

#### Investment Committee Friday, January 12, 2024, 9:00 a.m.

Virtual Only
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#### **AGENDA**

- I. CALL TO ORDER AND ACCEPTANCE OF AGENDA (Committee Action)
- II. ACCEPTANCE OF MINUTES (December 8, 2023) (Committee Action)
- III. INVESTMENT STRATEGY REVIEW (60 minutes) (Information) Mr. Anderson (Break)
- IV. CONSULTING STRATEGY (30 minutes) (Information) Mr. Anderson
- V. PRIVATE MARKET MANAGER RECOMMENDATION<sup>1</sup> (30 minutes) (Committee Action) Mr. Moss and Mr. Ziettlow
- VI. DISCUSSION
- VII. ADJOURNMENT

<sup>&</sup>lt;sup>1</sup> Executive Session pursuant to N.D.C.C. 44-04-19.2, 44-04-18.4 (2)(a) and NDCC 44-04-18.4(2)(d) to review and discuss confidential commercial information and trade secrets.

## STATE INVESTMENT BOARD INVESTMENT COMMITTEE MEETING MINUTES OF THE DECEMBER 8, 2023, MEETING

**MEMBERS PRESENT:** Thomas Beadle, State Treasurer, Chair

Joseph Heringer, Trust Lands Commissioner, Vice Chair

Scott Anderson, Chief Investment Officer Eric Chin, Deputy Chief Investment Officer Dr. Prodosh Simlai, External Representative Dr. Ruilin Tian, External Representative

**STAFF PRESENT:** Derek Dukart, Investment Officer

Jennifer Ferderer, Fiscal Investment Admin

Missy Kopp, Executive Assistant George Moss, Sr. Investment Officer Jan Murtha, Executive Director Matt Posch, Sr. Investment Officer

Emmalee Riegler, Procurement/Records Coordinator Ryan Skor, Chief Financial Officer/Chief Operating Officer

Nitin Vaidya, Chief Risk Officer

Jason Yu, Risk Officer

Lance Ziettlow, Sr. Investment Officer

GUESTS: Alexander Browning, Callan

Members of the public

#### **CALL TO ORDER:**

Treasurer Beadle called the State Investment Board (SIB) Investment Committee (IC) meeting to order at 9:08 a.m. on December 8, 2023. The meeting was held virtually.

The following Investment Committee members were present representing a quorum, Mr. Anderson, Treasurer Beadle, Mr. Chin, Commissioner Heringer, Dr. Simlai, and Dr. Tian.

#### **AGENDA:**

The agenda was considered for the December 8, 2023, meeting.

IT WAS MOVED BY MR. CHIN AND SECONDED BY DR. TIAN AND CARRIED BY A VOICE VOTE TO APPROVE THE AGENDA FOR THE DECEMBER 8, 2023, MEETING AS DISTRIBUTED.

AYES: MR. ANDERSON, TREASURER BEADLE, MR. CHIN, COMMISSIONER HERINGER, DR. SIMLAI, DR. TIAN.
MOTION CARRIED

#### **MINUTES**:

The minutes were considered for the October 23, 2023, meeting and for the November 7, 2023, meeting.

IT WAS MOVED BY MR. ANDERSON AND SECONDED BY DR. SIMLAI AND CARRIED BY A VOICE VOTE TO APPROVE THE MINUTES FOR THE OCTOBER 23, 2023, AND NOVEMBER 7, 2023, MEETINGS AS DISTRIBUTED.

## AYES: MR. ANDERSON, TREASURER BEADLE, MR. CHIN, COMMISSIONER HERINGER, DR. SIMLAI, DR. TIAN MOTION CARRIED

#### **RISK REVIEW**

Mr. Vaidya and Mr. Yu provided a detailed review of the Risk Analysis, including Country Assessment, Risk Exposures, Investment Systems Acquisition, and the Annual Compliance Review.

Mr. Vaidya provided information on the Country Assessments of China and India and how they compare to other countries. He noted RIO's use of both quantitative risk models and qualitative risk analysis when analyzing scores.

Mr. Vaidya provided the next steps in Risk Exposures, including the continued data verification and validation to ensure accurate reports.

Mr. Vaidya provided information for the Investment Systems Acquisition, including a progress update on the RIO Investment IT Systems Project. The Executive Steering Committee has been formed and the charter has been approved, with an expected total cost of \$950,000-\$1.9 million.

Lastly, Mr. Yu provided insight to the Annual Compliance Review, including the future developments to the RIO investment team, including an Internal Direct Investment Team (IDIT) and a compliance role. The IDIT will necessitate additional rules implementation on the new OEMS platform and will have the ability to trade under strict monitoring. The compliance role will need to provide an effective program to monitor compliance with state and client requirements, as well as rule definitions, and employee compliance.

The Board recessed at 10:32 a.m. and reconvened at 10:38 a.m.

#### PUBLIC MARKETS FUND MANAGEMENT PART II AND HIGH YIELD STRATEGY

IT WAS MOVED BY COMMISIONER HERINGER AND SECONDED BY DR. TIAN AND CARRIED BY A ROLL CALL VOTE TO ENTER INTO EXECUTIVE SESSION TO REVIEW AND DISCUSS CONFIDENTIAL COMMERCIAL INFORMATION AND TRADE SECRETS PURSUANT TO NDCC 44-04-19.2, 44-04-18.4 (2)(a) AND 44-04-18.4 (2)(d).

AYES: MR. CHIN, COMMISIONER HERINGER, DR. TIAN, MR. ANDERSON, DR. SIMLAI, AND TREASURER BEADLE

NAYS: NONE MOTION CARRIED

The executive session started at 10:41 a.m. and ended at 11:41 a.m. and was attended by Committee members, RIO staff, and Mr. Browning.

#### INTERNAL DIRECT INVESTMENT COMPLIANCE CONSULTANT AND GENERAL CONSULTANT RFP

Mr. Anderson provided an update regarding two upcoming RFPs relating to advisory services.

The first for an internal direct investment compliance consultant to assist staff in building a larger compliance framework applicable to an internal direct strategy. Since internal direct strategies will be implemented incrementally, staff recommends a multi-year project-based consulting relationship. After discussion, the committee provided direction for staff to proceed with the RFP and have finalists present to the committee.

The second for a general consultant with a possible unbundling of some consulting services. Discussion followed. The committee requested staff develop a plan for future consulting relationships. Additionally, staff should prepare a draft of the general consultant RFP for committee review and discussion.

IT WAS MOVED BY DR. TIAN AND SECONDED BY COMMISSIONER HERINGER AND CARRIED BY A ROLL CALL VOTE FOR APPROVAL OF STAFF PROCEEDING WITH THE INVESTMENT COMPLIANCE CONSULTANTS RFP.

AYES: COMMISIONER HERINGER, MR. ANDERSON DR. SIMLAI, MR. CHIN, DR. TIAN, AND TREASURER BEADLE

NAYS: NONE MOTION CARRIED

#### <u>ADJOURNMENT</u>

With no further business to come before the Investment Committee, Treasurer Beadle adjourned the meeting at 12:05 p.m.

Prepared by:

Jennifer Ferderer, Assistant to the Board

## INVESTMENT STRATEGY REVIEW

## THE MARKET



## PERFORMANCE – BENCHMARK INDICES

Summary of Returns											
N	November 30, 2023										
Benchmark Indices					10 Yr						
(% change, annualized)	YTD	1 Yr	5 Yr	10 Yr	Volatility						
Russell 1000	20.6%	13.6%	12.2%	11.6%	17.9%						
Russell 2000	4.2%	-2.6%	4.8%	6.1%	22.5%						
S&P 500	20.8%	13.8%	12.5%	11.8%	17.7%						
MSCI ACWI IMI Net	15.5%	11.1%	8.7%	7.4%	14.3%						
MSCI World ex US	11.8%	11.3%	6.2%	3.9%	14.3%						
MSCI Emerging Markets	5.7%	4.2%	2.3%	2.1%	15.7%						
Bloomberg Aggregate	1.6%	1.2%	0.7%	1.4%	4.5%						
Bloomberg Gov/Credit	2.0%	1.5%	1.1%	1.5%	4.9%						
Bloomberg US High Yield	9.4%	8.7%	4.1%	4.3%	5.2%						
NCREIF Property Index (09/30/2023)	-5.1%	-8.4%	5.3%	7.4%	3.7%						

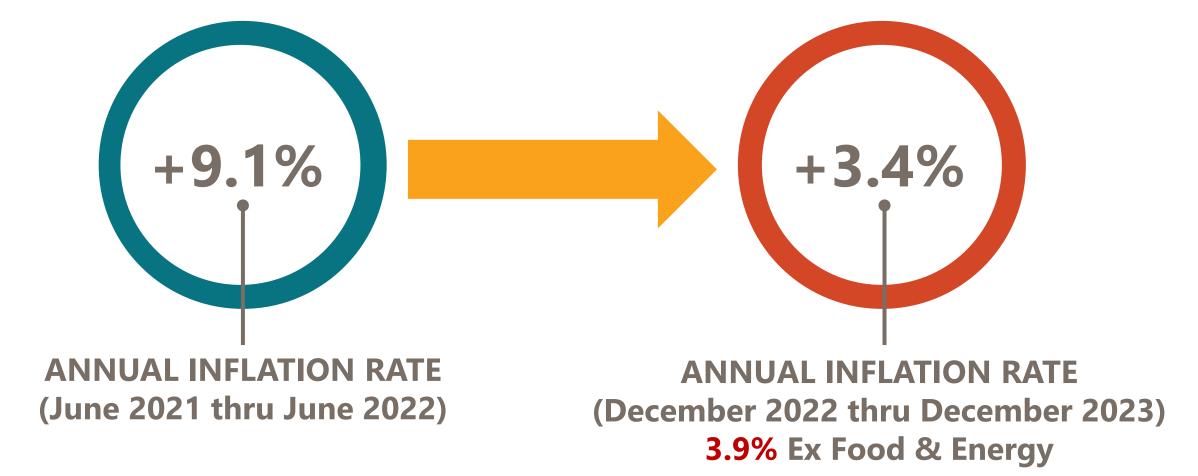
Source: Bloomberg

#### PERFORMANCE – BENCHMARK INDICES

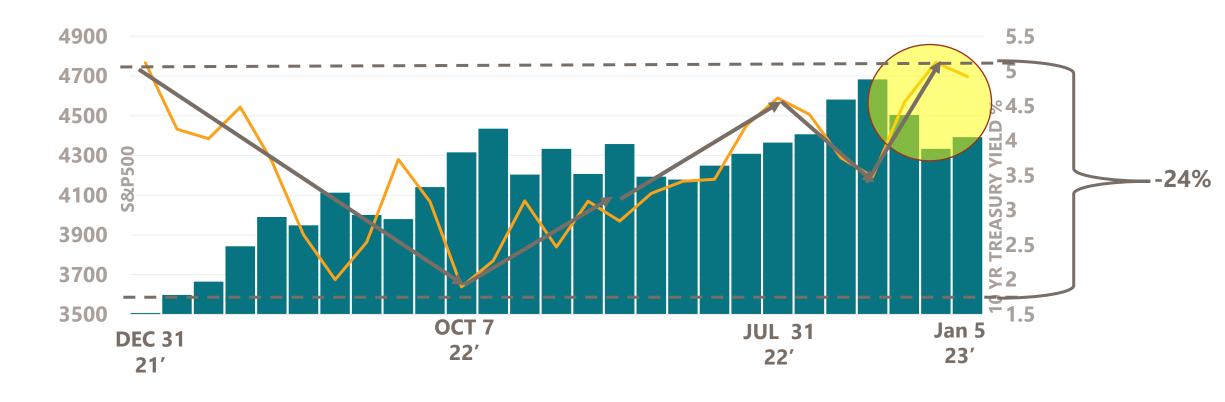
Summary of Returns										
January 05, 2024										
Benchmark Indices					10 Yr					
(% change, annualized)	YTD	1 Yr	5 Yr	10 Yr	Volatility					
Russell 1000	-1.6%	25.5%	14.9%	11.7%	17.9%					
Russell 2000	-3.7%	13.1%	8.6%	6.8%	22.6%					
S&P 500	-1.5%	25.4%	15.1%	12.0%	17.7%					
MSCI ACWI IMI Net	-1.7%	19.4%	10.9%	7.7%	14.3%					
MSCI World ex US	-1.2%	15.5%	7.9%	4.3%	14.3%					
MSCI Emerging Markets	-2.1%	4.5%	3.3%	2.7%	15.7%					
Bloomberg Aggregate	-1.2%	3.5%	0.8%	1.7%	4.5%					
Bloomberg Gov/Credit	-1.2%	3.7%	1.1%	1.8%	4.9%					
Bloomberg US High Yield	-1.1%	10.9%	4.9%	4.5%	5.2%					
NCREIF Property Index (09/30/2023)	-5.1%	-8.4%	5.3%	7.4%	3.7%					

Source: Bloomberg

#### HAS INFLATION PEAKED?<sup>1</sup>



## THE S&P500 HAS TRACKED INFLATION EXPECTATIONS<sup>1</sup>



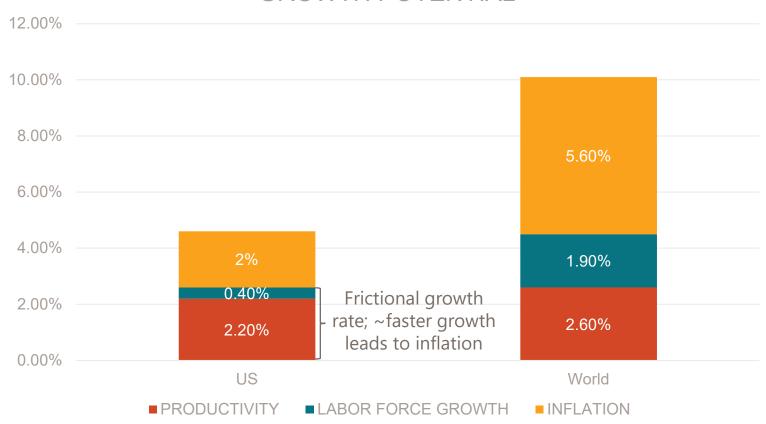
■10 YR TREASURY —S&P 500

#### RECESSIONS AS FED LOWERS RATES



#### DRIVERS OF GDP GROWTH

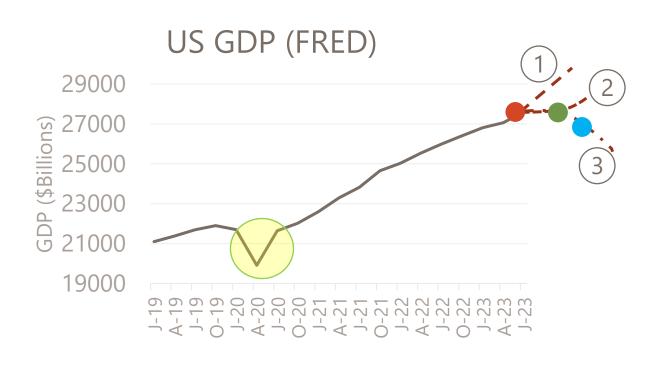




- 1. US productivity based on BLS (2023) stats and global productivity from The Conference Board (2011 -2019)
- 2. US Labor force growth projection from BLS and global labor force growth from the World Bank
- 3. US FED inflation target and 2019 global inflation estimate IMF



#### THE GOLDILOCKS NARRATIVE



- 1 Fed Lowers Early Too Hot
  - GDP growth to fast
  - Tight labor and fast growth cause inflation
  - Moderate equity growth, interest rates rise
- 2 Fed lowers Just Right Goldilocks
  - Reach growth capacity and control inflation
  - Moderate equity markets, normal fixed income markets, low defaults
- (3) Fed lowers too Late- Too Cold
  - Growth collapses into a recession
  - Equity markets perform poorly, fixed income performs poorly as defaults spike
  - Lower rates eventually potentially spur stagflation



# HIGH INFLATION

#### COMPETING NARRATIVES

#### LOW GROWTH

#### HIGHER GROWTH

#### (Hard Landing)

- High levels of Debt Higher Interest Rates
- Tight Labor Market/Labor Force Growth
- Consumer Savings Are Running Out
- Higher Energy Prices From Policy
- Political Risk
- Student Loan Payments Restart Reducing Retail Spending

#### (Soft Landing)

- Housing Inflation Abates
- Lower Interest Rates
- Lower Growth/Lower Energy Prices
- Student Loan Payments Restart Reducing Retail Spending
- Reduced Government Spending
- Political Risk Diminish

#### (No Landing)

- Continued Government Spending
- Tight Labor Market/Labor Force Growth
- Inflation Psychology
- Higher Energy Prices From Policy
- Millennials in Peak Spending Years
- Housing Shortage/Higher Prices
- Continued Government Stimulus

#### (Goldilocks)

- Low Unemployment Buoys Economy
- Lower Interest Rates
- Millennials in Peak Spending Years
- Reduced Government Spending
- Global Political Risks Are Resolved/ Peace Dividend
- Productivity Boom From Al



#### GOOD NEWS <sup>1</sup>

BLOOMBERG AGG YIELD<sup>1</sup>: 4.66%



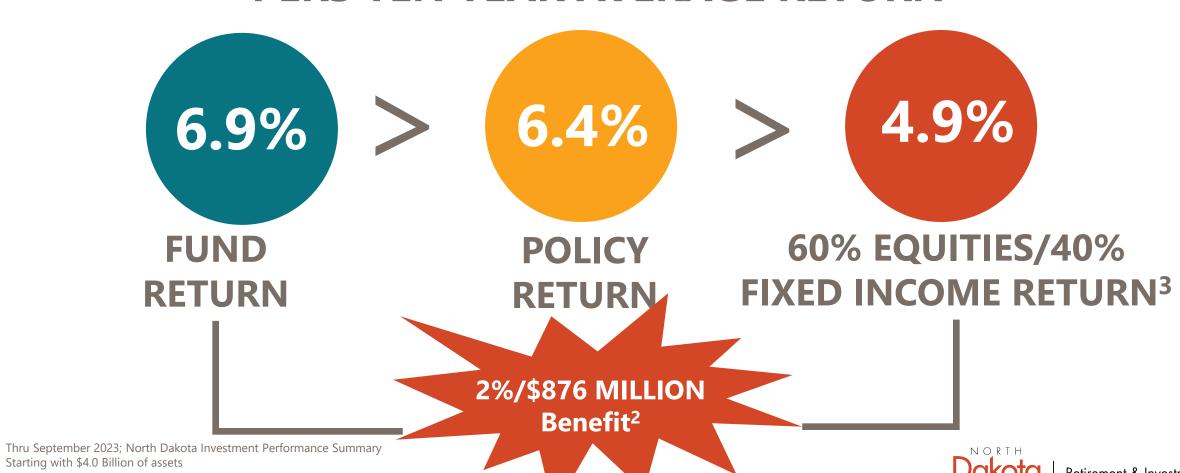


## **PERFORMANCE**



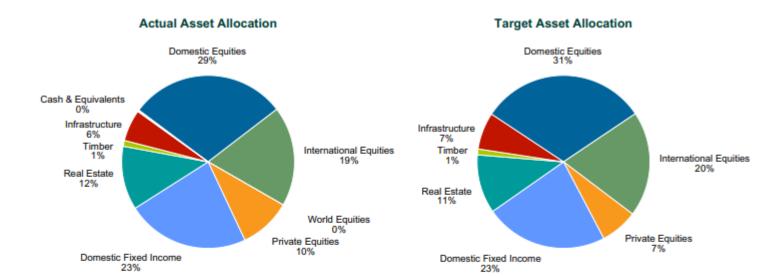
#### INVESTMENT MANAGEMENT BENEFITS

#### PERS TEN YEAR AVERAGE RETURN<sup>1</sup>



- Starting with \$4.0 Billion of assets
- 60% MSCI ACW IMI/40% Bloomberg Aggregate 10 years Scott M Anderson, CFA - January 12, 2024

## **ASSET ALLOCATION**



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s 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%		

1. September 2023 values – Callan

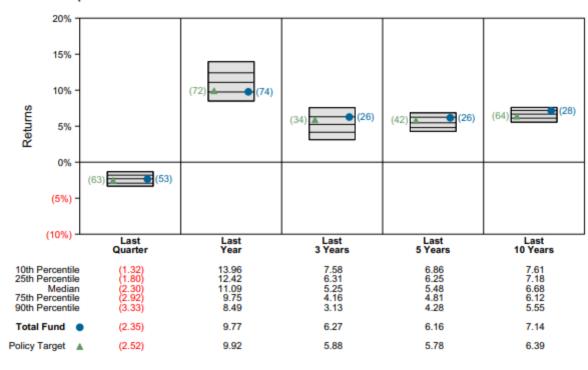
## PERS PERFORMANCE

AS OF NOVEMBER 30, 2023	Year to				Risk
PERS \$4.0 Billion	Date	1 Year	3 year	5 Year <sup>1</sup>	(5 Year)
<b>Total Fund Return - Net</b>	7.8%	5.3%	5.1%	7.4%	10.3%
Policy Benchmark Return	7.7%	5.2%	4.9%	7.2%	10.6%
Total Relative Return <sup>1</sup>	0.1%	0.0%	0.2%	0.2%	

<sup>1.</sup> Corridor benchmark applied only in year-to-date numbers

#### PERS PERFORMANCE

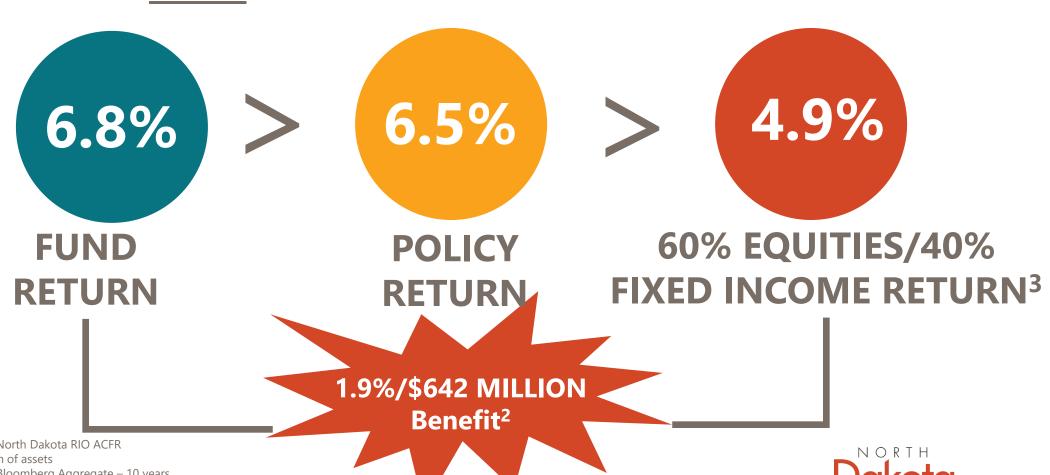
#### **Callan Public Fund Sponsor Database**



<sup>1.</sup> September 2023 values – Callan

#### INVESTMENT MANAGEMENT BENEFITS

#### TFFR TEN YEAR AVERAGE RETURN<sup>1</sup>



<sup>1.</sup> Thru September 2023; North Dakota RIO ACFR

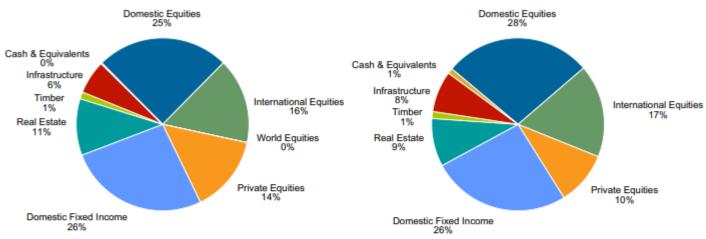
Starting with \$3.1 Billion of assets

<sup>3. 60%</sup> MSCI World/40% Bloomberg Aggregate – 10 years Scott M Anderson, CFA - January 12, 2024

## **ASSET ALLOCATION**







	\$000s	Weight		Percent	\$000s
Asset Class	Actual	Actual	Target	Difference	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%		

1. September 2023 values – Callan



## TFFR PERFORMANCE

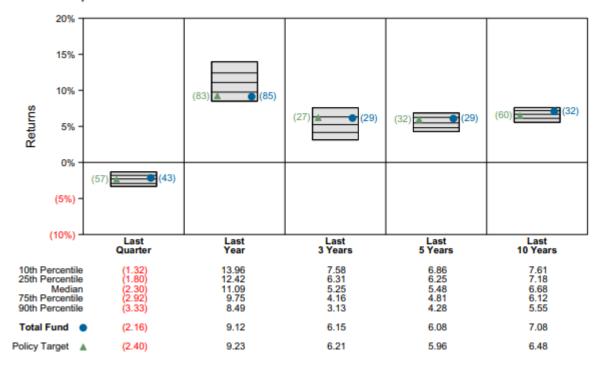
AS OF NOVEMBER 30, 2023	Year to				Risk
TFFR \$3.1 Billion	Date	1 Year	3 year	5 Year <sup>1</sup>	(5 Year)
<b>Total Fund Return - Net</b>	7.3%	5.1%	4.9%	7.2%	10.0%
<b>Policy Benchmark Return</b>	7.1%	4.9%	5.1%	7.3%	10.3%
Total Relative Return <sup>1</sup>	0.2%	0.2%	-0.2%	-0.1%	



<sup>1.</sup> Corridor benchmark applied only in year-to-date numbers

#### PERFORMANCE – TFFR

#### Callan Public Fund Sponsor Database



1. September 2023 values – Callan



#### INVESTMENT MANAGEMENT BENEFITS

#### LEGACY TEN YEAR AVERAGE RETURN<sup>1</sup>

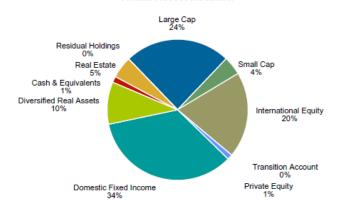
Be Leaendary.



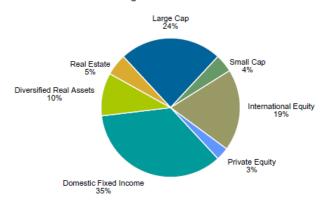
Scott M Anderson, CFA - January 12, 2024

#### **ASSET ALLOCATION**





#### Target Asset Allocation



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Large Cap	2,175,624 384,316	24.3% 4.3%	23.8% 4.2%	0.5% 0.1%	47,992 8,851
Small Cap International Equity	1,760,277	19.7%	19.0%	0.7%	61,747
Transition Account Private Equity	43 106,685	0.0% 1.2%	0.0% 3.0%	0.0% (1.8%)	43 (161,503)
Domestic Fixed Income	3.076.895	34.4%	35.0%	(0.6%)	(51,976)
Diversified Real Assets Cash & Equivalents	862,853 120,768	9.7% 1.4%	10.0% 0.0%	(0.3%) 1.4%	(31,110) 120,768
Real Estate	450.014	5.0%	5.0%	0.0%	3.033
Residual Holdings	2,156	0.0%	0.0%	0.0%	2,156
Total	8,939,632	100.0%	100.0%		

<sup>\*</sup> Current Quarter Target = 35.0% Blmbg:Aggregate, 23.8% Russell 1000 Index, 19.0% MSCI ACWI xUS IMI, 10.0% DRA Weighted Benchmark, 5.0% NCREIF Total Index, 4.2% Russell 2000 Index and 3.0% Private Equity.



<sup>1.</sup> September 2023 values – Callan

## PERFORMANCE – LEGACY

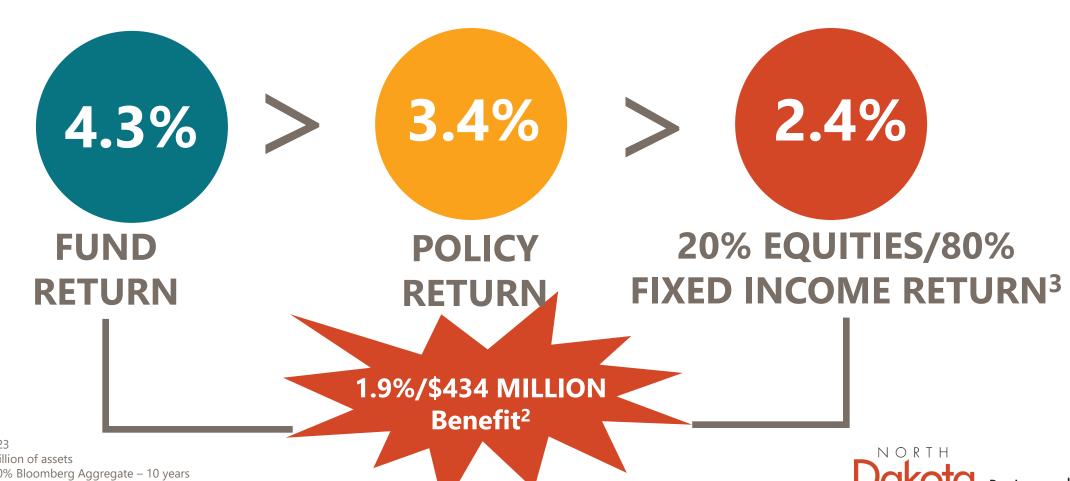
AS OF NOVEMBER 30, 2023	<b>Year to</b>				Risk
LEGACY \$9.4 Billion	Date	1 Year	3 year	5 Year <sup>1</sup>	(5 Year)
<b>Total Fund Return - Net</b>	8.5%	6.3%	2.7%	6.1%	10.9%
Policy Benchmark Return	7.3%	5.0%	1.7%	5.5%	10.7%
<b>Total Relative Return</b>	1.2%	1.2%	1.0%	0.7%	



<sup>1.</sup> Corridor benchmark applied only in year-to-date numbers

#### INVESTMENT MANAGEMENT BENEFITS

#### WSI TEN YEAR AVERAGE RETURN<sup>1</sup>



1. Thru September 2023

Starting with \$2.1 Billion of assets

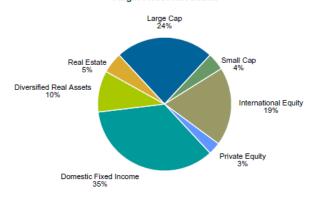
3. 20% MSCI World/80% Bloomberg Aggregate – 10 years Scott M Anderson, CFA - January 12, 2024

## ASSET ALLOCATION





#### Target Asset Allocation



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%		

1. September 2023 values – Callan



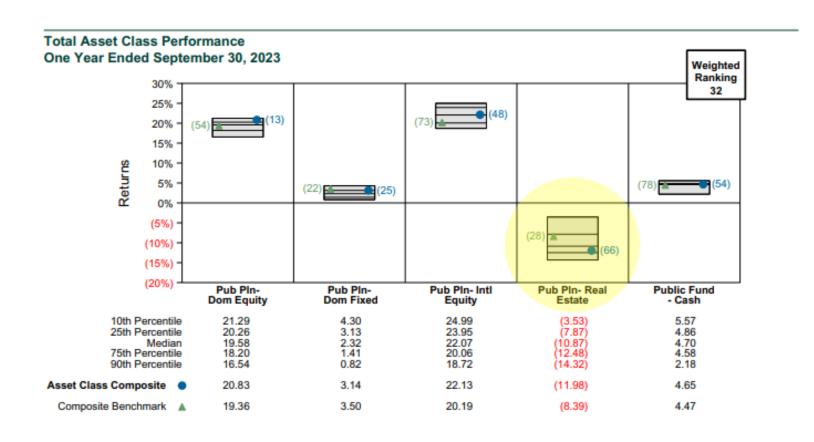
## PERFORMANCE – WSI

AS OF NOVEMBER 30, 2023	Year to				Risk
WSI \$2.1 Billion	Date	1 Year	3 year	5 Year <sup>1</sup>	(5 Year)
<b>Total Fund Return - Net</b>	4.4%	3.3%	-0.6%	3.6%	7.4%
Policy Benchmark Return	3.7%	2.4%	-1.1%	3.2%	6.9%
<b>Total Relative Return</b>	0.7%	0.88%	0.5%	0.5%	



<sup>1.</sup> Corridor benchmark applied only in year-to-date numbers

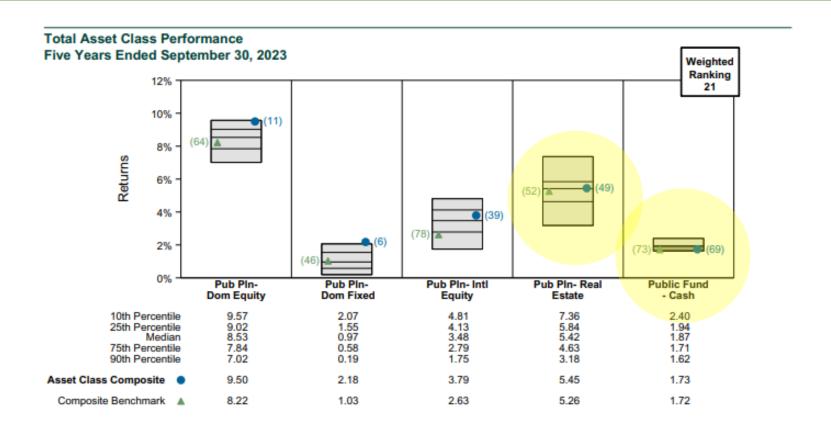
## ASSET CLASS PERFORMANCE





<sup>1.</sup> September 2023 values – Callan

## ASSET CLASS PERFORMANCE



1. September 2023 values – Callan

<sup>\*</sup> Current Quarter Target = 25.2% Russell 1000 Index, 18.7% MSCI ACWI xUS IMI, 17.1% Blmbg:Aggregate, 10.1% NCREIF Total Index, 8.2% Private Equity, 7.4% Blmbg HY Corp 2% Iss Cap, 4.5% Russell 2000 Index, 3.6% CPI All Urban Cons lagged 3 months, 3.6% NCREIF NFI-ODCE Eq Wt Net, 1.2% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.



## PATHWAY TO STRATEGY

#### ROADMAP FOR SUCCESS



#### CAPABILITIES FOR SUCCESS

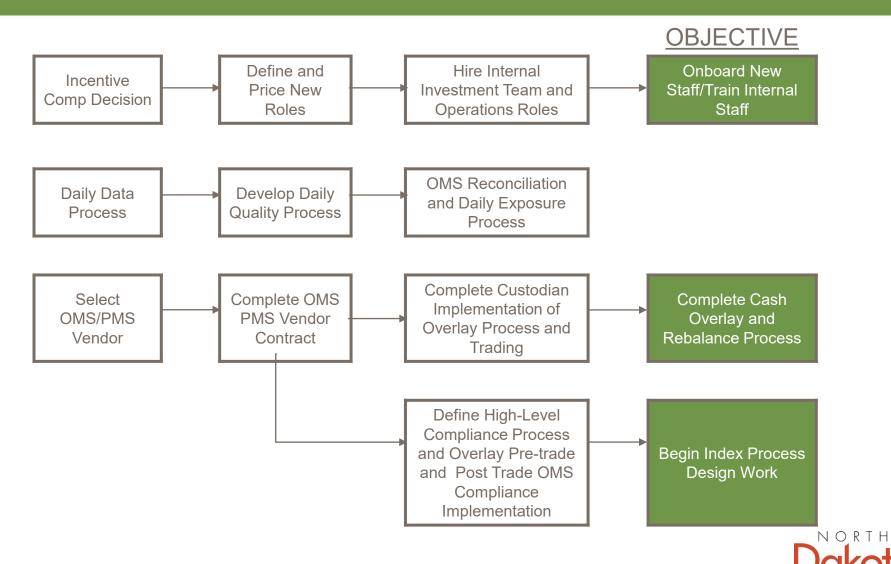
- DELEGATED AUTHORITY
- INCENTIVE COMP SYSTEM
- DIRECT INVESTMENT TEAM
- INDEPENDENT BENCHMARK CONSULTANT
- PRIVATE MARKETS BENCHMARK CORRIDOR
- FUND POOLING

- 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



#### CRITICAL PATHS OF SUCCESS



Be Legendary.

## NEAR TERM TIMELINE OF ACTIVITIES

NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
■ Begin incentive and unclassified role project  ■ Board approves benchmark memo ■ Coordinate hurdle rate discussions with incentive comp and unclassified role project ■ Establish Executive Steering Committee for IT project. ■ Approve Alternative IT Procurement ■ ssue IT RFP	resent private narkets strategy to Legacy Fund  Complete daily allocation process design  Identify vestment role titles and benchmark  Consultant reviews incentive comp prototype	efine incentive comp plan 1.0, Receive and score MS/PMS RFPs elect OMS/PMS endors for call back	<ul> <li>Equity 2.0 proposal approval</li> <li>Begin Fixed Income 2.0</li> <li>Determine Private Markets Harmonization Strategy</li> <li>Issue Compliance Process RFP</li> <li>Issue Performance Consultant RFP</li> <li>Approve incentive comp 1.0 and role comp (ERCC) –</li> <li>OMS/PMS vendor demonstrations</li> <li>Select OMS/PMS vendor</li> <li>Complete daily allocation process design</li> </ul>	<ul> <li>Begin Private Markets Harmonization</li> <li>Define new investment roles and comp</li> <li>Recruit new investment roles</li> <li>New role long list screening</li> <li>OMS/PMS vendor negotiation</li> <li>Sign OMS/PMS contract</li> <li>Begin OMS/PMS incremental implementation</li> <li>Launch data warehouse project</li> <li>Begin to develop data warehouse strategy</li> <li>Complete daily data quality process</li> </ul>	<ul> <li>Begin internal direct overlay and rebalance strategy</li> <li>New role long list screening</li> <li>First round interviews of long list screened candidates</li> <li>Begin compliance process design</li> <li>Develop large IT project data architecture</li> <li>Select data warehouse solution and approach</li> <li>Hire ops roles</li> </ul>	<ul> <li>Approve internal direct overlay and rebalance strategy</li> <li>Approve Private Markets         Harmonization strategy at IC and Board</li> <li>Select and call back second round candidates</li> <li>Interview second round candidates</li> <li>Implement direct overlay and rebalance OMS/PMS requirements</li> <li>Continue compliance process design</li> <li>Complete daily reconciliation design</li> </ul>	<ul> <li>Implement Private Markets Harmonization strategy</li> <li>Equity 2.0 complete</li> <li>Select and call back final round candidates</li> <li>Interview final round candidates</li> <li>Issue Allocation Consultant RFP</li> <li>Finalize compliance process design</li> <li>Begin design custodian feed to data warehouse</li> </ul>

Scott M Anderson, CFA - January 12, 2024

**DOKOTO** Be Legendary.

## NEAR TERM TIMELINE OF ACTIVITIES - CONTINUED

JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB
<ul><li>Implement Private Markets Harmonization</li></ul>	<ul><li>Finalize Private Markets Harmonization</li></ul>	<ul><li>Develop legislative strategy</li><li>Begin legislative</li></ul>	Develop tools and data for indexing Impalement Fixed	<ul><li>Develop tools and data for indexing</li><li>Continue legislative</li></ul>	<ul><li>Approve indexing policy</li><li>Continue legislative</li></ul>	<ul><li>Continue legislative outreach</li><li>Continue recruitment</li></ul>	
strategy  Hire initial internal	strategy  Pilot internal direct	outreach  Begin to develop	Income 2.0  Continue legislative	outreach  Continue recruitment	outreach	<ul><li>Continue data</li></ul>	
<ul><li>direct team</li><li>Continue</li><li>recruitment</li></ul>	cash overlay and rebalance  Test OMS and	index strategy  Scale up overlay and	outreach  Continue recruitment	<ul> <li>Continue data warehouse project</li> </ul>	<ul> <li>Continue data warehouse project</li> </ul>	<ul> <li>Continue data exchange project</li> </ul>	
Onboard initial internal direct team	integration with custodian/external	rebalance strategy  Approve Fixed Income	Continue data warehouse project	<ul> <li>Negotiate data exchange contract</li> </ul>	<ul> <li>Launch data exchange project</li> </ul>	with custodian on a	
<ul> <li>Incorporate compliance into</li> </ul>	traders on internal direct overlay and rebalance pilot	2.0 strategy  Continue recruitment	Select data exchange vendor	<ul> <li>Update compliance for internal indexing</li> </ul>	<ul> <li>Incorporate indexing into OMS implementation</li> </ul>	small pilot	
OMS implementation	<ul> <li>Hire initial internal direct team</li> </ul>	<ul> <li>Continue data warehouse project</li> </ul>			including compliance		
<ul> <li>Finalize OMS integration with custodian</li> </ul>	Continue recruitment Continue data	<ul><li>Begin data exchange RFP</li></ul>					
<ul> <li>Roll-out PMS daily reconciliation</li> </ul>	warehouse project  Begin data exchange						
	project						

## INVESTMENT CONSULTANT STRATEGY



#### **EXISTING CONSULTANT CONTRACTS**

MANDATE		CURRENT CONSULTANT	RENEWAL DATE
Performance and Project Consultant <sup>1</sup>		Callan	July 1, 2024
Compensation Consultant		Mercer	July 1, 2024
Benchmark Hurdle Rate Consulta		Verus	July 1, 2025
→ Performance Consultant <sup>2</sup>	+ 2025?	-	July 1, 2024
Allocation Consultant <sup>3</sup>		-	July 1, 2024
Cost and FTE Benchmark Consultant		CEM Benchmarking	In Discussion
Compliance Consultant Retainer		-	April 2024
Public or Private Market Manager Specialist <sup>5</sup>		_	?
Contracted Consulting Projects		_	?

<sup>1.</sup> The performance and process consulting contract includes quarterly investment performance reports and evaluation of manager performance/attendance at board meetings quarterly; 2 consulting projects; access to specialty consulting staff – can be unbundled into separate performance consulting and project consulting arrangements

<sup>2.</sup> A general performance consulting contract that provides quarterly performance assessment of client funds and managers; potential to provide annual performance and independent performance checks of fiscal staff generated performance

<sup>3.</sup> Potential for a retained allocation consultant that provides for fee allocation project consulting, portfolio construction advice and manager search expertise

<sup>4.</sup> A retained compliance consultant would provide advice and compliance services including legal/regulatory compliance, personal trading policy, trading processes controls/compliance, high level compliance processes

<sup>5.</sup> Potential for public and private market manager specialist consulting contracts

Confidential materials will be sent separately to Committee Members via secure link.