markets Harmonization Strategy 	 Equity 2.0 proposal approval 	 Begin internal direct overlay and rebalance strategy 	 Approve internal direct overlay and rebalance strategy 	 Approve Private Markets Harmonization strategy at IC 	 Implement Private Markets Harmonization strategy
Board approves benchmark memoCoordinate	 Complete daily allocation process design 	Define new investment roles	Begin Fixed Income 2.0Begin Private Markets	New role long list screeningComplete	 Approve internal direct overlay strategy and rebalance 	 and Board Select and call back second round 	 Equity 2.0 complete Select and call
hurdle rate discussions with incentive comp and unclassified role project Establish	 Identify investment role titles and benchmark Consultant reviews 	 Define incentive comp plan 1.0, define new role comp Approve incentive comp 	 Harmonization Recruit new investment roles Compliance process RFP 	custodian data feed to data warehouse Sign OMS/PMS contract Begin	strategy policy First round interviews of long list screened candidates	candidates Interview second round candidates Continue compliance	 back final round candidates Interview final round candidates Finalize
Executive Steering Committee for IT project. Approve Alternative IT Procurement Issue IT RFP	 incentive comp prototype Receive and score OMS/PMS RFPs Select OMS/PMS vendors for call 	1.0 and role comp (ERCC) OMS/PMS vendor demonstrations Select OMS/PMS vendor	 Select data warehouse solution and approach Design custodian feed to data 	OMS/PMS incremental implementation Develop large IT project data architecture Begin to	 Begin compliance process design Finalize large IT data architecture Finalize data warehouse 	process design Implement direct overlay and rebalance OMS/PMS requirements Continue data warehouse work	compliance process design Implement direct overlay and rebalance OMS/PMS requirements
	back	Launch data warehouse project	warehouseOMS/PMSvendornegotiation	develop data warehouse expansion strategy	expansion strategy Hire ops roles	 Complete daily reconciliation design 	Continue data warehouse work

NEAR TERM TIMELINE OF ACTIVITIES - CONTINUED

Implement Private Markets Harmonization strategy							
Markets Harmonization strategy # Hire initial internal direct team # Onboard initial internal direct team # Incorporate compliance into OMS implementation # Finalize OMS integration with custodian # Roll-out PMS daily Markets Harmonization strategy # Begin legislative outreach # Begin legislative outreach # Impalement Fixed lncome 2.0 # Impalement Fixed lncome 2.0 # Continue legislative outreach # Continue # Conti	July	August	September	October	November	December	January
direct team Continue recruitment Test OMS and integration with custodian on internal direct team Incorporate compliance into OMS implementation Finalize OMS integration with custodian Continue Continue recruitment Regin to develop index strategy Scale up overlay and rebalance strategy Approve Fixed Income 2.0 strategy Continue recruitment Continue Regislative outreach Continue data warehouse project Update compliance Incorporate index strategy Continue data warehouse project Continue data warehouse project Continue data warehouse project Continue exchange contract Update compliance Incorporate indexing into OMS implementation including compliance Continue a exchange vendor Indexing into OMS implementation including compliance Continue a exchange vendor Continue a	Markets Harmonization strategy	Markets Harmonization strategy	strategy • Begin legislative	data for <u>indexing</u> Impalement Fixed	data for indexingContinue legislative	policyContinue legislative	legislative outreach Continue
reconciliation Begin data exchange project	 Continue recruitment Onboard initial internal direct team Incorporate compliance into OMS implementation Finalize OMS integration with custodian 	cash overlay and rebalance Test OMS and integration with custodian on internal direct overlay and rebalance pilot Hire initial internal direct tea Continue recruitment Continue data warehouse project Begin data	 Scale up overlay and rebalance strategy Approve Fixed Income 2.0 strategy Continue recruitment Continue data warehouse project Begin data 	legislative outreach Continue recruitment Continue data warehouse project Select data	 Continue recruitment Continue data warehouse project Negotiate data exchange contract Update compliance for internal 	 Continue recruitment Continue data warehouse project Launch data exchange project Incorporate indexing into OMS implementation including 	 Continue data warehouse project Continue data exchange project Test OMS for indexing with custodian on a





Memorandum

To: Members of the Board

North Dakota State Investment Board

From: Verus

Date: November 17, 2023

RE: Strategic Benchmark Recommendations

The purpose of this memorandum is to provide the North Dakota State Investment Board ("SIB") benchmark recommendations for the strategic asset classes which comprise the asset allocation policies for the respective Plans under the SIB's purview.

Summary of Recommendations

Asset Class	Current Benchmark	Recommended Benchmark		
Total Fund	Custom asset class weighted policy index	Custom asset class weighted policy index		
Total Equity	Roll-up of underlying strategy benchmarks	Roll-up of asset class strategy benchmarks		
Total Public Equity	Roll-up of underlying strategy benchmarks	MSCI ACWI IMI		
U.S. Equity	Custom weighted policy index (85% Russell 1000/ 15% Russell 2000)	Russell 3000		
Non-U.S. Equity	MSCI ACWI World ex-US IMI	MSCI ACWI World ex-US IMI		
Private Equity	Roll-up of underlying strategy benchmarks	MSCI ACWI IMI + 200 bps		
Total Income	No benchmark	Roll-up of asset class strategy benchmarks		
Inv. Grade Fixed Income	Bloomberg Aggregate Bond Index	Bloomberg Aggregate Bond Index		
Non-Inv. Grade Bonds	Bloomberg HY 2% Issuer Constrained	Bloomberg HY 2% Issuer Constrained		
Private Credit	No benchmark	Bloomberg HY 2% Issuer Constrained		
Private Credit (Legacy	No benchmark	Morningstar LSTA Leveraged Loan Index + 100 bps		
Fund)				
Total Real Assets	No benchmark	Roll-up of asset class strategy benchmarks		
Core Real Estate	NCREIF NPI Total Index	NCREIF ODCE		
Timber	NCREIF Timberland Index	NCREIF Timberland Index		
Infrastructure	50%/50% NCREIF ODCE/CPI-U (lagged 1 Qtr)	NCREIF ODCE + 100 bps		
TIPS (Workforce Safety and Insurance Fund)	Bloomberg US Government Inflation Linked Bond Index	Bloomberg US Government Inflation Linked Bond Index		
Short Term Fixed Income	Bloomberg 1-3 Year US G/C Index	Bloomberg 1-3 Year US G/C Index		
In-State Equity	No benchmark	Benchmark against itself		
In-State Infrastructure Loan	No benchmark	Benchmark against itself		
BND CD Match Program	No benchmark	Benchmark against itself		
Cash	90-day T-Bills	90-day T-Bills		

Overview

Selecting benchmarks is among the most important decisions the SIB makes behind setting asset allocation policy for the Plans under its purview. Benchmarks provide the mechanism through which to evaluate the success of the respective investment program in meeting its stated policy objectives. They provide the link between expectations and success.

Benchmarks serve essential functions in the realm of investment program oversight for fiduciaries. From a policy viewpoint, they reflect the desired asset class risk, or 'beta' exposures. The overarching goal of SIB's benchmarks should be to provide the SIB a measurement tool in order to evaluate and understand the degree to which the Plans, asset classes and strategies are successful in meeting policy objectives over both the short term (i.e., 3 or less years) and long term (i.e., 5 or more years).

Benchmarks provide insight into how capital markets are performing, in general, and help the Board understand how individual asset classes, sub-asset classes and strategies are contributing to overall results. The qualities that are desirable in benchmarks used to evaluate investment performance are typically¹:

- Representative of the opportunity set
- Investable and known and set ex ante (before the fact)
- Transparent
- Measurable
- Unambiguous

Other desirable qualities are:

- Consistent with the proxies used in asset allocation policy development
- Reflective of risk as well as the return of the asset class
- Available in a timely, cost-efficient manner
- Commonly used by public fund and other institutional investor peers

Asset classes are defined by the asset allocation policy; thus, the benchmarks for asset classes need to be reflective of the benchmarks used in the policy setting process. The goal of the SIB should be to ensure SIB's benchmarks meet industry standards for benchmark quality and that these benchmarks fairly and accurately represent the asset classes and strategies employed in the various Plans. Benchmarks for the most liquid asset classes (Global Public Equities, Public Fixed Income and Cash) tend to meet all of the benchmark quality criteria. For Private Equity, Private Credit, Real Estate and Real Assets, some of the above criteria cannot be fully met and choosing which items to emphasize entails subjective judgement, including the tradeoff between short-term tracking error and long-term compatibility with the desired outcomes.

The recommended strategic asset class benchmarks are summarized in Exhibit 1 below. The main rationale in support of these recommended benchmarks is that the respective benchmarks provide the best representation of capital market "beta" for that market segment as well as reflect the proxies that were employed in the asset allocation policy development process. Additionally, most of the recommended benchmarks are widely utilized by SIB's peers for those same market segments. The recommended public markets benchmarks are all published benchmarks which meet the preferred benchmark quality standards articulated earlier in this memorandum. Lastly, the benchmarks are simple and easy to understand. Exhibit 1 summarizes how the respective recommended benchmarks align with the aforementioned benchmark quality criteria.

¹ While these characteristics align with benchmark standards published by the CFA Institute, as a public pension plan, SIB is not, and is not required to be, GIPS compliant.



2

Exhibit 1: Summary of Recommended Public Markets Strategic Asset Class Benchmarks

			Benchmark Quality Summary of Recommended Benchmarks (Yes/ No/ NA (Not Applicable))					
Asset Class	Current Benchmark	Recommended Benchmark	Opportunity Set / Investment Guideline Alignment	Investable and Known Ex- Ante	Transparent/ Measurable/ Unambiguous/ Available in a Timely, Cost Efficient Manner	Consistent with Proxies in Asset Allocation Policy	Reflective of Asset Class or Portfolio Risk/Return	Commonly Used by Similar Investors
Total Fund	Custom asset class weighted policy index	Custom asset class weighted policy index	N/A	No	Yes	N/A	N/A	Yes
Total Equity	Roll-up of underlying strategy benchmarks	Roll-up of asset class strategy benchmarks	N/A	No	Yes	N/A	N/A	Yes
Total Public Equity	Roll-up of underlying strategy benchmarks	MSCI ACWI IMI	Yes	Yes	Yes	Yes	Yes	Yes
U.S. Equity	Custom weighted policy index (85% Russell 1000/ 15% Russell 2000)	Russell 3000	Yes	Yes	Yes	Yes	Yes	Yes
Non-U.S. Equity	MSCI ACWI World ex-US	MSCI ACWI World ex-US IMI	Yes	Yes	Yes	Yes	Yes	Yes
Private Equity	Roll-up of underlying strategy benchmarks	MSCI ACWI IMI + 200 bps	No	No	Yes	Yes	No	Yes
Total Income	No benchmark	Roll-up of asset class strategy benchmarks	N/A	No	Yes	N/A	N/A	Yes
Inv. Grade Fixed Income	Bloomberg Aggregate Bond Index	Bloomberg Aggregate Bond Index	Yes	Yes	Yes	Yes	Yes	Yes
Non-Inv. Grade Bonds	Bloomberg HY 2% Issuer Constrained	Bloomberg HY 2% Issuer Constrained	Yes	Yes	Yes	Yes	Yes	Yes
Private Credit	No benchmark	Bloomberg HY 2% Issuer Constrained	Yes	Yes	Yes	N/A	No	Yes
Private Credit (Legacy Fund)	No benchmark	Morningstar LSTA Leveraged Loan Index + 100 bps	No	No	Yes	Yes	No	Yes
Total Real Assets	No benchmark	Roll-up of asset class strategy benchmarks	N/A	No	No	N/A	N/A	Yes
Core Real Estate	NCREIF NPI Total Index	NCREIF ODCE	Yes	No	No	Yes	Yes	Yes
Timber	NCREIF Timberland Index	NCREIF Timberland Index	Yes	No	No	Yes	Yes	Yes
Infrastructure	50%/50% NCREIF ODCE/CPI- U (lagged 1 Qtr)	NCREIF ODCE + 100 bps	No	No	Yes	N/A	No	No
TIPS (Workforce Safety and Insurance Fund)	Bloomberg US Government Inflation Linked Bond Index	Bloomberg US Government Inflation Linked Bond Index	Yes	Yes	Yes	Yes	Yes	Yes
Short Term Fixed Income	Bloomberg 1-3 Year US G/C Index	Bloomberg 1-3 Year US G/C Index	Yes	Yes	Yes	Yes	Yes	Yes
In-State Equity	No benchmark	Benchmark against itself	Yes	No	Yes	N/A	Yes	Yes
In-State Infrastructure Loan	No benchmark	Benchmark against itself	Yes	No	Yes	N/A	Yes	Yes
BND CD Match Program	No benchmark	Benchmark against itself	Yes	No	Yes	N/A	Yes	Yes
Cash	90-day T-Bills	90-day T-Bills	Yes	Yes	Yes	Yes	Yes	Yes

Rationale Supporting Recommended Benchmarks

Public Equity – Three new benchmarks are being proposed for the Equity asset class.

- Total Equities The current benchmark is a roll-up of the individually managed account benchmarks within the Equity asset class. This approach is non-standard in the industry for this asset class. Instead, Verus recommends a benchmark which is a roll-up of the two Equity sub-asset class (i.e., Public Equities and Private Equities) benchmarks. This represents a more industry standard approach to benchmarking an aggregate asset class.
- Total Public Equity The recommended Total Public Equity benchmark is the MSCI ACWI IMI, which is the broadest published global equity benchmark and is widely used by SIB's peers to benchmark their respective global (or total) public equity asset classes.
- *U.S. Equity* For U.S. Equities, Verus recommends adoption of the Russell 3000, the broadest published U.S. equity benchmark and which is also widely used by SIB's peers to benchmark their respective U.S. equity sub-asset class portfolios.

These two recommended sub-asset class benchmarks represent a best practices consideration under prevailing investment theory that the broad capital market benchmarks represent the best 'portfolio' in terms of return to risk relationship. Additionally, these benchmarks are typical proxies employed for these sub-asset classes within the asset allocation policy setting process, so they provide for good alignment with the Plans' various asset allocation policy targets.



Private Equity – Verus' recommended benchmark, MSCI ACWI IMI + 2%, represents an industry standard strategic benchmark for Private Equities. The majority of state-level pension plans employ benchmarks using this construct (i.e., a public markets published benchmark plus some premium to capture the additional risks assumed from private markets investing activities). The current benchmark is more reflective of an implementation, or bottom-up, benchmark and is not typically employed by peers. The recommended benchmark reflects the fact that Private Equity is viewed by SIB as an alternative exposure to public equities. Thus, we are recommending the public equities benchmark, plus a premium to capture the financial engineering, leverage and illiquidity risks of the underlying companies, as the Private Equity benchmark which will then enable the Board to evaluate the strategic decision to employ Private Equity versus public market equities. While the recommended benchmark does not capture all the qualities desired in a benchmark, it is consistent with private equity proxy used in the asset allocation policy setting process and is typically employed by a majority of SIB's peers.

Public and Private Markets Fixed Income – Verus recommends three benchmark changes in this asset class.

- Total Fixed Income There is currently no benchmark for the overall asset class. Verus recommends a roll-up of the three asset class strategy benchmarks, similar to the recommended Total Equities benchmark.
- Private Credit (ex-Legacy Fund) Currently, there is no benchmark for this sub-asset class.
 Verus recommends the Bloomberg HY 2% issuer Constrained index for this sub-asset class.
 This recommended benchmark reflects the fact that Private Credit is viewed as an alternative exposure to public market non-investment grade bonds. Thus, we are recommending the non-investment grade bonds benchmark as the Private Credit benchmark as the Board should regularly be monitoring and evaluating the decision to strategically employ Private Credit versus public market non-investment grade bonds.
- Private Credit (Legacy Fund) Currently, there is no benchmark for this asset class.
 However, it is a discreet, strategic exposure within the Legacy Fund asset allocation policy.
 Thus, Verus is recommending an industry standard benchmark for this asset class, the
 Morningstar LSTA Leveraged Loan Index + 100 basis points. Similar to the recommended benchmark for Private Equity, this benchmark enables the Board to evaluate the decision to employ a private markets asset class versus a public markets alternative.

Real Assets – Verus recommends no change to the current Timber or TIPS sub-asset class benchmarks. However, we recommend adoption of new benchmarks for the remaining two Real Assets sub-asset classes (Core Real Estate and Infrastructure).

- Core Real Estate The current benchmark is a non-standard benchmark in that it is an aggregation of the returns of individual real estate properties. The recommended benchmark is a pooled benchmark comprised of institutional, managed Real Estate commingled funds similar to the SIB's real estate portfolio. The recommended benchmark, NCREIF ODCE (i.e., Open-end Diversified Core Equity), is a capitalization-weighted, time-weighted return series of open-end, diversified core real estate funds. Thus, it better represents the core real estate universe and performance of the asset class. It is the most widely employed Core Real Estate benchmark by SIB's peers and is the asset class proxy employed in the typical asset allocation policy setting process.
- Infrastructure The current benchmark is a non-standard benchmark that is made complex through the incorporation of a lagged CPI return. The CPI is non-investable and Core Real Estate is not generally used as a proxy for infrastructure by SIB's peers. The difficulty with



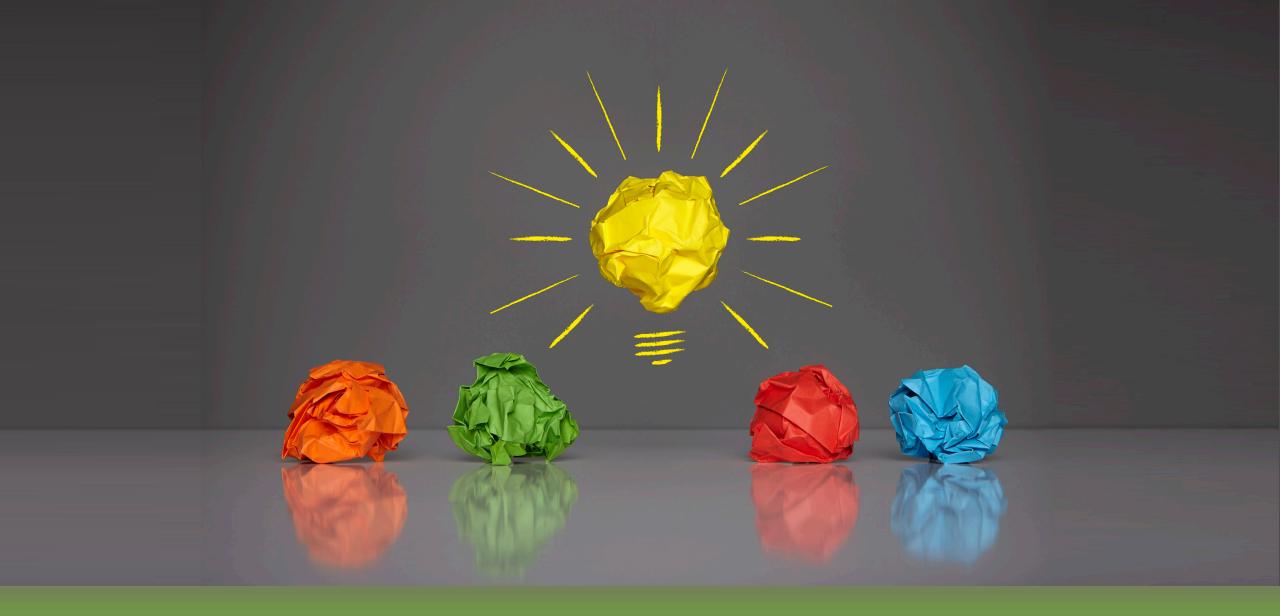
Infrastructure is that it is a relatively nascent sub-asset class and there currently does not exist a widely accepted 'industry standard' benchmark. A public Listed Infrastructure benchmark is often employed as both an asset class proxy in the asset allocation policy setting process as well as an asset class benchmark. However, SIB is unique in that it has a well-developed Infrastructure investment program, which is ahead of most peers. Given the existence of multiple strategies and the fact that the program was developed to be income oriented with a return/risk profile similar to a 75%/25% Core/Value-add Real Estate program. Thus, Verus is recommending the same benchmark as for SIB's Core Real Estate program (NCREIF ODCE) plus a 100 basis points premium to capture both the value-added component and the idiosyncrasies of an infrastructure portfolio. While imperfect, the benchmark does capture the strategic objective of this sub-asset class (real income generation), which is the goal for the strategic benchmarks being recommended to the Board.

In-State Investments – The In-State investment program is relatively new and in the process of being built. Additionally, in-state investments are idiosyncratic in nature and do not lend themselves to traditional benchmarks, particularly at the very immature stage. Thus, Verus recommends to benchmark these investments against themselves in the initial years. Benchmarking idiosyncratic assets against themselves is not uncommon in institutional investments. Benchmarks should be re-visited every 3 years or so as a matter of industry best practice. At the next strategic benchmark review, these three program components will be evaluated to determine what alternative benchmarks may be appropriate to consider based upon the composition of the respective investment portfolios at that time.

While the Board does not currently set asset allocation policy for total asset class exposures (i.e., Total Equities, Total Fixed Income and Total Real Assets), we believe that all measurable asset class exposures should be benchmarked and monitored. Thus, we recommend that benchmarks be adopted at these total asset class levels. The respective benchmarks would simply be roll-ups of the underlying sub-asset class strategy benchmarks. The Total Fund benchmark for each plan would continue to be a custom asset class weighted benchmark based upon the respective Plan's asset allocation policy as articulated in their investment policy statement ("IPS"). This would serve as the policy benchmark against which to measure total fund actual performance and the respective Plan liability discount rate or real return objective, to the extent one exists and is incorporated within the respective IPS.

Verus additionally recommends that each Plan's investment policy statement be amended to reflect the strategic benchmarks for each asset class and sub-asset class as summarized in Exhibit 1. Given the statement earlier that benchmark selection is an important fiduciary decision, it is a best practice to articulate asset class and sub-asset class benchmarks within the investment policy statement. This is because the investment policy statement should provide a transparent 'road map' of the Board's decision-making processes and how it implements its fiduciary duties; in this case, the duty to regularly conduct investment program monitoring and evaluation versus policy objectives.





Strategic Communications Plan

Sarah Mudder, communications and outreach director

WHAT IS A STRATEGIC COMMUNICATIONS PLAN?

A communications strategy is a plan for communicating with your target audience. It includes who you are talking to, why you are talking to them, how and when you talk to them, what form your content takes, and what channels you use to share it.

In simpler terms: it's about getting information to the right people at the right time in the right way.



OVERVIEW: AGENCY

North Dakota's Retirement and Investment Office coordinates the activities of the State Investment Board and the Teacher's Fund for Retirement.

Mission Statement

To provide prudent and transparent investment services for our client funds and support North Dakota public school educators with responsible benefit administration.

Vision Statement

To be recognized as a trusted and innovative provider of investment and pension services.

Core Values

Integrity - We value honesty and are committed to doing what's best for our customers.

Accountability - We are responsible for our actions and work as a team to produce the desired outcomes.

Service - We care about the people we serve and take time to understand their unique needs.



OVERVIEW: COMMUNICATIONS STATEMENT

Communications Statement

RIO is committed to and actively pursues the timely dissemination of accurate information regarding agency and board activities and actions to our stakeholders.

The communications and outreach director works closely with the executive team and the agency's program managers to implement and maintain a regular and active flow of information of scheduled events, activities, and announcements.

The communications and outreach director also acts as the agency's public information officer, and understands this function, especially as it relates to the media, helps to build rapport and trust, and positions RIO as a thought leader, readily available to engage.



WHAT PURPOSE DOES THE PLAN SERVE?

Principles

- 1. The communication plan's goals should support the agency's goals.
- 2. A plan should be research-based, using **input** from stakeholders to develop messages and materials that demonstrate an understanding of the issues and audiences.
- 3. It should be intended primarily for the stakeholders who are most **affected** by the agency's actions.
- 4. Relevant stakeholder thoughts and expertise should be sought in a plan's development.
- 5. It should be expected to produce results for all the relevant stakeholders.
- 6. Monitoring should be used to improve the communications plan.



WHO IS OUR TARGET AUDIENCE?

Internal Stakeholders

- Closest tie to the agency, the most influence on its identity.
- Their messages should be consistent when interacting with external audiences.
- Who are they?
 - Employees
 - Board and committee members

WHO IS OUR TARGET AUDIENCE?

External Stakeholders

- Shape opinions of the agency and its programs.
- Sharing information through these groups creates ambassadors who market the agency.
- Who are they?
 - Agency lawmakers, media, public and state agencies.
 - Investment client funds, fund managers, state agencies, in-state banks, industry groups and peers
 - TFFR members, employers, state agencies, industry groups and peers.

HOW IMPORTANT ARE THE AUDIENCES?

Division	Primary	Secondary	Other
Agency	Board/committee members Employees Lawmakers	Media	Peers Public State agencies
SIB	Board/committee members Client funds Employees Fund managers Lawmakers	Industry groups In-state banks Media Service providers	Peers Public State agencies
TFFR	Board/committee members Business partners Employees Lawmakers Members	Industry groups Media Service providers	Peers Public State agencies



WHAT KIND OF MESSAGES DO WE CONVEY?

Key messages: answers WHAT, HOW, and WHY

- What: a clear, comprehensive, and understandable narrative of the action that has taken or will take place.
- How: the way assistance and capacity building efforts are implemented and the value of the implementation.
- Why: why stakeholders should care, how they benefit.

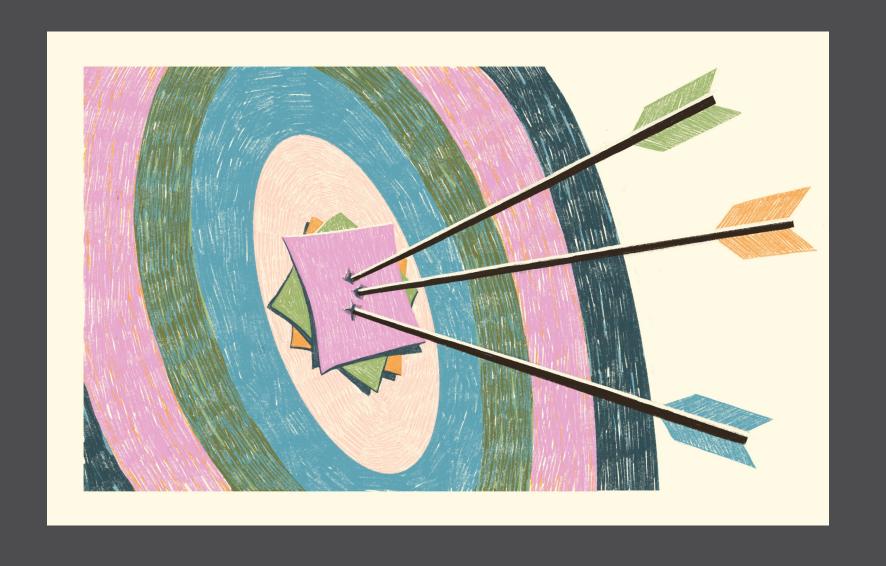
Example: "In 2010, State Investment Board's assets under management were about \$4 billion. As of June 30, 2023, the investment's market value was approximately \$20 billion. The growth has led the Retirement and Investment Office to add more investment strategies and issue more complex mandates, creating a need for more staff."

WHAT KIND OF MESSAGES DO WE CONVEY?

General messages: increases the agency's **profile**, how it assists client funds and TFFR members.

Example: "All funds invested under the direction of the State Investment Board (SIB) follow the 'Prudent Investor Rule.' Investments are managed exclusively in the interest of meeting the funds' individual objectives. Professional investment managers, consultants and custodians are retained to assist in the implementation of the investment program. The Retirement and Investment Office assists the SIB in carrying out its responsibilities for investment program administration."





Communications goals:

- 1. Build **brand awareness** increase stakeholder knowledge of the agency and the services it provides to its investment and pension fund customers.
- 2. Evaluate and develop or improve the **communications tools** used to help stakeholders understand both RIO's day-to-day and strategic communications.
- 3. Develop and coordinate the delivery of messages to stakeholders regarding TFFR's new pension administration system in fall 2024.
- 4. Support the growth of the investment services division including the hiring and development of an in-state investment team in summer 2024.

Goal 1: Build Brand Awareness

Objective 1: Improved awareness of agency's role as the SIB and TFFR program coordinator.

- Consistently identifying the agency's role in communications.
- Establishing communications standards.
- Improving website content.
- Increase board and employee knowledge of agency happenings.
- Educate lawmakers on the agency's role and its growth.
- Highlight agency accomplishments during board, committee and staff meetings.

Goal 1: Build Brand Awareness

Objective 2: Increased member awareness of the TFFR program, how it works and who administers the program.

- Relaunch member newsletter.
- Improving website content.
- Developing a quick start guide.
- Redeveloping introductory presentation for new members.
- Reworking the enrollment letter.
- Developing a short introductory video.

Goal 1: Build Brand Awareness

Objective 3: Improved employer awareness of TFFR program requirements.

- Improving website content.
- Updating format and promotion of Info Mixers.
- Updating format and promotion of new business manager workshop.
- Develop a communication that introduces new business managers to the program.
- Initiate and foster relationships with education associations.
- Evaluating employer handbook to improve the material.



Goal 1: Build Brand Awareness

Objective 4: Increased awareness of investment program operations, how it works and who administers the program.

- Improving website content.
- Relaunch investment newsletter.
- Host an investment seminar.
- Develop a fact sheet about the program.
- Seek out speaking opportunities for the staff.
- Identify investment publications to target for news about the division.

Goal 2: Evaluate and develop or improve communications tools

Objective 1: Understand and define opportunities for improvements.

- Using GovDelivery for widespread communications.
- Improving website content.
- Develop an intranet site.
- Using graphics and links in email signatures to promote events and communications.
- Evaluate social media options.

Goal 2: Evaluate and develop or improve communications tools

Objective 2: Evaluate and update communications assets and bring them on brand, align with the state's standards.

- Improving website content.
- Update board materials.
- Evaluate existing print assets.
- Incorporate graphics and links into email signatures to promote events and communications.

Goal 3: Develop and coordinate the delivery of messages regarding TFFR's new pension administration system

Objective 1: Create awareness and onboard employer partners.

- Plan and promote PAS project previews.
- Plan and promote user education.
- Develop message points to ensure staff are sharing the same information.
- Incorporate into employer communications.
- Encourage employers to sign up for ACH in preparation for the launch.

Goal 3: Develop and coordinate the delivery of messages regarding TFFR's new pension administration system

Objective 2: Create awareness and onboard members.

- Encourage members to establish online accounts in preparation for the transition to the new system.
- Develop an onboarding plan for members that includes a MyTFFR quick start guide.
- Plan and promote user education.
- Develop message points to ensure staff are sharing the same information.
- Incorporate into member communications.
- Consider securing marketing/vanity URL, e.g., MyTFFR.nd.gov.



Goal 4: Support the growth of the investment services division

Objective 1: Educate external stakeholders on the value of an internal investment team.

- Develop a communication and/or improve the agency's website to better describe the division's role.
- Host an investment seminar to educate policy makers and instill confidence in clients and add new cliental.
- Devise a method and structure for obtaining department news that can be shared with stakeholders
- Research and contract for a media tracking service.

Goal 4: Support the growth of the investment services division

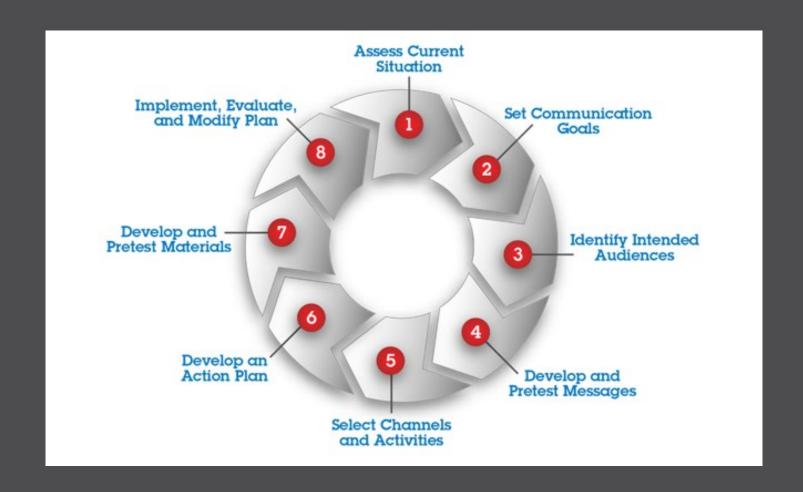
Objective 2: Support the growth and development of the team, particularly those who working in a hybrid or remote environment.

- Develop a communication and/or improve the agency's website to better describe the division's role.
- Develop an intranet that can be used to inform staff of agency activities
- Provide communications support for tracking and publishing/sharing program successes.

STAKEHOLDERS/CHANNELS MATRIX

Stakeholders/Channels		Education (hosted by RIO)		Events (hosted by others)	Intranet	Hearings,	Meetings	Mission, Vision & Values	Newsletter (invest)	Newsletter (pension)	News Releases	Pension Admin System	Promo Items	Reports	Social Media	Tradeshow	Website
Board and Committee Members		•										,					
Employees	•	•	•		0		•	•	0	•	•		•		0		•
Lawmakers	•						•	•	0		•			•			•
Media	•							•			•						•
Public	•																•
State Agencies	•						•	•									•
Client Funds	•	0					•	•	0		•		•				•
Fund Managers		0					•	•									•
State Agencies	•						•	•			•						•
In-state banks								•									•
Peers				•			•	•	0								•
Industry Groups				•				•									-
Employers	•	•	•	•				•		•	•	•	•	•		•	•
Members, active	•	•	•	•			•	•		•		•	•	•		•	•
Members, inactive	•	•	•	•			•	•		0		•	•	•		•	•
Members, retirees	•	•	•					•		0						•	•
State Agencies		•		•				•			•						•
Peers				•				•									•
Industry Groups				•				•			•						•

8-STEP COMMUNICATION MODEL







STRATEGIC COMMUNICATIONS PLAN



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EXECUTIVE SUMMARY

The Retirement and Investment Office's (RIO) Strategic Communications Plan was developed by the communications and outreach director using feedback gathered from stakeholders and input from the executive team.

The plan is focused on four main goals.

- 1. Build brand awareness increase stakeholder knowledge of the agency and the services it provides to its investment and pension fund customers.
- 2. Evaluate and develop or improve the communications tools used to help stakeholders understand both RIO's day-to-day and strategic communications.
- 3. Develop and coordinate the delivery of messages to stakeholders regarding TFFR's new pension administration system, set to launch in fall 2024.
- 4. Support the growth of the investment services division including the hiring and development of an in-state investment team in summer 2024.

The plan identifies RIO's target audiences, the form communications take, and the channels used. It also prioritizes communications projects and identifies how success will be measured.

The intention of the plan is to guide RIO's communications to ensure they are purposeful. It will be updated and refined as implementation details, stakeholder concerns and available resources are determined.

i

OVERVIEW

Agency Background

North Dakota's Retirement and Investment Office (RIO), as stated in <u>NDCC § 54-52.5</u>, coordinates the activities of the State Investment Board (SIB) and the Teachers' Fund for Retirement (TFFR).

In addition to being the oversight board for RIO, the SIB is responsible for the investment of the assets of the Legacy Fund, a sovereign wealth fund, and the pension and insurance funds listed in NDCC § 21-10-06. Subject to agreement with the North Dakota Industrial Commission, the SIB provides investment management services to and manages money for any agency, institution, or political subdivision of the state. Currently, the SIB is responsible for 28 client funds with assets under management of approximately \$20 billion.

The TFFR board of trustees has statutory responsibility for a retirement program for more than 25,000 North Dakota educators of whom approximately 11,800 are active members employed by public schools and state institutions. NDCC § 15-39-1 contains the statutory language governing the fund. It is supplemented by ND Admin. Code Title 82.

Mission Statement

To provide prudent and transparent investment services for our client funds and support North Dakota public school educators with responsible benefit administration.

Vision Statement

To be recognized as a trusted and innovative provider of investment and pension services.

Core Values

Integrity - We value honesty and are committed to doing what's best for our customers.

Accountability - We are responsible for our actions and work as a team to produce the desired outcomes.

Service - We care about the people we serve and take time to understand their unique needs.

Communications Statement

RIO is committed to and actively pursues the timely dissemination of accurate information regarding agency and board activities and actions to our stakeholders.

The communications and outreach director works closely with the executive team and the agency's program managers to implement and maintain a regular and active flow of information of scheduled events, activities, and announcements.

The communications and outreach director also acts as the agency's public information officer, and understands this function, especially as it relates to the media, helps to build rapport and trust, and positions RIO as a thought leader, readily available to engage.

Plan Principles

- 1. A communication plan's goals should support the agency's goals.
- 2. A plan should be research-based, using input from stakeholders to develop messages and materials that demonstrate an understanding of the issues and audiences.

- 3. It should be intended primarily for the stakeholders who are most affected by the agency's actions.
- 4. Relevant stakeholder thoughts and expertise should be sought in a plan's development.
- 5. It should be expected to produce results for all the relevant stakeholders.
- 6. Monitoring should be used to improve the communications plan.

AUDIENCE(S)

Successful communication encourages growth and development. It helps the agency to retain existing and to attract new clients, employees, and supporters.

Internal Stakeholders

Internal stakeholders have the closest tie to the agency and the most influence on its identity. It is imperative that their messages are consistent when interacting with external audiences. These stakeholders include:

- Board and committee members.
- Employees.

External Stakeholders

External stakeholders shape opinions of the agency and its programs. By consistently sharing information through these groups, RIO creates ambassadors who market the agency. These stakeholders include:

- Agency
 - Lawmakers state legislators and congressional delegation.
 - Media local and industry.
 - Public
 - o State agencies (i.e., Governor's office and Office of Management and Budget).
- State Investment Board
 - Client funds.
 - Fund managers.
 - State agencies (i.e., Bank of North Dakota, Commerce, Treasurer, Securities, Trust Lands and Workforce Safety & Insurance).
 - In-state banks.
 - Peers (i.e., investment boards in other states).
 - o Industry groups associations.
- Teachers' Fund for Retirement
 - Employers school administrators, business managers, human resources professionals and board members.
 - Members active, inactive, retired and beneficiaries.
 - o State agencies (i.e., Career and Technical Education, Dept. of Public Instruction).
 - o Peers (i.e., retirement systems in other states).
 - Industry groups associations and unions.

Audience Analysis

Audiences have different levels of importance. Primary audiences have the greatest need to receive and understand agency or division messages. Secondary audiences are important, but not primary. Other audiences are nice to have, but not essential.

Division	Primary	Secondary	Other
Agency	Board/committee members	Media	Peers
	Employees		Public
	Lawmakers		State agencies
SIB	Board/committee members	Industry groups	Peers
	Client funds	In-state banks	Public
	Employees	Media	State agencies
	Fund managers	Service providers	_
	Lawmakers	•	
TFFR	Board/committee members	Industry groups	Peers
	Business partners	Media	Public
	Employees	Service providers	State agencies
	Lawmakers	•	
	Members		

MESSAGES

Key messages include answers to WHAT, HOW, and WHY as described below:

- WHAT: A successful "what" statement delivers a clear, comprehensive, and understandable narrative of the action that has taken or will take place.
- HOW: Demonstrate the way assistance and capacity building efforts are implemented and the value of an activity's implementation.
- WHY: The "why" message helps stakeholders understand why they should care, how they benefit.

General messages play a role in increasing the agency's profile and how it assists client funds and TFFR members.

Agency

North Dakota's Retirement and Investment Office was established in 1989 to coordinate the activities of the State Investment Board and the Teacher's Fund for Retirement.

An agency of the State of North Dakota, the Retirement and Investment Office administers a pension program for public school educators and manages a sovereign wealth, and insurance and pension fund investments for other government agencies.

Investment

In 2010, State Investment Board's assets under management were about \$4 billion. As of June 30, 2023, the investment's market value was approximately \$20 billion. The growth has led the Retirement and Investment Office to add more investment strategies and issue more complex mandates, creating a need for more staff.

The State Investment Board (SIB) has statutory responsibility for the administration of the investment program of several funds including the Teachers' Fund for Retirement, the Public Employees Retirement System, and the Legacy Fund, a sovereign wealth fund supported by

petroleum tax revenues. The SIB also maintains contractual relationships for investment management with certain political subdivisions.

All funds invested under the direction of the State Investment Board (SIB) follow the 'Prudent Investor Rule.' Investments are managed exclusively in the interest of meeting the funds' individual objectives. Professional investment managers, consultants and custodians are retained to assist in the implementation of the investment program. The Retirement and Investment Office assists the SIB in carrying out its responsibilities for investment program administration.

The State Investment Board is responsible for administration of the Legacy Fund. The Legacy and Budget Stabilization Fund Advisory Board serves as the client board and determines the fund's asset allocation.

Known as the "people's fund," North Dakota's Legacy Fund was created by a constitutional amendment that was initiated by the state legislature and approved by voters in November 2010. It is funded with petroleum production and extraction taxes.

Thirty percent of the taxes on petroleum produced and extracted in North Dakota are transferred to the Legacy Fund monthly. At the end of each biennium, fund earnings are transferred to the state's general fund.

Retirement

In fall 2024, RIO will launch MyTFFR, a new self-service portal that allows members to manage a wider range of account transactions online. If you currently have access to TFFR's online member service, your credentials will transfer to MyTFFR. If you don't have access, you can create a login and access the existing system by visiting RIO's website, www.rio.nd.gov, and selecting TFFR Member Login.

The Teachers' Fund for Retirement board has statutory responsibility for a retirement program for North Dakota public school educators.

The Teachers' Fund for Retirement (TFFR) is a qualified defined benefit public pension plan covered under Section 401(a) of the Internal Revenue Code. In simpler terms, TFFR is a tax-exempt pension plan where benefits are defined by state law.

More than 25,000 educators participate in the Teachers' Fund for Retirement's pension program. Approximately 11,800 are active members employed by public schools and state institutions.

Teachers' Fund for Retirement benefit funding comes from three sources: member and employer contributions and investment earnings.

The Teachers' Fund for Retirement plan is funded on an actuarial reserve basis. That is, money is invested for future retirement benefits while members are actively teaching.

GOALS

Agency goals guide day-to-day and long-term decision making. By adhering to and supporting RIO's goals, board and committee members and employees help to ensure that agency resources are deployed strategically to meet its priorities.

RIO's communications goals for the coming year follow:

1. Build brand awareness – increase stakeholder knowledge of the agency and the services it provides to its investment and pension fund customers.

- 2. Evaluate and develop or improve the communications tools used to help stakeholders understand both RIO's day-to-day and strategic communications.
- 3. Develop and coordinate the delivery of messages to stakeholders regarding TFFR's new pension administration system in fall 2024.
- 4. Support the growth of the investment services division including the hiring and development of an in-state investment team in summer 2024.

OBJECTIVES, TACTICS, PRIORITIES AND METRICS

The tactics listed will guide RIO's communication efforts. Success will be measured on both outputs and behavior changes.

The communications and outreach director and the agency's staff retain the right to alter or eliminate tactics based on changing needs and an evolving landscape.

Goal 1: Build Brand Awareness.

Increase stakeholder knowledge of RIO and the services it provides to its investment and pension fund customers.

Objective 1: Improved awareness of agency's role as the SIB and TFFR program coordinator.

Tactic	Priority	Assigned	Metrics and/or Notes
Consistently identify the agency's role as the administrative office for the SIB and TFFR programs in agency communications (i.e., letters, brochures, reports, etc.).	High	Communications director and admin support	Officewide adoption and usage
Establish communication standards to address inconsistent branding, i.e., standardize email signatures, PowerPoint templates, etc.	High	Communications director	Officewide adoption and usage
Improve website content to better describe RIO and the programs coordinated (e.g., the about tab contains more information about boards than the agency).	High	Communications director and admin support	Google analytics, user feedback
Increase board member and employee knowledge of agency happenings by including them in communications distributions (i.e., press releases, newsletters, program updates).	High	Communications director	Feedback and metrics
Coordinate board education program, support the onboarding of new members.	Medium/high	Communications director	Feedback and metrics
Educating lawmakers about the agency's role and its growth in preparation for the 2025 legislative session.	Medium/high	Executive director and communications director	Feedback

Highlight employee	Medium	Executive	Feedback
accomplishments during board,		director and	
committee, and staff meetings.		communications	
		director	

Objective 2: Increased member awareness of the TFFR program, how it works and who administers the program.

Tactic	Priority	Assigned	Metrics and/or Notes
Relaunch member (active and retired) newsletters to provide regular communications about program activity and events.	High	Communications director and retirement services staff.	Feedback and metrics
Update RIO's website content to identify the agency's role, improve TFFR's program descriptions, and balance its presence (e.g., TFFR dominates the website with most of the links and graphics on the home page directed to the program.)	High	Communications director and retirement services staff.	Google analytics, user feedback
Develop quick start guide directed to newer members. Include with enrollment letters and distributed during presentations and at tradeshows.	High	Communications director with support from retirement services staff	Feedback
Redevelop introductory presentation for newer members. Name presentation to better define content. Identify speaking opportunities (i.e., regional and large district in-service events). Also offer a virtual that is recorded and share online and in member communications.	Medium/high	Communications director with support from retirement staff	Feedback
Rework enrollment letter, breaking it down intro a series of shorter communication that introduce the pension program to new members in more easily digestible manner.	Medium/high	Communications director with support from retirement staff	Feedback
Develop a short video introducing the program that can be featured on the website and distributed to school districts for play at inservice events.	Medium	Communications director with support from retirement services staff	Feedback
Initiate and foster relationships with education associations and the teachers' union to ensure their program messaging is consistent with the agency's.	Medium	Communications director with support from retirement services staff	Feedback

Evaluate member handbook (i.e.,	Medium/low	Communications	Feedback
review content and compare to		director with	
peer publications) to improve the		support from	
material provided to members		retirement	
		services staff	

Objective 3: Improved employer awareness of TFFR program requirements.

Tactic	Priority	Assigned	Metrics and/or Notes
Update RIO's website content to identify the agency's role and better describe program requirements.	High	Communications director with support from retirement services staff	Google analytics, user feedback
Update format and promotion of Info Mixers, educational webinar for TFFR employers.	Medium/High	Communications director with support from retirement services staff	Feedback and metrics
Update format and promotion of new business manager workshop, an educational webinar for new TFFR employer staff members.	Medium/High	Communications director with support from retirement services staff	Feedback and metrics
Develop a communication (i.e., a welcome letter) that introduces new business managers to the pension program.	Medium	Communications director with support from retirement services staff	Feedback
Initiate and foster relationships with education associations to ensure messaging is consistent and garner their support in educating about the program.	Medium	Communications director with support from retirement services staff	Feedback
Evaluate employer handbook (review content and compare to peer publications) to improve the materials provided to employers.	Medium/low	Communications director with support from retirement services program mgr.	Feedback

Objective 4: Increased awareness of investment program operations, how it works and who administers the program.

Tactic	Priority	Assigned	Metrics and/or Notes
Improve RIO's website content to identify the agency's role and better describe program activities (e.g., investment division lacks a landing page for the program that describes its work.)	High	Communications director and admin support	Google analytics, user feedback
Relaunch investment newsletter to provide regular	High	Communications director and	Feedback and metrics

communications. Determine audience, distribution, and frequency of publication.		investment division staff.	
Host an investment seminar to educate policy makers, instill confidence in client funds, and add new cliental.	Medium/high	Communications director and investment division staff	Feedback and metrics
Develop a fact sheet about the program.	Medium/high	Communications director and investment division staff	Feedback
Seek out speaking opportunities for staff in order to raise the profile of the program.	Medium	Communications director and investment division staff	Ongoing
Identify investment publications to target for news about division activities.	Medium	Communications director and investment division staff	Ongoing

Goal 2: Evaluate and develop or improve the communications tools used to help stakeholders understand both RIO's day-to-day and strategic communications.

Objective 1: Understand and define opportunities for improvements in both day-to-day and strategic communications. Improve communication processes.

Tactic	Priority	Assigned	Metrics and/or Notes
Send important, widespread communications via GovDelivery (i.e., an email service provider) to allow the office to track metrics that help to determine effectiveness.	High	Communications director and admin support	Feedback and metrics
Update RIO's website structure and improve branding.	High	Communications director and admin support	Successful completion
Develop an intranet site (SharePoint based) that can be used to inform staff of agency activities, host HR policies and other resources.	Medium/high	Executive team and comms director, will require input from NDIT	Feedback and metrics
Incorporate graphics and links into email signatures to promote events and communications.	Medium	Communications director and RIO staff.	Feedback
Evaluate social media options, determine if the office should have a presence. Select appropriate platforms and implement social media plan.	Medium	Communications director	Metrics

Objective 2: Evaluate and update current communications assets and bring them into alignment with the state of North Dakota's brand standard.

Tactic	Priority	Assigned	Metrics and/or Notes
Update RIO's website structure and improve branding.	High	Communications director and admin support	Successful completion
Update board materials and bring on brand.	Medium/high	Communications director and admin support	Successful completion
Evaluate existing print assets (i.e., letterhead, business cards, etc.) and bring on brand.	Medium/high	Communications director and admin support	Successful completion
Incorporate graphics and links into email signatures to promote events and communications.	Medium	Communications director and RIO staff.	Feedback

Goal 3: Develop and coordinate the delivery of messages to project stakeholders regarding TFFR's new pension administration system, aka the Pioneer Project, set to launch in fall 2024.

Objective 1: Create awareness of the new pension administration system (PAS) and onboard employer partners.

Tactic	Priority	Assigned	Metrics and/or Notes
Plan and promote PAS project previews.	High	Communications director	Successful completion
Plan and promote user education.	High	Communications director	Successful completion
Develop message points to ensure staff are sharing the same information.	High	Communications director	Successful completion
Incorporate into employer communications.	High	Communications director	Successful completion
Encourage employers to sign up for ACH in preparation for launch of new system.	High	Communications director with support from retirement services staff	Successful completion

Objective 2: Create awareness of the new pension administration system (PAS) and onboard members.

Tactic	Priority	Assigned	Metrics and/or Notes
Encourage members to establish online accounts in preparation for the transition to the new PAS.	High	Communications director with support from retirement services staff	Successful completion
Develop an onboarding plan for members that includes a MyTFFR quick start guide introducing the new PAS. Include with member enrollment letters, distribute at presentations and tradeshows.	High	Communications director with support from retirement services staff	Successful completion
Plan and promote user education.	High	Communications director	Successful completion
Develop message points to ensure that all staff are sharing the same message.	High	Communications director	Successful completion
Incorporate into member communications.	High	Communications director	Successful completion
Consider securing marketing/vanity URL, e.g., mytffr.nd.gov.	Medium	Communications director and NDIT	Successful completion

Goal 4: Support the growth of the investment services division including the hiring and development of an in-state investment team in summer 2024.

Objective 1: Educate external stakeholders on the value of an internal investment team.

Tactic	Priority	Assigned	Metrics and/or Notes
Develop a communication and/or improve the agency's website to better describe the division's role (i.e., review content and compare to peer organizations).	High	Communications director and investment division staff	Feedback
Host an investment seminar to educate policy makers, instill confidence in client funds, and add new cliental.	Medium/high	Communications director and investment division staff	Feedback and metrics
Devise a method and structure for obtaining department news that can be shared with stakeholders.	Medium/low	Communications director and investment division staff	Feedback
Research and contract for a media tracking service that can be used to monitor investment	Medium/low	Communications director	Successful completion and metrics

services news. (Currently the		
agency is using Google alerts.)		

Objective 2: Support the growth and development of the team, particularly those who working in a hybrid or remote environment. (This objective also aligns with Goal #2, evaluate and develop or improve communications tools.)

Tactic	Priority	Assigned	Metrics and/or Notes
Develop a communication and/or improve the agency's website to better describe the division's role (review content and compare to peer organizations).	High	Communications director and investment division staff	Feedback and metrics
Develop an intranet that can be used to inform staff of agency activities, host HR publications and other resources.	Medium/high	Communications director and admin support	Feedback and metrics
Provide communications support for tracking and publishing/sharing program successes.	Medium	Communications director and admin support	Feedback and metrics

APPENDIX

Research summation

Evaluation tools and resources referenced in the development of the Retirement and Investment Office's Strategic Communications Plan includes the following:

- Teachers' Fund for Retirement member survey conducted by Segal Benz in May 2023.
- Teachers' Fund for Retirement event evaluations, 2022-23.
- Teacher's Fund for Retirement customer surveys, 2022-23.
- State Investment Board client fund evaluations, 2021-23.
- Retirement and Investment Office strategic plan, September 2022.

active

Legend:

8-Step Communication Model

The visual displays a model for carrying out a strategic communications process based on the social marketing approach.

The eight steps are:

1. Assess Current Situation

 Acquire a thorough understanding of the problem, the audience and the action you want the audience to take. Assessing the situation reduces the assumptions and lays a solid foundation to continue the process.

2. Set Communication Goals

 Answer the question: what do you want to accomplish? Once you set your goals, develop specific, measurable, achievable, realistic and timely (SMART) objectives for implementing those goals.

3. Identify Intended Audiences

- Identify the segments of the population you want to target. This will drive the messages, channels and activities you choose for maximum impact.
- Once you identify your audience, go one step further and analyze the audience. When we segment down to a very specific audience, we learn what makes that particular group tick. And we can use that information to create messages and select channels that will align with the needs, beliefs, values, and priorities of our audiences.

4. Develop and Pretest Messages

 Make sure your messages are: easy for your audience to understand; are direct and concise; don't use jargon; and communicate the benefits to your audience.

5. Select Channels and Activities

 Research which communication channels are the most effective to reach your target audience.
 Remember to engage partners as force multipliers. Partnerships with key stakeholders are valuable elements in your ability to communicate with your audiences.

6. Develop an Action Plan

 How will you implement communications strategy?
 Do you have alternatives (backups) in place to implement all steps of the strategy? Did you identify potential risks and contingency plans?

7. Develop and Pretest Materials

 Conduct concept and positioning testing to determine which materials are relevant to the audience; test the materials for memorability, impact, image, persuasiveness and other key attributes; conduct readability testing; consider adding peer or professional review to the materials testing process; conduct test marketing with a small sample of the target audience.

8. Implement, Evaluate and Modify Plan

Review your action plan and modify as needed.
 Obtain any necessary or required approvals.
 Implement the approved plan.

Assess Current Situation Implement, Evaluate, and Modity Plan Bevelop and Pretest Materials Develop and Action Plan Select Champels Select Champels

Source: Federal Emergency Management Agency

TO: SIB

FROM: Jan Murtha, Executive Director

DATE: November 9, 2023

RE: Governance and Policy Review Committee

I. Summary of Actions

The SIB Governance & Policy Review Committee (GPR Committee) met on November 9, 2023, to discuss the following:

- SIB Governance Manual Review Project
- Strategic Planning Preparation
- · Legislative Study and Initiative Implementation Update

The Committee took the following actions:

- The committee reviewed, discussed and provided staff guidance on proposed changes to Section C of the SIB Governance Manual in accordance with the approved a work plan to conduct a comprehensive review of the SIB Governance Manual for the upcoming fiscal year. The committee is not bringing forward proposed changes at this time and will present all proposed amendments for first reading at the April 2024 SIB meeting, followed by Second Reading and Final Adoption at the May 2024 SIB meeting. This review is necessary given the creation of an internal investment management program and other governance updates.
- Staff presented a time frame and process for updates to the agency strategic plan in preparation for a strategy review session with the Governor's office in 2024. The committee discussed and provided guidance on future initiatives.
- Staff provided an update on participation in legislative studies and a revised time frame and process for the internal investment management initiative.
- Additional information may be found at: <u>State Investment Board Governance & Policy Review</u> Committee | Retirement Investment Office (nd.gov)

BOARD ACTION REQUESTED: Information Only.

TO: SIB

FROM: Scott Anderson, Chief Investment Officer

DATE: November 17, 2023

RE: Investment Committee Update

November 7, 2023, Investment Committee Meeting

The Investment Committee met Tuesday November 7, 2023. The meeting was called to order and there was an acceptance of the agenda followed by an acceptance of the minutes from the October 23, 2023, meeting.

Ms. Neil of Verus and Mr. Anderson presented the Benchmark Memo that describes benchmark recommendations for the strategic asset classes which comprise the asset allocation policies for the respective plans under the SIB's purview. Following the presentation, the Investment Committee approved to recommend approval of the Benchmark Memo- by the full SIB Board.

Mr. Moss and Mr. Ziettlow then provided a Private Equity and Private Real Estate Update. This was followed by a closed session, information only Real Estate Strategy Update.

Lastly, Mr. Posch provided a Machine Learning and Investments presentation that described existing RIO activities, industry trends and potential uses of machine learning in the RIO investment and operational processes.

 $\frac{https://www.rio.nd.gov/sites/www/files/documents/PDFs/SIB\%20Investment/Board/Materials/sibinvestmat20231107.pdf}{}$

BOARD ACTION REQUESTED: Information Only.

TO: State Investment Board

FROM: Sara Seiler, Supervisor of Internal Audit

DATE: November 15, 2023

RE: Internal Audit Activities Quarterly Update

The SIB Audit Committee met on November 14, 2023. The SIB Audit Committee reviewed the first quarter audit activities and update on current audit activities.

The following was presented:

- 1. June 30, 2023 Fiscal Year Financial Statement Audit
 - a. 2023 Financial Statement Audit Results
 - i. Unmodified "clean" opinion
 - ii. No material weaknesses were identified.
 - iii. No significant deficiencies were identified.
 - b. GASB 68 Schedule Audit
 - i. Tested 12 separate employers, 125 total employees tested no findings.
 - ii. Expected to issue final report by December 2023.
- 2. Charters
 - a. Reviewed Internal Audit and Audit Committee charter, recommendations will be coming to the SIB in February 2024.
- 3. Internal Audit Maturity Development
 - a. Reviewed and approved RFP to be issued.
 - i. A special Audit Committee meeting will be held in January 2024 for presentation from finalists.
 - ii. Tentative start date is February 2024
 - b. Approved proposed workplan for IA development.

The following link has the committee materials that were presented for your reference:

https://www.rio.nd.gov/sites/www/files/documents/PDFs/SIB%20Audit/Board/Materials/sibauditmat20231114.pdf

TO: SIB

FROM: Ryan K. Skor, CFO/COO

DATE: November 9, 2023

RE: Quarterly Budget/Expense Report

Enclosed are the following quarterly budget and expense reports for the quarter ended September 30, 2022:

- Budget Appropriation Status Report
- Expenditure Summary Report
- PAS Modernization Project Status Report

Board Action Requested: Board acceptance.

BUDGET APPROPRIATION STATUS

AS OF SEPTEMBER 30, 2023

EXPENDITURES 2023-2025 ADJUSTED **BIENNIUM TO BUDGET** % BUDGET % OF BIENNIUM APPROPRIATION * DATE ACTUAL **AVAILABLE** AVAILABLE REMAINING BUDGET SALARIES AND BENEFITS 8,910,047.00 9,466,367.80 ^ \$ 1,073,378.49 8,392,989.31 88.66% 87.50% **OPERATING EXPENDITURES** 2,869,937.00 4,277,560.00 262,721.34 4,014,838.66 93.86% 87.50% CAPITAL ASSETS 0.00 4,150,213.50 366,176.25 3,784,037.25 91.18% 87.50% CONTINGENCY 200,000.00 200,000.00 0.00 200,000.00 100.00% 87.50% **TOTAL** \$ 11,979,984.00 18,094,141.30 1,702,276.08 16,391,865.22 90.59% 87.50%

^{*} In addition to the capital assets line, the salaries and benefit line includes \$50,000 and the operating expenditure budget includes \$1,407,623 for the TFFR Pension Administration System Project.

[^] The adjusted appropriation for salaries and benefits also includes amounts appropriated during the Legislative Session in relation to the new and vacant FTE funding pool, target market equity, and additional employer retirement funding.

EXPENDITURE SUMMARY

AS OF AND FOR THE QUARTER ENDED SEPTEMBER 30, 2023

CONTINUING APPROPRIATIONS	INVESTMENT	RETIREMENT	QUARTERLY TOTALS	FISCAL YEAR TO - DATE	BIENNIUM TO - DATE
INVESTMENT EXPENDITURES \$	6,689,808_\$	0_\$	6,689,808	6,689,808_\$	6,689,808
MEMBER CLAIMS 1. ANNUITY PAYMENTS 2. REFUND PAYMENTS	0	67,028,368 2,499,770	67,028,368 2,499,770	67,028,368 2,499,770	67,028,368 2,499,770
TOTAL MEMBER CLAIMS	0	69,528,138	69,528,138	69,528,138	69,528,138
OTHER CONTINUING APPROPRIATIONS	99,873	5,281	105,154	105,154	105,154
TOTAL CONTINUING APPROPRIATIONS	6,789,681	69,533,419	76,323,099	76,323,100	76,323,099
BUDGETED EXPENDITURES					
1. SALARIES & BENEFITS					
SALARIES OVERTIME/TEMPORARY TERMINATION SALARY & BENEFITS FRINGE BENEFITS	524,582 2,838 0 172,907	254,550 19,651 0 98,851	779,132 22,488 0 271,758	779,132 22,488 0 271,758	779,132 22,488 0 271,758
TOTAL SALARY & BENEFITS	700,326	373,052	1,073,378	1,073,378	1,073,378
2. OPERATING EXPENDITURES					
DATA PROCESSING TELECOMMUNICATIONS - ISD TRAVEL IT - SOFTWARE/SUPPLIES POSTAGE SERVICES IT - CONTRACTUAL SERVICES EQUIPMENT RENTS AND LEASES BUILDING/LAND RENT & LEASES DUES & PROF. DEVELOPMENT OPERATING FEES & SERVICES REPAIR SERVICE PROFESSIONAL SERVICES INSURANCE OFFICE SUPPLIES PRINTING PROFESSIONAL SUPPLIES & MATERIALS MISCELLANEOUS SUPPLIES IT EQUIPMENT UNDER \$5000 OFFICE EQUIP. & FURNITURE UNDER \$5000 TOTAL OPERATING EXPENDITURES	10,482 1,390 2,243 0 375 783 0 12,615 5,025 2,269 0 0 798 56 46 0 173 0	101,381 1,275 4,273 0 1,058 58,647 0 14,779 7,834 1,808 0 33,816 670 226 566 0 132 0 0	111,863 2,666 6,516 0 1,433 59,430 0 27,394 12,859 4,077 0 33,816 1,467 282 612 0 306 0 0	111,863 2,666 6,516 0 1,433 59,430 0 27,394 12,859 4,077 0 33,816 1,467 282 612 0 306 0 0 262,721	111,863 2,666 6,516 0 1,433 59,430 0 27,394 12,859 4,077 0 33,816 1,467 282 612 0 306 0 0
3. CAPITAL ASSETS	0	366,176	366,176	366,176	366,176
4. CONTINGENCY	0	0	0	0	0
TOTAL BUDGETED EXPENDITURES	736,583	965,693	1,702,276	1,702,276	1,702,276
TOTAL EXPENDITURES \$	7,426,391_\$	70,493,831 \$	78,025,376	\$ <u>78,025,376</u> \$	78,025,376

PAS MODERNIZATION PROJECT STATUS

AS OF AND FOR THE QUARTER ENDED SEPTEMBER 30, 2023

PAS PROJECT - UNEXPENDED PORTION CARRIED FORWARD TO 2023-25 BIENNIUM

	2019-2021 Biennium Approved Budget	Carryover to 2023-2025 Biennium	Expenses 2023-2025 Biennium	Remaining Budget
TEMPORARY SALARIES	50,000	50,000	0	50,000
IT - DATA PROCESSING (NDIT PROJECT MGMT)	775,000	596,933	16,858	580,075
PROFESSIONAL SERVICES	1,875,000	810,690	62,568	748,122
CAPITAL ASSETS	6,300,000	4,150,214	366,176	3,784,037
TOTAL PAS PROJECT BUDGET	9,000,000	5,607,837	445,602 *	5,162,235

^{*} The amounts in the 2023-2025 expense column are included in the totals on the Expenditure Summary on the previous page.

TO: TFFR Board of Trustees FROM: Chad Roberts, DED/CRO

DATE: October 26, 2023

RE: TFFR Ends Report – 1st Quarter ending September 30, 2023

This report highlights exceptions to the normal operating conditions of the TFFR program for the period spanning July 1, 2023, through September 30, 2023.

TFFR staff and the PAS vendor completed pilot 3 of the pension system design phase in July of 2023. Pilot 4, the last phase of design was begun in July and is expected to be complete in October of 2023.

Madelynn Nelson, TFFR accounting and business intern for the summer, completed her internship on August 18, 2023.

The TFFR program transitioned from the former actuary, Segal, to the newly selected actuary, GRS, in July. A replication of the FY2022 actuarial report was completed by GRS and the valuation for FY2023 has begun.

The TFFR Retirement Programs Manager and the Communications and Outreach Director staffed a booth at the Governor's Summit on Innovative Education in West Fargo on August 7, 2023.

The TFFR program resumed the publication of an active member newsletter for the first time in three years. The newsletter was sent out electronically using the GovDelivery system in late September. The newsletter will be produced semi-annually.

A Retirement Specialist left the agency in September of 2023 for another opportunity. An internal candidate was promoted into the position from a temporary support position.

Scott Evanoff, a retired teacher from Minot, was appointed by Governor Burgum to fill the TFFR Trustee seat vacated by Mel Olson who stepped down effective June 30, 2023.

Board Action Requested: Board acceptance

TO: SIB

FROM: Jan Murtha, Executive Director

DATE: November 9, 2023

RE: Executive Limitations

Ms. Murtha will provide a verbal update at the meeting on staff relations and strategic planning. Including updates on the following topics:

I. Strategic Planning

RIO executive team members attended the Judicial, Executive, and Legislative (JEL) meeting on October 31, 2023. Information relating to the Governor's expectations regarding the content of strategy review sessions and timeline was provided. RIO staff will begin the strategic planning process in December with the intent to share an updated strategic plan with the Governance and Policy Review committees of both the SIB and TFFR Board in February and the full boards in March. To facilitate the strategic planning process, board and committee members will be sent a brief survey following the November board meetings.

II. New Board & Committee Member Update

Staff proposes that the next in person onboarding meeting be scheduled for Friday, December 15, 2023, at 9:00am in the WSI Board room. A Teams link will be provided for those unable to attend in person. This training would occur at the time normally reserved for the SIB meeting, however, historically the SIB has only met in December when an unanticipated issue has arisen. At this time there is not a need for a regular December meeting, therefore staff proposes the time be utilized for training. Staff has created a survey tool for onboarding sessions that will be sent out after each future session.

III. Retirements/Resignations/FTE's/Temporary Assistance:

Position Title*	Status
Retirement Membership Specialist (temporary)	Re-posted. Unable to fill the position.

^{*}Remaining new FTEs related to the Internal Investment program are expected to be posted in 2024.

IV. Current Project Activities/Initiatives:

- **TFFR Pioneer Project** The TFFR Pioneer Project continues with implementation consistent with the project plan. Currently the project is in an elaboration phase involving review of system components. The amount of time spent on the project by various staff members continues to vary from 5 to 25 hours or more per week.
- **Northern Trust Initiative** In an effort to enhance the infrastructure for the investment program the Investment and Fiscal teams continues to coordinate with Northern Trust for additional functionality/capabilities.
- Audit Consultant Report: Staff has created an Executive Steering committee comprised of the ED, CFO/COO, and IA Supervisor to oversee a project to implement recommendations from Weaver Consulting. A project plan for implementing the recommendations will be provided to the Audit Committee in November.
- Compensation Study RFP: An RFP for a Compensation Study was issued for consultant services necessary to prepare and present an incentive compensation plan for approval to the Board and develop compensation goals for agency positions. Staff finalized the contract and conducted a kick-off meeting. A final presentation will be made to both the ERCC and full SIB in February.
- Investment Program Software Solutions: NDIT has determined that the investment software solution to provide the necessary infrastructure for internal investment management qualifies as a large IT project. State procurement has determined that RIO's exemption from procurement processes does not apply to this project. RIO staff is working with NDIT and procurement through their process, including the creation of an executive steering committee (ESC), and project charter. The ESC is tentatively scheduled to meet for the first time by the end of November.

V. Board & Committee Presentations October 28, 2023 through November 17, 2023.

Staff attended/provided or is scheduled to attend/provide the following presentations to Boards and Committees during the above referenced time period:

- Board/committee education session 10/30/23
- JEL Leadership meeting 10/31/23
- BND Interim Study Workgroup Discussion 11/1/23
- SIB Investment Committee 11/7/23
- TFFR GPR Committee 11/7/23
- BND Interim Study Steering Committee Discussion 11/9/23
- SIB GPR Committee 11/9/23
- Cash Management Study 11/13/23
- SIB Audit Committee 11/14/23
- Retirement Committee (Legislature) 11/15/23
- Employee Benefits Programs Committee (Legislature) 11/16/23
- TFFR Board meeting 11/16/23
- SIB meeting 11/17/23

VI. Awards and 2023 Engagement Survey Results

RIO has received the Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association for fiscal year ended 2022. In addition, the TFFR program has received the Public Pension Standards Award for Funding and Administration from the Public Pension Coordinating Council for fiscal year ended 2023. The awards are included for your reference.

Further, please find following a preview of the 2023 Engagement Survey results for RIO. RIO saw statistically significant increases in five areas with a mean of 4.55 on a 5 point scale.



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

North Dakota Retirement and Investment Office

For its Annual Comprehensive Financial Report For the Fiscal Year Ended

June 30, 2022

Executive Director/CEO

Christopher P. Morrill



Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2023

Presented to

North Dakota Teachers' Fund for Retirement

In recognition of meeting professional standards for plan funding and administration as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA) National Conference on Public Employee Retirement Systems (NCPERS) National Council on Teacher Retirement (NCTR)

> Alan H. Winkle Program Administrator

alan Allinble

Employee Engagement

Q12+ Engagement Survey trending - Regular staff -October 2023

Oct 16, 2023 - Nov 06, 2023

Reporting Group: Direct | Agency - 19000



Q¹² Mean

The Gallup Q¹² score represents the average, combined score of the 12 elements that measure employee engagement. Each element has consistently been linked to better business outcomes.

ENGAGEMENT MEAN

4.55

TRENDED MEAN

Change From Last Mean: 0.13 4.06 | 4.22 | 4.42 | 4.55

MEAN PERCENTILE RANK

33

Database: Gallup Overall

RESPONDENTS

22

ENGAGEMENT INDEX

×

Gallup Q¹² Items

Questions	Respondents	Current Mean	Last Mean	Change	Mean Percentile Rank - Gallup Overall	Company Overall Current Mean
Q00: Overall Satisfaction	22	4.59	4.17	▲ +0.42	82	3.88
Q01: Know What's Expected	22	4.55	4.25	▲ +0.30	55	4.30
Q02: Materials and Equipment	22	4.64	4.33	▲ +0.31	80	4.15
Q03: Opportunity to do Best	21	4.29	4.17	0.12	57	4.04
Q04: Recognition	22	4.41	4.42	-0.01	79	3.52
Q05: Cares About Me	22	4.82	4.92	-0.10	85	4.22
Q06: Development	22	4.64	4.42	▲ +0.22	83	3.94
Q07: Opinions Count	21	4.48	4.00	▲ +0.48	79	3.69
Q08: Mission/Purpose	22	4.50	4.58	-0.08	73	4.07
Q09: Committed to Quality	22	4.73	4.67	0.06	85	4.06
Q10: Best Friend	21	3.95	3.91	0.04	61	3.33
Q11: Progress	21	4.71	4.58	0.13	83	3.84
Q12: Learn and Grow	22	4.95	4.83	0.12	93	4.06

Gallup Q¹² Items – Trended Details

•		Pa Rep		Past Report		Past Report		Current	
Questions	Trended Mean	3		2		1		Report	
Q00: Overall Satisfaction	3.69 4.00 4.17 4.59	3.69	16	4.00	12	4.17	12	4.59	22
Q01: Know What's Expected	4.06 4.08 4.25 4.55	4.06	16	4.08	12	4.25	12	4.55	22
Q02: Materials and Equipment	4.31 4.33 4.33 4.64	4.31	16	4.33	12	4.33	12	4.64	22
Q03: Opportunity to do Best	4.00 3.92 4.17 4.29	4.00	16	3.92	12	4.17	12	4.29	21
Q04: Recognition	4.06 4.17 4.42 4.41	4.06	16	4.17	12	4.42	12	4.41	22
Q05: Cares About Me	4.19 4.58 4.92 4.82	4.19	16	4.58	12	4.92	12	4.82	22
Q06: Development	4.00 4.17 4.42 4.64	4.00	16	4.17	12	4.42	12	4.64	22
Q07: Opinions Count	3.69 4.00 4.00 4.48	3.69	16	4.00	12	4.00	12	4.48	21
Q08: Mission/Purpose	4.19 4.92 4.58 4.50	4.19	16	4.92	12	4.58	12	4.50	22
Q09: Committed to Quality	4.50 4.42 4.67 4.73	4.50	16	4.42	12	4.67	12	4.73	22
Q10: Best Friend	3.63 3.55 3.91 3.95	3.63	16	3.55	11	3.91	11	3.95	21
Q11: Progress	3.94 4.08 4.58 4.71	3.94	16	4.08	12	4.58	12	4.71	21
Q12: Learn and Grow	4.13 4.42 4.83 4.95	4.13	16	4.42	12	4.83	12	4.95	22

Q¹² Plus - Workplace Demands

Q12 Plus - Workplace Demands

ENGAGEMENT MEAN TRENDED MEAN MEAN PERCENTILE RANK RESPONDENTS

*

Database: Gallup Overall

Questions	Respondents	Current Mean	Last Mean	Change	Mean Percentile Rank - Gallup Overall	Company Overall Current Mean
At work, I am treated with respect.	22	4.68	*	*	73	4.10
My agency cares about my overall wellbeing.	22	4.77	*	*	88	3.81
I have received meaningful feedback in the last week.	22	4.32	*	*	64	3.50

Basic Needs - What do I get?

Employees need to have a clear understanding of what excellence in their role looks like so they can be successful. Groups with high scores on the first element are more productive, cost-effective, creative and adaptive.

ENGAGEMENT MEAN



TRENDED MEAN

Change From Last Mean: +0.30 4.19 | 4.21 | 4.29 | 4.59

MEAN PERCENTILE RANK

68

Database: Gallup Overall

RESPONDENTS

22



Individual - What do I give?

Employees want to know about their individual contributions and their worth to the organization. Manager support is especially important during this stage because managers typically define and reinforce value.

ENGAGEMENT MEAN

4.54

TRENDED MEAN

Change From Last Mean: 0.06 4.06 | 4.21 | 4.48 | 4.54 MEAN PERCENTILE RANK

RESPONDENTS

77

22

Database: Gallup Overall

Questions	Respondents	Current Mean	Last Mean	Change	Mean Percentile Rank - Gallup Overall	Company Overall Current Mean
Q03: Opportunity to do Best	21	4.29	4.17	0.12	57	4.04
Q04: Recognition	22	4.41	4.42	-0.01	79	3.52
Q05: Cares About Me	22	4.82	4.92	-0.10	85	4.22
Q06: Development	22	4.64	4.42	▲ +0.22	83	3.94

Teamwork - Do I belong here?

Employees need to feel like they belong and are a good fit with their team. They need to know they are part of something bigger than themselves. As a manager, encourage opportunities for teamwork and a sense of belonging.

ENGAGEMENT MEAN

4.41

TRENDED MEAN

Change From Last Mean: 0.12 4.00 | 4.22 | 4.29 | 4.41 MEAN PERCENTILE RANK

RESPONDENTS

73

22

Database: Gallup Overall

Questions	Respondents	Current Mean	Last Mean	Change	Mean Percentile Rank - Gallup Overall	Company Overall Current Mean
Q07: Opinions Count	21	4.48	4.00	▲ +0.48	79	3.69
Q08: Mission/Purpose	22	4.50	4.58	-0.08	73	4.07
Q09: Committed to Quality	22	4.73	4.67	0.06	85	4.06
Q10: Best Friend	21	3.95	3.91	0.04	61	3.33

Growth - How can I grow?

Employees need to be challenged to learn something new and find better ways to do their jobs. They need to feel a sense of movement and progress as they mature in their roles.

ENGAGEMENT MEAN

4.83

TRENDED MEAN

Change From Last Mean: 0.12 4.03 | 4.25 | 4.71 | 4.83

MEAN PERCENTILE RANK

RESPONDENTS

91

22

Database: Gallup Overall

Questions	Respondents	Current Mean	Last Mean	Change	Mean Percentile Rank - Gallup Overall	Company Overall Current Mean
Q11: Progress	21	4.71	4.58	0.13	83	3.84
Q12: Learn and Grow	22	4.95	4.83	0.12	93	4.06

Engagement Index

There is a powerful link between employees who are engaged in their jobs and the achievement of crucial business outcomes.

ENGAGEMENT INDEX RATIO

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ENGAGEMENT INDEX

*

Engaged

Employees are highly involved in and enthusiastic about their work and workplace. They are psychological "owners", drive performance, innovation, and move the organization forward.

Not Engaged

Employees are essentially psychologically unattached to their work and company. Because their engagement needs are not being fully met, they're putting time – but not energy or passion – into their work.

Actively Disengaged

Employees aren't just unhappy at work – they are resentful that their needs are not being met and are busy acting out their unhappiness. Every day, these workers potentially undermine what their engaged coworkers accomplish.

Footnotes

Trended Report Details

	Report Name	Date
Current Report	Q12+ Engagement Survey - trending - Regular staff - October 2023	Oct 16, 2023 - Nov 06, 2023
Past Report 1	Q12 Engagement Survey - trending - Regular staff - October 2022	Oct 17, 2022 - Nov 07, 2022
Past Report 2	ND State EE Engagement Survey - trending - Oct. 2021	Oct 18, 2021 - Oct 31, 2021
Past Report 3	North Dakota State Employee Engagement Survey 2020	Nov 30, 2020 - Dec 15, 2020

Respondents can select multiple responses for multi-select questions.

Not shown if n < 4 for Mean, Top Box, Verbatim Responses, and Sentiment, n < 10 for Frequency, or data is unavailable.

Mean Percentile Rank is being calculated against other workgroup scores in the Gallup Overall database.

Meaningful change is represented by a green or red arrow if the score changes by 0.2 or more between survey periods.

Percentile Rank in Gallup Overall Database

< 25th Percentile</p>

25-49th Percentile

■ 50-74th Percentile

■ 75-89th Percentile

■ >= 90th Percentile

*All text analytics are machine generated. Because we use machine learning to generate sentiments, results may not be 100% accurate.

Respondents can select multiple responses for multi-select questions.

^{* -} Scores are not available due to data suppression.

^{*}Percent Engaged available when $n \ge 30$. All categories available when $n \ge 100$.

^{* -} Scores are not available due to data suppression.

Thank You