

#### Investment Committee Friday, September 13, 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 (August 9, 2024) (Committee Action)
- III. STRATEGY REVIEW (90 minutes)
  - A. Overall Investment Strategy Mr. Anderson (Information)

(Break)

- IV. MANAGER RECOMMENDATION<sup>1</sup> (30 minutes)
  A. Private Markets Mr. Ziettlow (Committee Action)
- V. PUBLIC MARKETS GUIDELINES<sup>1</sup> (30 minutes) Mr. Chin, Mr. Vaidya (Committee Action)
- VI. MANAGER UPDATE (10 minutes)
  - A. Private Markets Mr. Ziettlow (Information)
- VII. DISCUSSION
- VIII. 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 N.D.C.C. 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 AUGUST 9, 2024, MEETING

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

Joseph Heringer, Trust Lands Commissioner, Vice Chair

Eric Chin, Deputy Chief Investment Officer Pete Jahner, External Representative

Dr. Prodosh Simlai, External Representative

MEMBERS ABSENT: Scott Anderson, Chief Investment Officer

**STAFF PRESENT:** Derek Dukart, Senior Investment Analyst

Jennifer Ferderer, Fiscal Investment Admin

George Moss, Portfolio Manager

Sarah Mudder, Communications & Outreach Director

Janilyn Murtha, Executive Director Matt Posch, Portfolio Manager

Emmalee Riegler, Procurement/Records Mgmt. Coordinator

Michael Schmitcke, Senior Investment Accountant

Nitin Vaidya, Chief Risk Officer

Susan Walcker, Senior Financial Accountant

Jason Yu, Risk Analyst

Lance Ziettlow, Portfolio Manager

**GUESTS:** Members of the public

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

Treasurer Beadle called the State Investment Board (SIB) Investment Committee (IC) meeting to order at 9:02 a.m. on Friday, August 9, 2024. The meeting was held virtually.

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

#### **AGENDA**:

The agenda was considered for the August 9, 2024, meeting.

IT WAS MOVED BY COMMISSIONER HERINGER AND SECONDED BY DR. SIMLAI AND CARRIED BY A VOICE VOTE TO APPROVE THE AGENDA FOR THE AUGUST 9, 2024, MEETING AS DISTRIBUTED.

AYES: MR. CHIN, COMMISSIONER HERINGER, MR. JAHNER, DR. SIMLAI, AND TREASURER

**BEADLE** 

**NAYS: NONE** 

**ABSENT: MR. ANDERSON** 

**MOTION CARRIED** 

#### **MINUTES:**

The minutes were considered for the July 10, 2024, meeting.

IT WAS MOVED BY MR. CHIN AND SECONDED BY DR. SIMLAI AND CARRIED BY A VOICE VOTE TO APPROVE THE MINUTES FOR THE JULY 10, 2024, MEETING AS DISTRIBUTED.

AYES: MR. CHIN, COMMISSIONER HERINGER, MR. JAHNER, DR. SIMLAI, AND TREASURER

BEADLE NAYS: NONE

**ABSENT: MR. ANDERSON** 

**MOTION CARRIED** 

#### **STRATEGY REVIEW**

Mr. Vaidya and Mr. Yu provided the Committee an update on Risk Allocation and Management. Mr. Vaidya presented measures to assess performance and risk, such as portfolio return, portfolio risk, and risk adjusted return. Mr. Yu's presentation focused on market risk monitoring, with four risk indicator details: Macro-economic, systemic financial risk, capital market dynamics, and sentiment. Mr. Vaidya then provided an update on the investment systems strategy update.

Committee discussion followed.

#### MANAGER RECOMMENDATION

IT WAS MOVED BY MR. JAHNER SECONDED BY MR. CHIN AND CARRIED BY A ROLL CALL VOTE TO ENTER INTO EXECUTIVE SESSION PURSUANT TO N.D.C.C. 44-04-19.2, 44-04-18.4 (2)(A) AND N.D.C.C. 44-04-18.4(2)(D) TO REVIEW AND DISCUSS CONFIDENTIAL COMMERCIAL INFORMATION AND TRADE SECRETS.

AYES: MR. CHIN, COMMISSIONER HERINGER, MR. JAHNER, DR. SIMLAI, AND

TREASURER BEADLE

**NAYS: NONE** 

**ABSENT: MR. ANDERSON** 

**MOTION CARRIED** 

The executive session began at 10:01 a.m. and ended at 10:43 a.m. The session was attended by Committee members, Mr. Dukart, Ms. Ferderer, Mr. Moss, Ms. Mudder, Ms. Murtha, Mr. Posch, Mr. Vaidya, Mr. Yu, and Mr. Ziettlow.

IT WAS MOVED BY COMMISSIONER HERINGER AND SECONDED BY DR. SIMLAI AND CARRIED BY A ROLL CALL VOTE APPROVE STAFF RECOMMENDATION TO THE ADJUSTMENTS OF THE PRIVATE MARKET MANAGERS PENDING LEGAL REVIEW AND DIRECT STAFF TO REPORT BACK AT A FUTURE COMMITTEE MEETING.

AYES: COMMISSIONER HERINGER, DR. SIMLAI, MR. CHIN, MR. JAHNER, AND

TREASURER BEADLE

**NAYS: NONE** 

**ABSENT: MR. ANDERSON** 

**MOTION CARRIED** 

The Committee recessed at 10:45 a.m. and reconvened at 10:50 a.m.

#### POOL STRUCTURING

Mr. Chin presented a plan to Implement a new fund structure by combining Legacy and Insurance assets. This would reduce complexity by reducing number of manager accounts and meet minimum AUM for separate accounts, which would benefit Insurance clients.

IT WAS MOVED BY DR. SIMLAI AND SECONDED BY COMMISSIONER HERINGER AND CARRIED BY A ROLL CALL VOTE TO APPROVE STAFF MOVING FORWARD WITH THE PROPOSED PORTFOLIO CHANGES TO THE LEGACY FUND AND INSURANCE ASSETS STRUCTURE.

AYES: DR. SIMLAI, MR. CHIN, COMMISSIONER HERINGER, MR. JAHNER, AND

TREASURER BEADLE

**NAYS: NONE** 

**ABSENT: MR. ANDERSON** 

**MOTION CARRIED** 

#### **PUBLIC MARKETS TOOLS**

Mr. Posch reviewed the tools the public markets team utilizes, including eVestment, Venn, Aladdin, Bloomberg, and an internally developed tool. Mr. Posch presented an overview of each tool and finished his presentation with a demonstration of the internally developed tool.

#### **MANAGER UPDATES**

Mr. Chin provided a public market update that Two Sigma was onboarded. The portfolio will be funded with \$75 million.

#### **OPERATIONS UPDATE**

Mr. Chin informed the Committee of three planned transitions within the next two years and mentioned the benefits of having a transition manager, including a reduction in fees and cost, project management, and risk/exposure management.

IT WAS MOVED BY COMMISSIONER HERINGER AND SECONDED BY MR. JAHNER AND CARRIED BY A ROLL CALL VOTE TO APPROVE STAFF MOVING FORWARD WITH THE SELECTION OF APPROVED TRANSITION MANAGERS.

AYES: MR. JAHNER, MR. CHIN, COMMISSIONER HERINGER, DR. SIMLAI, AND

TREASURER BEADLE

**NAYS: NONE** 

**ABSENT: MR. ANDERSON** 

MOTION CARRIED

#### **ADJOURNMENT**

With no further business to come before the Investment Committee, Treasurer Beadle adjourned the meeting at 11:45 a.m.

Prepared by:

Jennifer Ferderer, Assistant to the Board

### INVESTMENT PERFORMANCE

### THE MARKET



### PERFORMANCE – BENCHMARK INDICES

Summary of Returns										
June 30, 2024										
Benchmark Indices 10 '										
(% change, annualized)	YTD	1 Yr	5 Yr	10 Yr	Volatility					
Russell 1000	14.2%	23.8%	14.6%	12.5%	17.9%					
Russell 2000	1.7%	10.0%	6.9%	7.0%	22.6%					
S&P 500	15.3%	24.5%	15.0%	12.8%	17.7%					
MSCI ACWI IMI Net	10.3%	18.3%	10.3%	8.2%	14.3%					
MSCI World ex US	5.0%	11.2%	6.5%	4.3%	14.4%					
MSCI Emerging Markets	7.5%	12.5%	3.1%	2.8%	15.7%					
Bloomberg Aggregate	-0.7%	2.6%	-0.2%	1.3%	4.7%					
Bloomberg Gov/Credit	-0.7%	2.7%	-0.1%	1.5%	5.0%					
Bloomberg US High Yield	2.6%	10.4%	3.9%	4.3%	5.2%					
NCREIF Property Index (06/30/2024)	-1.2%	-5.5%	3.4%	6.1%	4.1%					

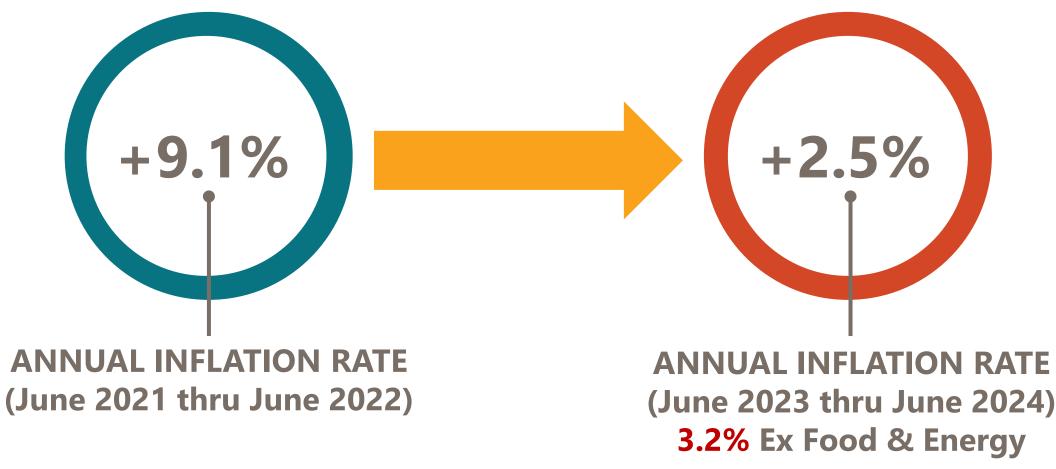
Source: Bloomberg

### PERFORMANCE – BENCHMARK INDICES

Summary of Returns										
September 06, 2024										
Benchmark Indices 10 Yr										
(% change, annualized)	YTD	1 Yr	5 Yr	10 Yr	Volatility					
Russell 1000	13.6%	22.2%	14.1%	12.1%	18.0%					
Russell 2000	4.1%	13.2%	8.2%	7.4%	22.9%					
S&P 500	14.5%	22.8%	14.5%	12.5%	17.9%					
MSCI ACWI IMI Net	10.9%	19.1%	10.6%	8.1%	14.4%					
MSCI World ex US	8.7%	17.5%	7.6%	4.8%	14.5%					
MSCI Emerging Markets	7.1%	12.3%	3.8%	2.2%	15.8%					
Bloomberg Aggregate	4.4%	9.9%	0.2%	1.8%	4.7%					
Bloomberg Gov/Credit	4.3%	9.8%	0.3%	2.0%	5.0%					
Bloomberg US High Yield	6.5%	13.3%	4.4%	4.7%	5.2%					
NCREIF Property Index (06/30/2024)	-1.2%	-5.5%	3.4%	6.1%	4.1%					

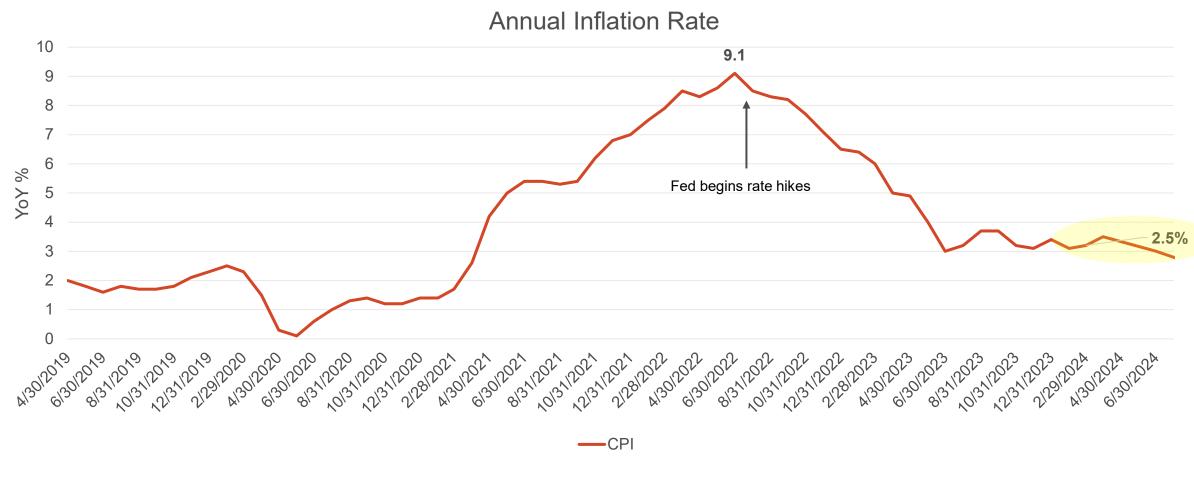
Source: Bloomberg

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

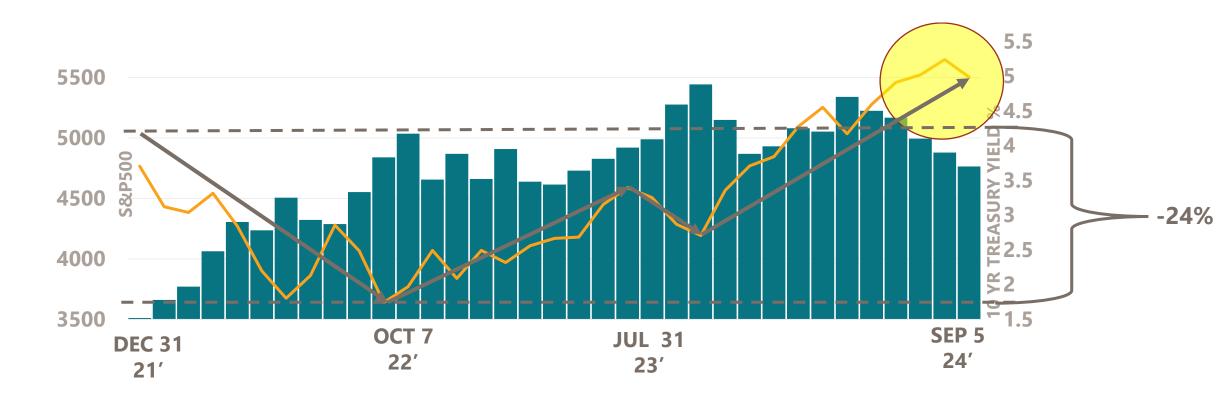


<sup>1.</sup> Bureau of Labor Statistics

### INFLATION PAST 5 YEARS



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



■ 10 YR TREASURY — S&P 500



#### 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
- Real Consumer Income Growth

#### (Goldilocks)

- 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

HIGH INFLATION

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

BLOOMBERG AGG YIELD<sup>1</sup>: 4.21%



1. Fixed income benchmark; yields are the best estimate of future bond returns.

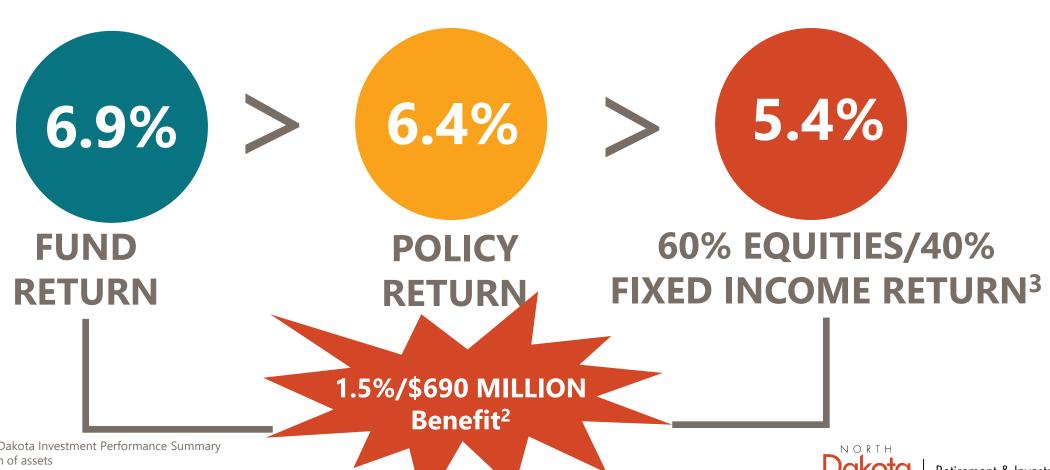


### **PERFORMANCE**



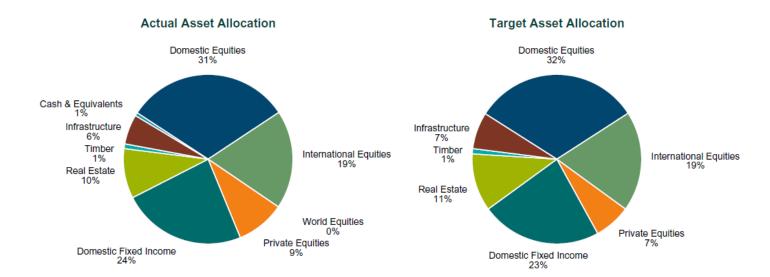
#### INVESTMENT MANAGEMENT BENEFITS

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



- Thru June 2024; North Dakota Investment Performance Summary
- Starting with \$4.3 Billion of assets
- 60% MSCI ACW IMI/40% Bloomberg Aggregate 10 years Scott M Anderson, CFA - September, 13 2024

### **ASSET ALLOCATION**



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equities	1,366,412	31.5%	31.9%	(0.4%)	(17,719)
International Equities	817,574	18.8%	19.1%	(0.3%)	(13,149)
World Equities .	28	0.0%	0.0%	`0.0%	28
Private Equities	402,684	9.3%	7.0%	2.3%	98,685
Domestic Fixed Income	1,028,962	23.7%	23.0%	0.7%	30,106
Real Estate	412,956	9.5%	11.0%	(1.5%)	(64,757)
Timber	37,381	0.9%	1.0%	(0.1%)	`(5,992)
Infrastructure	249,053	5.7%	7.0%	(1.3%)	(55,003)
Cash & Equivalents	27,801	0.6%	0.0%	0.6%	`27,801
Total	4,342,851	100.0%	100.0%		

<sup>1.</sup> June 2024 values – Callan

### PERS PERFORMANCE

AS OF June 30, 2024	Year to				Risk
PERS \$4.3 Billion	Date	1 Year	3 year	5 Year <sup>1</sup>	(5 Year)
<b>Total Fund Return - Net</b>	5.1%	8.9%	3.2%	7.6%	9.9%
<b>Policy Benchmark Return</b>	5.3%	9.4%	3.0%	7.2%	10.2%
Total Relative Return <sup>1</sup>	-0.2%	-0.5%	0.2%	0.4%	

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

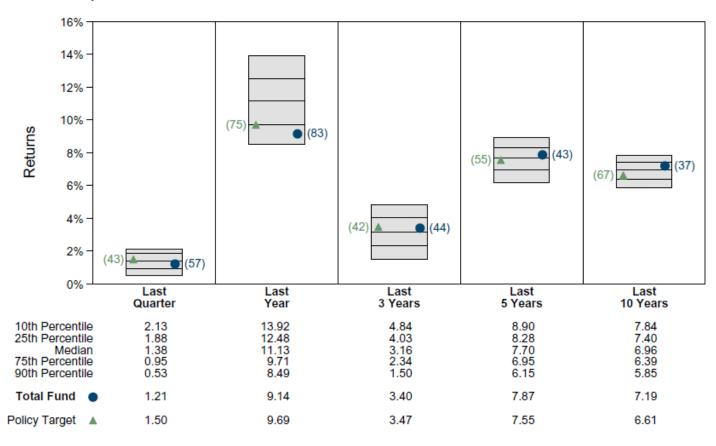
### PERS BY YEAR PERFORMANCE

PERS	Year to				
\$4.3 Billion – June 30, 2024	Date	23′	22'	21'	20'
<b>Total Fund Return - Net</b>	5.1%	11.0%	-10.9%	16.7%	12.2%
<b>Policy Benchmark Return</b>	5.3%	10.9%	-11.2%	15.4%	11.7%
<b>Total Relative Return<sup>1</sup></b>	-0.2%	0.1%	0.7%	1.3%	0.5%



#### PERS PERFORMANCE

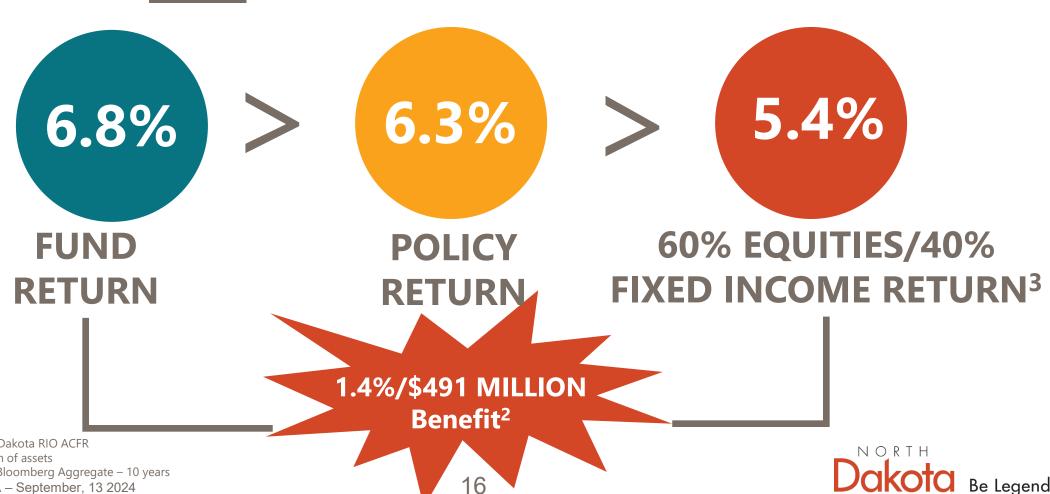
#### Callan Public Fund Sponsor Database



<sup>1.</sup> June 2024 values – Callan

#### INVESTMENT MANAGEMENT BENEFITS

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



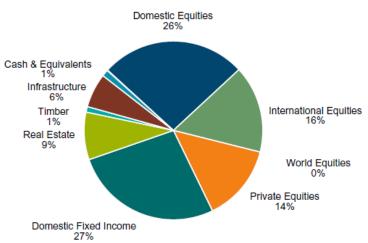
<sup>1.</sup> Thru June 2024; North Dakota RIO ACFR

Starting with \$3.3 Billion of assets

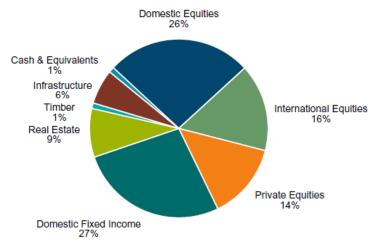
<sup>3. 60%</sup> MSCI World/40% Bloomberg Aggregate – 10 years Scott M Anderson, CFA - September, 13 2024

### **ASSET ALLOCATION**





#### Target Asset Allocation



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equities	865,928	26.3%	26.4%	(0.1%)	(1,821)
International Equities	520,032	15.8%	15.8%	(0.0%)	(771)
World Equities <sup>'</sup>	255	0.0%	0.0%	`0.0%´	255 <sup>°</sup>
Private Equities	456,805	13.9%	13.8%	0.1%	4,312
Domestic Fixed Income	885,992	26.9%	27.0%	(0.0%)	(1,079)
Real Estate	283,270	8.6%	8.8%	(0.1%)	(4,722)
Timber	33,367	1.0%	1.0%	(0.0%)	(243)
Infrastructure	204,024	6.2%	6.3%	(0.1%)	(2 <mark>,929</mark> )
Cash & Equivalents	39,894	1.2%	1.0%	0.2%	6,999
Total	3.289.567	100.0%	100.0%		,

1. June 2024 values – Callan

### TFFR PERFORMANCE

AS OF June 30, 2024	Year to				Risk
TFFR \$3.3 Billion	Date	1 Year	3 year	5 Year <sup>1</sup>	(5 Year)
<b>Total Fund Return - Net</b>	4.6%	8.1%	2.9%	7.4%	9.5%
<b>Policy Benchmark Return</b>	4.8%	8.4%	2.8%	6.9%	9.9%
Total Relative Return <sup>1</sup>	-0.2%	-0.3%	0.1%	0.5%	

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

### TFFR BY YEAR PERFORMANCE

TFFR	Year to				
\$3.3 Billion – June 30, 2024	Date	23′	22'	21'	20'
<b>Total Fund Return - Net</b>	4.6%	10.3%	-10.5%	16.2%	12.1%
<b>Policy Benchmark Return</b>	4.8%	10.0%	-10.6%	15.1%	11.4%
<b>Total Relative Return<sup>1</sup></b>	-0.2%	0.3%	0.1%	1.1%	0.7%



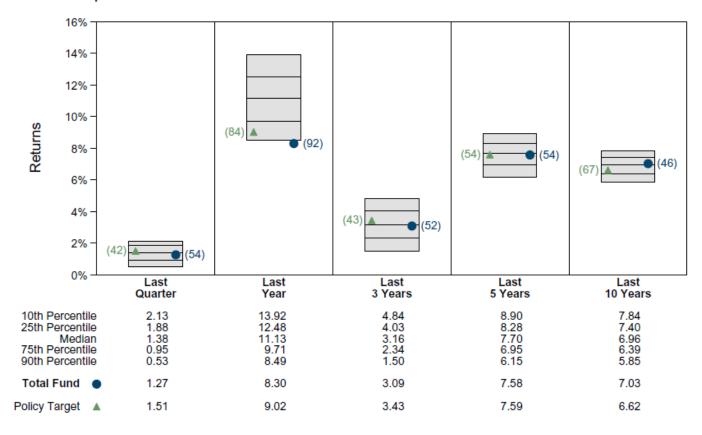
### PENSION COMPOSITE PERFORMANCE

PENSION COMPOSITE <sup>1</sup>	Year to				
\$7.9 Billion – June 30, 2024	Date	23′	22'	21′	20′
<b>Total Fund Return - Net</b>	5.0%	10.7%	-10.7%	16.4%	12.1%
<b>Policy Benchmark Return</b>	5.0%	10.6%	-10.9%	15.2%	11.6%
<b>Total Relative Return<sup>1</sup></b>	0.0%	0.1%	0.2%	0.3%	0.5%

<sup>1.</sup> PERS, TFFR, Bismarck, Employees, Bismarck Police, Grand Forks, Grand Forks Parks, Job Service

#### PERFORMANCE – TFFR

#### Callan Public Fund Sponsor Database



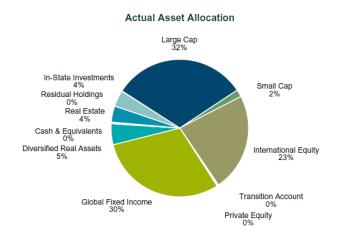
<sup>1.</sup> June 2024 values – Callan

#### INVESTMENT MANAGEMENT BENEFITS

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



### **ASSET ALLOCATION**





Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Large Cap	3,442,417	31.6%	23.4%	8.3%	899,497
Small Cap	179,553	1.7%	4.1%	(2.5%)	(269, 198)
International Equity	2,518,018	23.1%	19.0%	4.1%	451,046
Transition Account	45	0.0%	0.0%	0.0%	45
Private Equity	44,294	0.4%	7.0%	(6.6%)	(717,222)
Global Fixed Income	3,280,187	30.2%	28.5%	1.7%	179,729
Diversified Real Assets	537,291	4.9%	5.0%	(0.1%)	(6,649)
Cash & Equivalents	48,440	0.4%	0.0%	0.4%	48,440
Real Estate	416,358	3.8%	5.0%	(1.2%)	(127,582)
Residual Holdings	1,743	0.0%	0.0%	0.0%	1,743
In-State Investments	410,455	3.8%	8.0%	(4.2%)	(459,849)
Total	10,878,800	100.0%	100.0%		

<sup>1.</sup> June 2024 values – Callan

### PERFORMANCE – LEGACY

AS OF June 30, 2024	Year to				Risk
LEGACY \$10.9 Billion	Date	1 Year	3 year	5 Year <sup>1</sup>	(5 Year)
<b>Total Fund Return - Net</b>	5.6%	10.9%	2.5%	6.6%	10.6%
<b>Policy Benchmark Return</b>	4.9%	9.8%	1.7%	5.8%	10.5%
<b>Total Relative Return</b>	0.7%	1.1%	0.8%	0.8%	



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

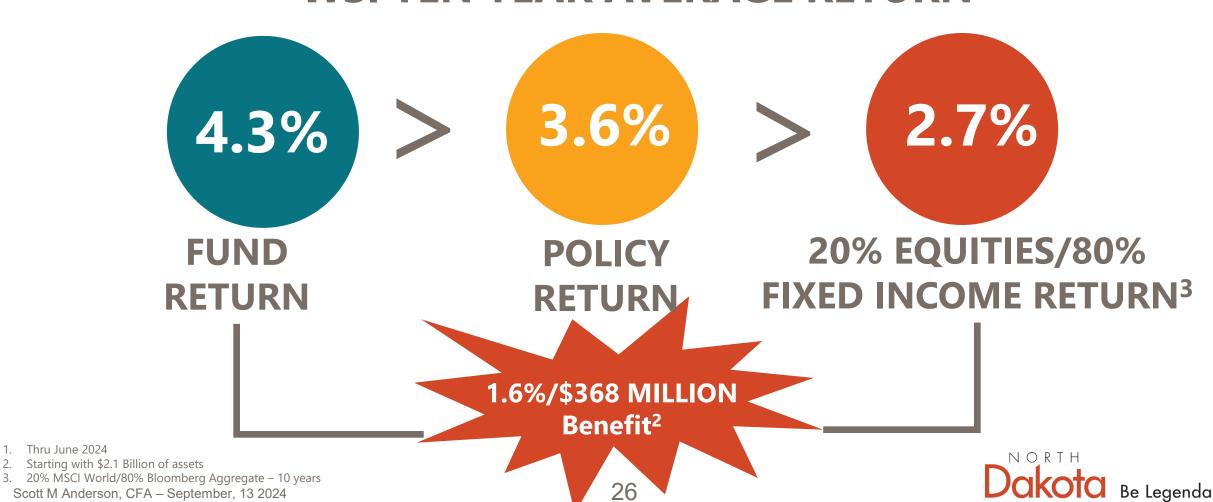
### LEGACY BY YEAR PERFORMANCE

LEGACY	Year to			•41	
\$10.8 Billion – June 30, 2024	Date	23′	22′	21′	20′
<b>Total Fund Return - Net</b>	5.6%	12.9%	-12.9%	11.3%	12.2%
<b>Policy Benchmark Return</b>	4.9%	11.7%	-13.4%	10.4%	12.1%
<b>Total Relative Return<sup>1</sup></b>	0.7%	1.2%	0.5%	0.9%	0.1%



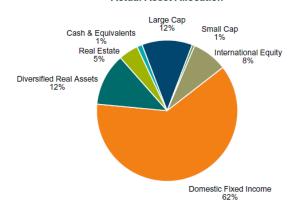
#### INVESTMENT MANAGEMENT BENEFITS

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

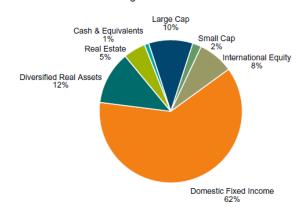


### **ASSET ALLOCATION**





#### Target Asset Allocation



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Large Cap	246,788	11.6%	10.0%	1.6%	33,445
Small Cap	13,110	0.6%	2.0%	(1.4%)	(29,558)
International Equity	173,607	8.1%	8.0%	`0.1%′	2,932
Domestic Fixed Income	1,322,185	62.0%	62.0%	(0.0%)	(541) (585)
Diversified Real Assets	255,426	12.0%	12.0%	(0.0%)	(585)
Real Estate	96,988	4.5%	5.0%	(0.5%)	(9,684)
Cash & Equivalents	25,325	1.2%	1.0%	`0.2%′	`3,991
Total	2.133.429	100.0%	100.0%		

<sup>1.</sup> June 2024 values – Callan

### PERFORMANCE – WSI

AS OF June 30, 2024	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>	1.8%	6.0%	-0.3%	3.2%	7.5%
<b>Policy Benchmark Return</b>	1.4%	5.0%	-0.7%	2.7%	7.0%
<b>Total Relative Return</b>	0.4%	1.0%	0.4%	0.6%	

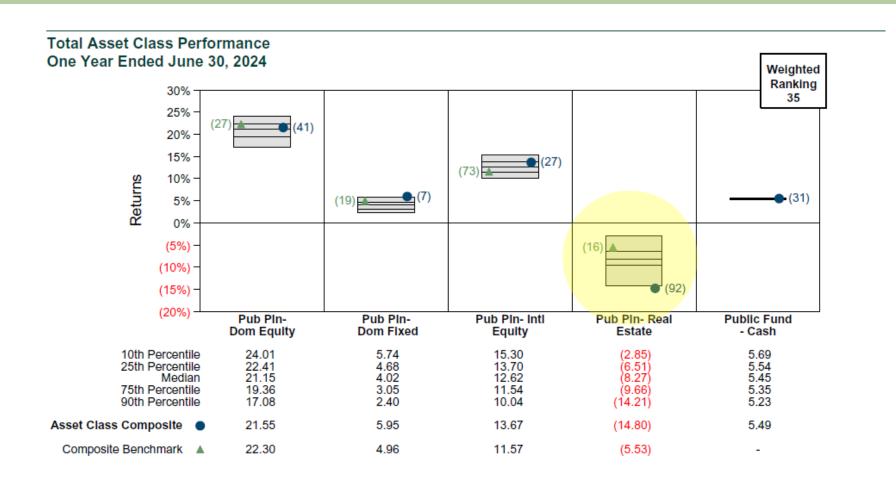
<sup>1.</sup> Corridor benchmark applied only in year-to-date numbers

### WSI BY YEAR PERFORMANCE

WSI \$2.1 Billion – June 30, 2024	Year to Date	23′	22′	21′	20′
<b>Total Fund Return - Net</b>	1.8%	8.4%	-12.3%	5.6%	9.9%
<b>Policy Benchmark Return</b>	1.4%	7.3%	-12.1%	4.9%	9.5%
<b>Total Relative Return<sup>1</sup></b>	0.4%	1.1%	0.2%	0.7%	0.4%

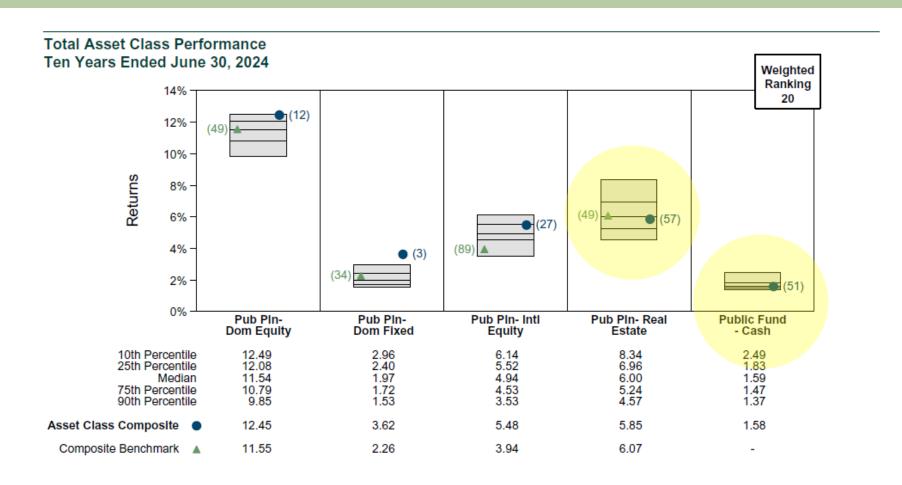


### ASSET CLASS PERFORMANCE



<sup>1.</sup> June 2024 values – Callan

### ASSET CLASS PERFORMANCE



<sup>1.</sup> June 2024 values – Callan

# PATHWAY TO STRATEGY

### ROADMAP FOR SUCCESS



#### CAPABILITIES FOR SUCCESS

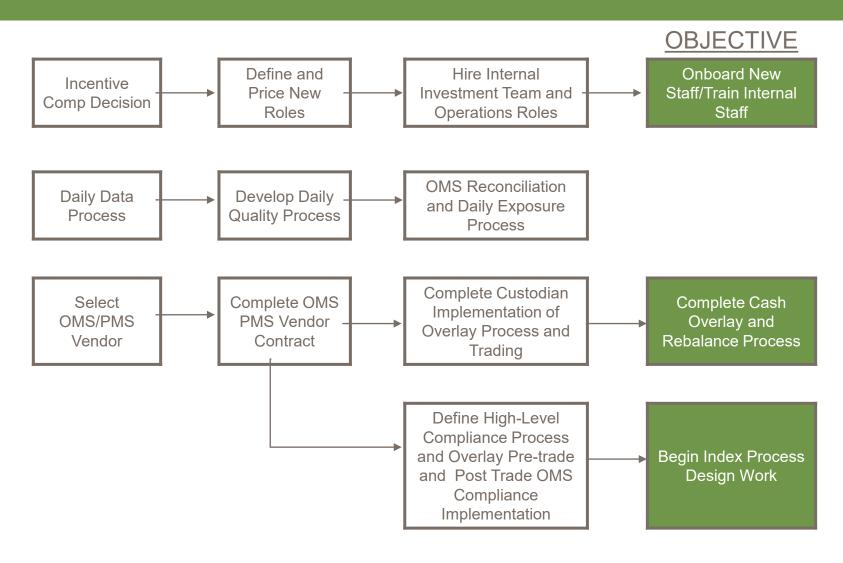
- DELEGATED AUTHORITY
- INCENTIVE COMP SYSTEM
- DIRECT INVESTMENT TEAM
- INDEPENDENT BENCHMARK CONSULTANT
- PRIVATE MARKETS BENCHMARK CORRIDOR
- FUND POOLING

- 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



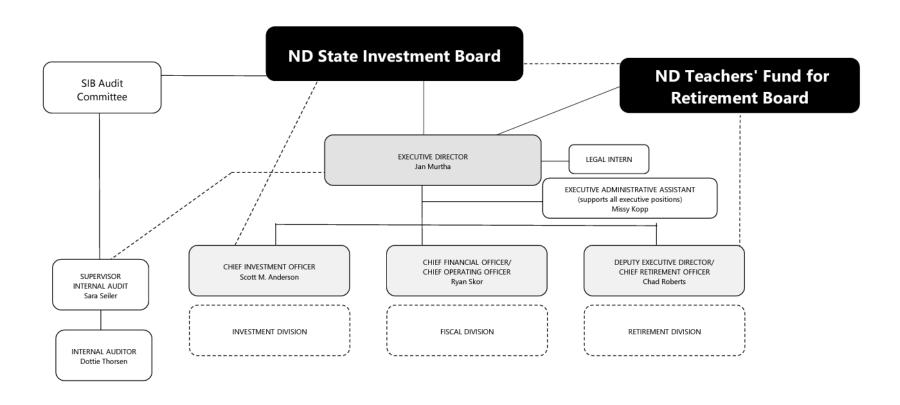
### CRITICAL PATHS OF SUCCESS



- Incentive Comp Approved
- Internal Investment portfolio managers and senior analyst
- Began discussions for broker/dealer arrangements
- Signed agreement for order management/portfolio management system
- Began program plan for investment IT infrastructure
- Began development of first internal investment strategies (cash overlay, liquidity indexes, efficient rebalance)

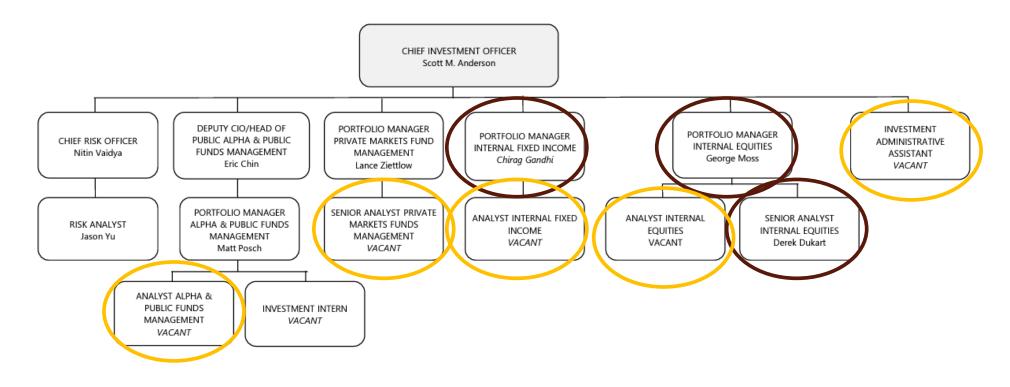
### THE RIO ORGANIZATION STRUCTURE

#### RETIREMENT AND INVESTMENT OFFICE ORGANIZATIONAL CHART



### THE INVESTMENT TEAM

#### RETIREMENT AND INVESTMENT OFFICE ORGANIZATIONAL CHART - INVESTMENT



### INTERNAL INVESTMENT MANAGEMENT INITIATIVE

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  **Equity Por		efine Incentive omp Plan 1.0,  Receive And Score MS/PMS RFP Responses  elect OMS/PMS Vendors For Call Back  and Senior Ana		Relect Performance RFP Consultant Finalists  elect Compliance rrocess Finalists  lefine And Recruit Loles Recruit New Investment Roles  lew Role Long List creening  MS/PMS Vendor regotiation  Launch Data Warehouse Project  Begin To Develop Data Warehouse Strategy  Complete Daily Data Quality Process	Jegin Internal Direct Jverlay And Rebalance Strategy  lire A Securities awyer And Begin FCM And ISDA Negotiations.  terview And Hire rformance Consultant  terview And Hire mpliance Consultant  reening  gin Compliance rocess Design  gn OMS/PMS Jontract  Pegin OMS/PMS cremental Implementation  re Ops Roles	<ul> <li>Approve Internal Direct Overlay And Rebalance Strategy</li> <li>Select And Call Back andidates</li> <li>Interview Second Round Candidates**</li> <li>Implement Direct Overlay And Rebalance OMS/PMS Requirements</li> <li>Develop Large It Project Data Architecture</li> <li>Select Data Warehouse Solution</li> <li>→ egin Compliance Focess Design</li> <li>Complete Daily Reconciliation Design</li> </ul>	* lect And Call Back nal Round Candidates**  * terview Final und Candidates**  * Complete First FCM Agreement, Continue ISDA And Master Confirm Agreements  * Finalize Compliance Process Design  * Begin Design Custodian Feed To Data Warehouse

### NEAR TERM TIMELINE OF ACTIVITIES - CONTINUED

JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB
lire Initial Internal irect Team**	Pilot Internal Direct Cash Overlay And	<ul><li>Develop Legislative</li><li>Strategy</li></ul>	Develop Tools And Data For <u>Indexing</u>	<ul><li>Develop Tools And Data For Indexing</li></ul>	<ul><li>Approve Indexing Policy</li></ul>	Continue Legislative Outreach	
Continue     Recruitment	Rebalance Test OMS And Integration With	<ul><li>Begin Legislative</li><li>Outreach</li></ul>	Continue Legislative Outreach	<ul><li>Continue Legislative Outreach</li></ul>	<ul><li>Continue Legislative</li><li>Outreach</li></ul>	Continue Recruitment Continue Data	
• Inboard Initial ternal Direct Team	Custodian/External Traders On Internal	<ul><li>Begin To Develop Index Strategy</li></ul>	Complete Second FCM Agreement, Continue ISDA And		Continue Data	Warehouse Project Continue Data	
<ul><li>Incorporate</li><li>Compliance Into</li><li>OMS</li></ul>	Direct Overlay And Rebalance Pilot  Hire Initial Internal	<ul> <li>Scale Up Overlay And Rebalance Strategy</li> <li>Continue Recruitment</li> </ul>	Master Confirm Agreements	9	Warehouse Project  Launch Data Exchange		
Implementation  Finalize OMS	Direct Team  Continue Recruitment	Continue Data     Warehouse Project	Continue Recruitment Continue Data	<ul> <li>Exchange Contract</li> <li>Update Compliance</li> <li>For Internal Indexing</li> </ul>	Project Incorporate Indexing Into OMS	Indexing With Custodian On A Small Pilot	
Integration With Custodian  Roll-out PMS Daily	Continue Data Warehouse Project	<ul><li>Begin Data Exchange</li><li>RFP</li></ul>	Warehouse Project Select Data Exchange Vendor		Implementation Including Compliance		
Reconciliation	Begin Data Exchange Project		vendor				
						N O R T H	

# Confidential materials will be sent to Committee members via secure link.

# PORTFOLIO GUIDELINES OVERVIEW

### PORTFOLIO GUIDELINES

- 1. Intended to mitigate the risk of undesired outcomes
- 2. These guidelines are followed by the manager when implementing their strategy
- 3. Guidelines act as guardrails which are based on past performance, the portfolio construction process, metrics and other qualitative criteria
- 4. Guideline creation is a collaborative process between the manager, the Investment Team, Risk Team and Legal Team to allow the manager to effectively implement their strategy in a risk-controlled fashion
- 5. Team implements two sets of guidelines:
  - *a)* Soft guidelines—upper and lower bands around a manager's strategy in normal conditions. Breaches are reviewed by Staff
  - b) Hard guidelines—significant deviation from the expected implementation. Breaches result in review by IC for further action, if needed

### PORTFOLIO GUIDELINES: SMA VS COMMINGLED

#### GUIDELINE PROCESS IS DIFFERENT FOR SMAS VS. COMMINGLED FUNDS

#### **SMA GUIDELINES:**

- Highly customizable, can set specific parameters for the SMA
- Guidelines are agreed upon by the manager and the Team—a key part of the IMA process
- Both the manager and Risk Team are responsible for flagging breaches
- Staff may implement additional internal monitoring guidelines when appropriate

#### **COMMINGLED:**

- Difficult to implement customized guidelines for commingled products-may have to invest as is
- Team evaluates the products existing guidelines and determines if they are acceptable given the strategy of the product
- Team also develops an internal set of soft and hard guidelines (not part of IMA) for monitoring by Staff
- Staff will engage with the manager when breaches of internal guidelines occur

Investment Committee approves and reviews actions in the event of a hard guideline breach

### PORTFOLIO GUIDELINES: PROCESS

#### MANAGER SELECTION PROCESS

## DEVELOP IMA & GUIDELINES

#### COMPLIANCE MONITORING

## GUIDELINE ANNUAL REVIEW

The Team develops a nuanced understanding of the Manager's investment process and portfolio characteristics

- Alpha sources
- Number of positions
- Portfolio concentration
- Sector & country exposures
- Market cap
- Active share/TE

Investment Team, Risk
Team and Legal Team
collaborate to develop
appropriate guidelines for
the strategy. Team
develops soft thresholds
and hard thresholds.
Criteria could include:

- TE
- Value at risk
- Exposures, i.e. sector, country
- Number of positions
- Portfolio concentration
- Leverage

IC approves guidelines

- Risk Team uses
   Northern Trust
   Compliance tool to
   monitor holdings-based
   guidelines.
- Develops performance monitoring reports to monitor performancebased guidelines
- reviews qualitative guidelines such as number of counterparties as part of the ongoing monitoring process

- Soft guideline breaches are flagged by the manager and/or internal tools. Risk Team reviews and determines if a course of action is necessary.
- Hard guideline breaches triggers formal review. Risk Team evaluates and produces memo of breach to IC
- IC approves waiver or resolution

- Investment and Risk Team conducts a formal review of all breaches that occurred over the year.
- Risk Team produces and presents the Compliance Exceptions Report to IC annually
- IC approves
   Compliance Exception
   Report

#### **MANAGER UPDATES**

#### **Private Markets**

- Horsley Bridge Growth 14, L.P.
  - Growth Equity Fund-of-Funds
  - \$60 million commitment (\$20 Pension, \$40 Legacy)
- Peak Rock Capital Fund IV, L.P.
  - Lower Middle Market Buyout
  - \$50 million commitment (\$15 Pension, \$35 Legacy)