NORTH Dakota | Teachers' Fund For Retirement
Be Legendary. RETIREMENT & INVESTMENT

ND TFFR Board Meeting

Thursday, January 23, 2025, 1:00 p.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. Conflict of Interest Disclosure

II. **ACCEPTANCE OF MINUTES (November 21, 2024)** ***(Board Action)***

III. **EDUCATION (30 minutes)** ***(Information)***
   A. Cash Balance Pension Plans - GRS

IV. **GOVERNANCE (60 minutes)**
   A. 2024 GASB Report *(Board Action)* - GRS
   B. 2025 Legislative Session Update – Ms. Smith
   C. Executive Search Committee Update – Dr. Lech, Ms. Seiler
   D. Pioneer Project Update *(Information)* – Mr. Roberts
   E. Summary of WEP/GPO Social Security Act Impact – Mr. Roberts

(Break)

V. **REPORTS (30 minutes)** ***(Board Action)***
   A. Annual Retirement Trends Report – Mr. Roberts
   B. Quarterly Outreach Report – Ms. Mudder
   C. Quarterly TFFR Ends – Mr. Roberts

VI. **OTHER BUSINESS**
   A. Board Reading Materials – Material References Included
   B. Next Meetings:
      1. TFFR Board Meeting (Tentative) - Thursday, February 20, 2025, at 1:00 p.m.

VII. **ADJOURNMENT**

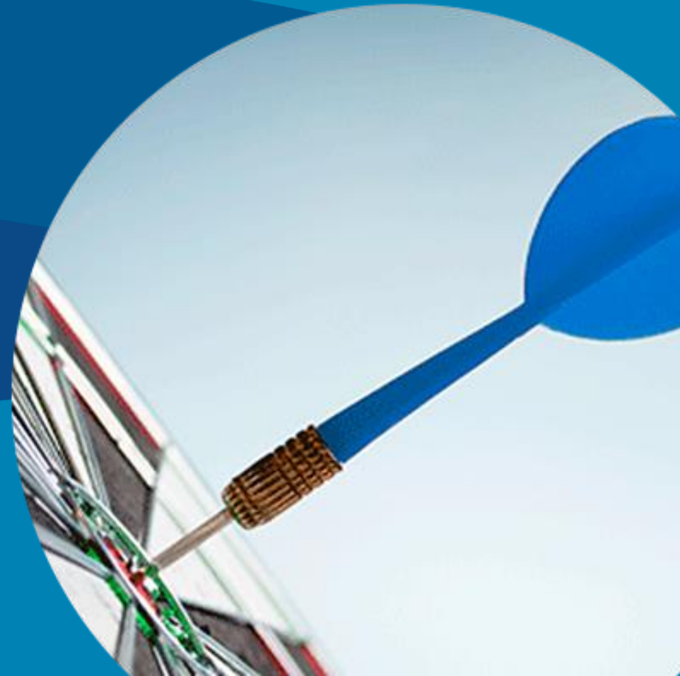
Any individual requiring an auxiliary aid or service, please contact the Retirement and Investment Office (701) 328-9885 at least three (3) days prior to the scheduled meeting.

Agenda item II. to follow.

Cash Balance Plans

January 25, 2025

Paul Wood, ASA



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Traditional Defined Benefit Plans (DB)

1. Final lifetime benefit ‘defined’ by a formula
2. Component: Years of credited service
3. Component: Final Average Compensation (FAC)
4. Component: Benefit multiplier such as 2.0%

Example
Formula: Service *x* FAC *x* Multiplier
30 years x $50,000 x 2.0% = $30,000 per year

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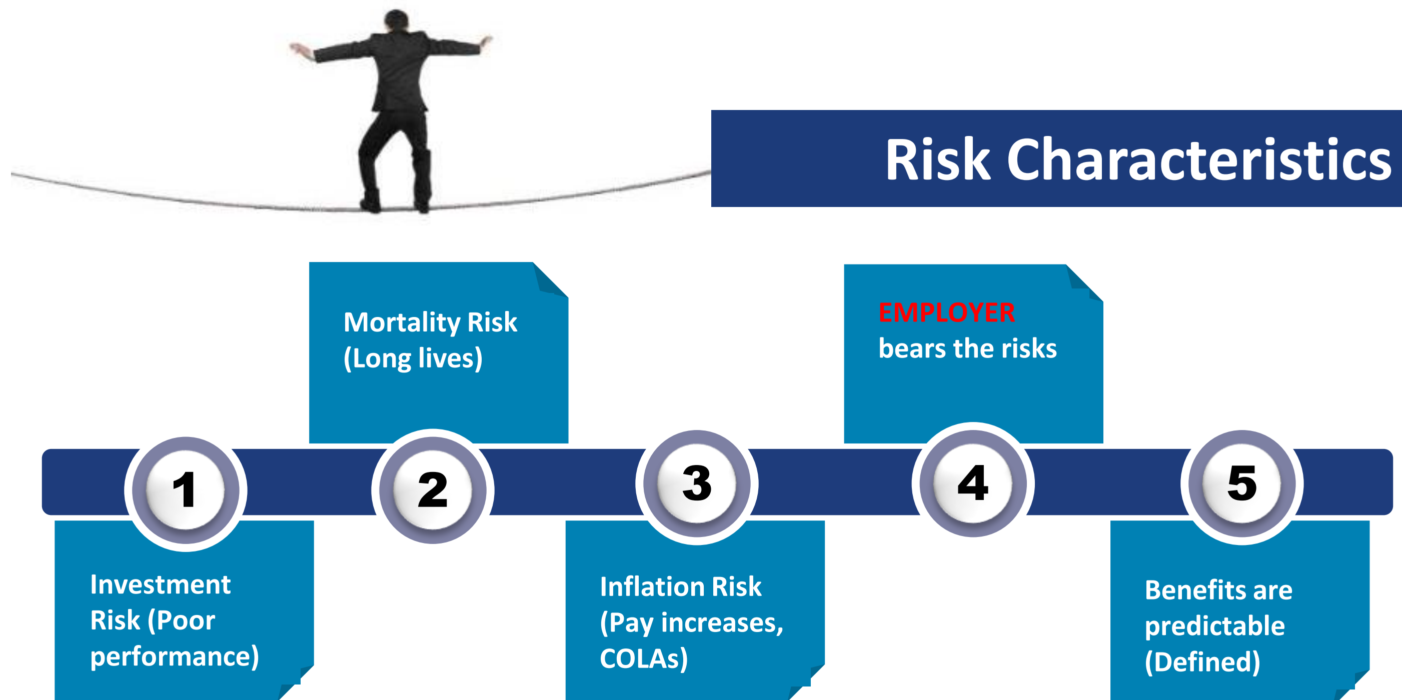
Traditional Defined Benefit Plans (DB)



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Defined Contribution Plans (DC)

1. Annual contribution 'defined' by a formula
2. Most common types are 401(k) and 403(b)
3. Annual contributions invested in the market
4. Final benefit is the account balance at retirement

Example
Annual Contribution: 5% of pay
$60,000 x 5.0% = $3,000 contribution

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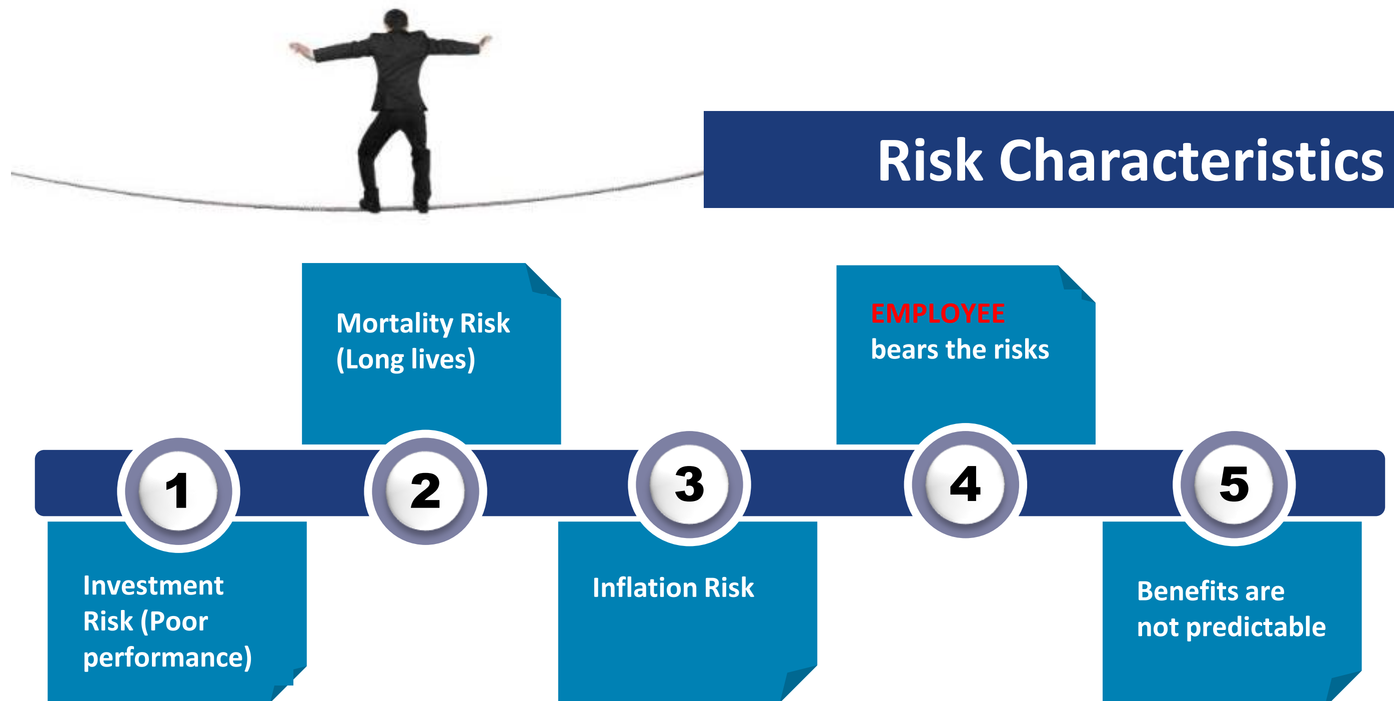
Defined Contribution Plans (DC)



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Hybrid Plans

- Pension plans that have elements of both defined benefit and defined contribution plans
  - Seek to balance the risks to Employers and Employees
- Examples include:
  - **Cash balance plan – members receive pay and interest credits in a "hypothetical account"**
  - **Side by side** – provides smaller DB and DC benefits
  - **Pooled defined contribution** – plan sponsor responsible for plan investments prior to retirement

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CASH BALANCE PLANS

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Cash Balance Plans

- Cash balance plans are not new to state and local governments
- While not new, the cash balance design is fundamentally different from the traditional DB design – even though they're considered DB plans

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Cash Balance Plans – Basic Design

- Under the CB plan design:
  - The benefit is based on the member's account balance (like DC plans)
  - Typically, employees and employers* contribute a fixed percent of pay (like DC and some DB plans)
  - Contributions and investment earnings are invested by the plan (like DB)
  - Benefit is provided though a lifetime annuity or other options (like DB)
  - Interest is credited on the member's account at a rate set by the plan, possibly based on an index of investment returns (unlike DB or DC)

**The employer must make additional contributions if accumulated assets are not sufficient to pay benefits (like DB)*

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Cash Balance - Example 1

- Employee contributes 5%
- Employee account earns **5.5% interest**
  - During and after employment
- At retirement, employee account is fully matched and annuitized using actuarial equivalence factors

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Cash Balance - Example 2

- Employee contributes 5%
- Employee account earns **4% interest**
  - During and after employment
  - But also gain sharing
    - 50% of the return in excess of 4%—up to 3% additional per year
    - **Expected gain sharing ~1.5%**
- At retirement, employee account is fully matched and annuitized using actuarial equivalence factors

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Cash Balance Plans – Advantages/Disadvantages

- Key goals in providing retirement benefits include:
  - Attracting and retaining qualified employees
  - Providing sufficient and sustainable benefits

		Defined Benefit Plan	Defined Contribution Plan	Cash Balance Plan
Attract and Retain Qualified Employees	Advantages	• Rewards long-term service • Provides death and disability benefits	• May appeal to younger and more mobile employees	• May appeal to younger and more mobile employees
	Disadvantages	• Less portable than defined contribution benefits • May not appeal to more mobile employees	• May not be effective in retaining employees • Death and disability benefits only provided as distribution of DC account balance	• May not provide death and disability benefits
Sufficient and Sustainable Benefits	Advantages	• Provides guaranteed lifetime benefits • Pools risks related to investment, longevity, and inflation	• Gives members control over investment selection	• Provides guaranteed lifetime benefits • Pools risks related to investment, longevity and inflation
	Disadvantages	• Lower benefits to short-term employees than under a cash balance plan	• Transfers investment, longevity, and inflation risk to employees • Higher fees for investment administration and management	• Benefit sufficiency difficult to understand • Lower benefits to career employees than under a defined benefit plan

https://insidegrs.gabrielroeder.com/sites/research/External%20Publications/GFR_apr_13_Cash%20Balance.pdf#search=cash%20balance

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CASE STUDY – TEXAS ERS

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Planning for Sustainability

- Key legislators were very motivated to find a “final” solution for ERS
  - Funding was available for the additional contributions ERS needed
  - Legislators wanted to limit future unfunded liabilities
- Preliminary discussions with legislative leadership included a change to a DC plan for future employees
- Focus shifted to a cash balance design
  - Maintains a DB plan for state employees
  - Advantages of pooling “Group 4” contributions with existing DB assets
  - Ability of cash balance structure to “limit future unfunded liabilities”

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Key Tenants During Design of ERS Cash Balance

- Lessen contribution burden on members eligible for cash balance
- Maintain current level of employer-provided benefit for the plan
  - Understanding that the different benefit formula could impact specific individuals differently
- Develop adaptive (or “gain sharing”) features that react to plan experience

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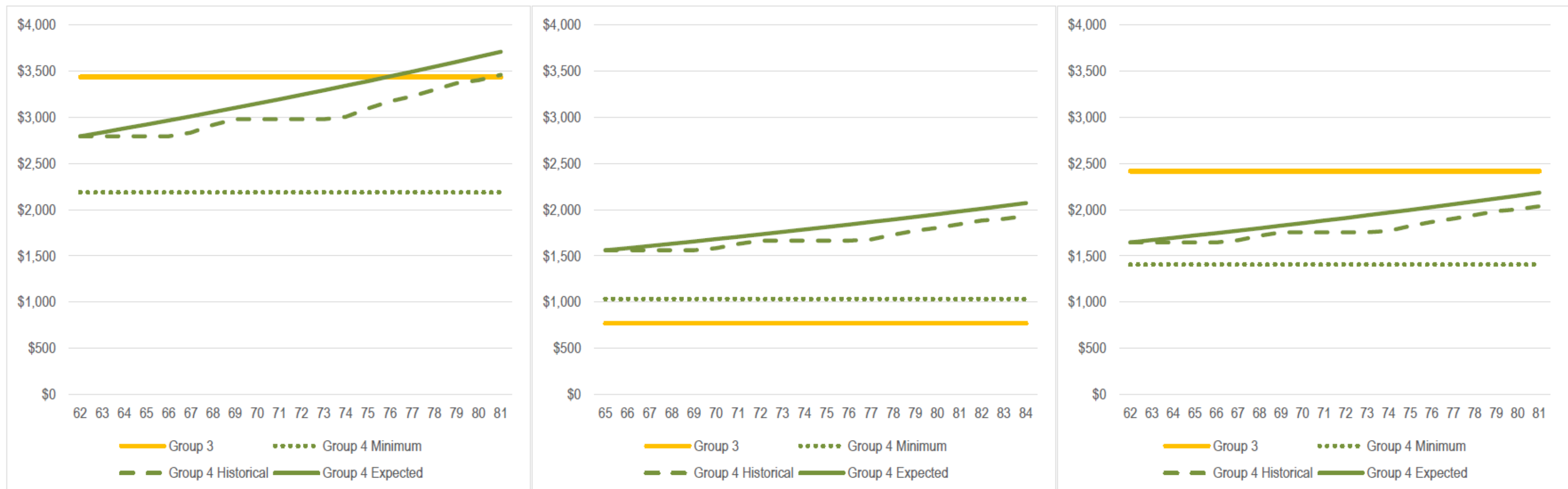
Considering Structural Change in Benefit Design

Kenyon was hired at age 32 with a $35,000 starting salary and retired at age 62 today.

Sal was hired at age 32 with a $35,000 starting salary and quit at 42. Sal left the retirement account with ERS and retired at age 65 today.

Tonya was hired at age 42 with a $45,000 starting salary and retired at age 62 today.

Monthly annuity values throughout retirement



Early career

Short, early career

Short, late career

ERS Group 4 Cash Balance Structure for New State Employees

- Resets employee cost of retirement benefits
  - Decreases employee contribution from 9.5% to 6% of pay
- Increases access to benefits and provides more flexibility for individuals to customize their career and retirement
  - Shortens vesting period from 10 years to 5 years
  - Annuity that is expected to grow after employment and during retirement
  - Continues Rule of 80 retirement eligibility
  - Retains an enhanced benefit for law enforcement and correctional officers
- Maintains a defined benefit pension plan
  - Assets pooled for investment purposes
  - Provides a lifetime annuity that is defined by a calculation and can be reasonably projected
  - Retirement account grows annually by guaranteed 4% interest plus potential "gain sharing"
  - 150% employer match on accumulated account once member commences retirement

ERS Group 4 Cash Balance Structure for New State Employees

- Gain sharing features included in design will limit future unfunded liabilities
- In years when the five-year average investment return exceeds 4%, the member's accumulated account balance will also receive a Gain Sharing Interest Adjustment
- Gain Sharing Interest Adjustment is equal to 50% of the return in excess of 4%
  - Will not be less than 0% nor greater than 3% in a given year
- Gain Sharing Interest Adjustment is also applied to retiree annuities so that the retirees receive the same "gain sharing" as the active members

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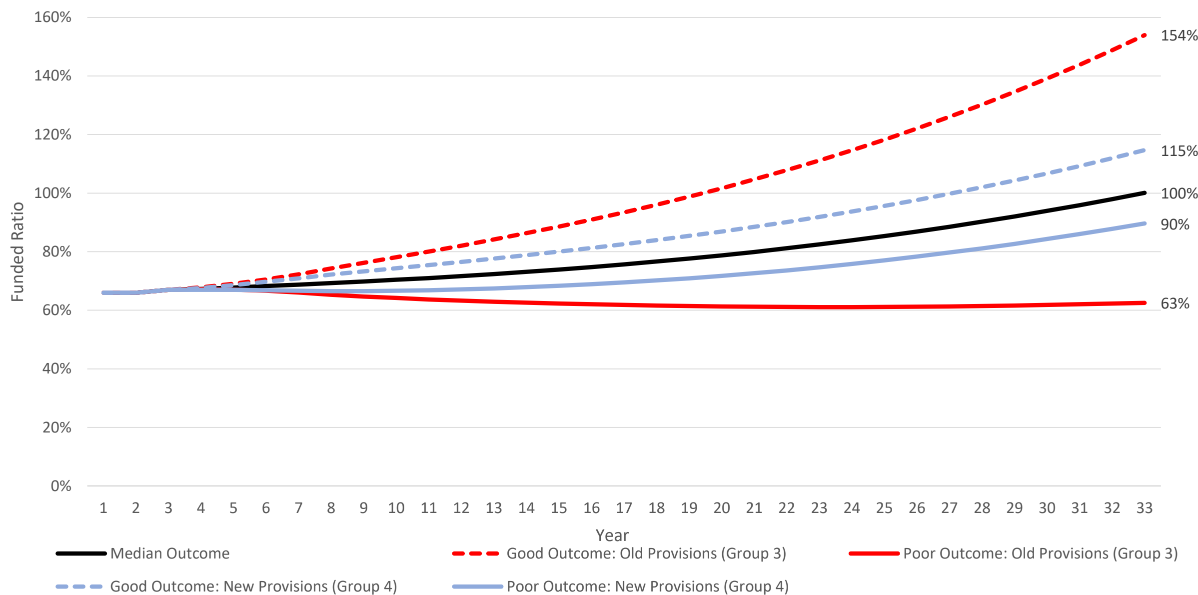
Illustration of Future Impact From Having Adaptable Benefit Provisions



This graph compares the adaptable benefit package from group 4 to the non-adaptable benefits from group 3 based on actual investment performance

The red lines represent a "poor" and a "good" investment scenario with group 3 benefits. The likely range of funded ratio 33 years out is 63% to 154%

The blue lines represent a "poor" and a "good" investment scenario with group 4 benefits. The likely range of funded ratio 33 years out is 90% to 115%

For this hypothetical example, we modeled all current and future members in either group 3 or group 4 to show the impact once all members are in group 4. Thus, this gives a view into the future risk profile of ERS, 30-50 years from now

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ERS Group 4 Implementation

- Implementation requires considerable time investment from internal and external resources
  - includes significant changes to technical systems, data interfaces, administrative rules, policies, procedures, communications and educational materials
- Requires work from multiple state agency partners
- Clarifying legislation for next session to address issues raised in implementation

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Challenges

- Communicating a cash balance retirement benefit
- Budget method of finance for level dollar amortization payments
- Multiple employee contribution rates for the state workforce
- Death and disability benefits
- Actuarial factors

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Wrap Up

- Cash Balance Plans can mitigate future risk while still providing a meaningful benefit
- With the current relationship of normal cost to employee contributions, there is a little room for cost savings through plan design
  - Employer provided value = 12.26% + 0.38% -11.75%
  - < 1% of pay + benefit promise
- Can provide further quantitative analysis if this is a path the Board would like to go down

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Disclaimers

- This presentation is intended to be used in conjunction with the actuarial valuation report issued on October . This presentation should not be relied on for any purpose other than the purpose described in the valuation report.
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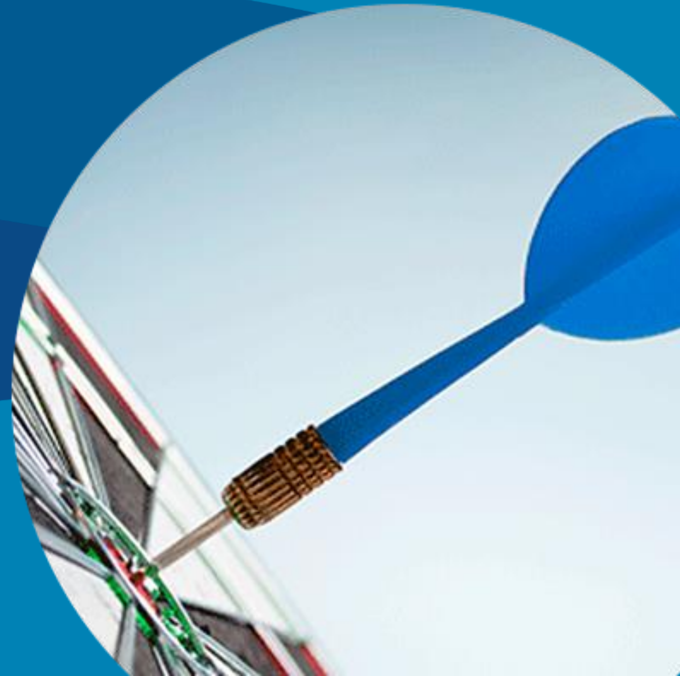
GASB 67 & 68
Fiscal Year Ending June 30, 2024

January 23, 2025

Paul Wood, ASA



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GASB Purpose

- GASB establishes accounting and financial reporting standards for US state and local governments
- Statement Nos. 67 and 68 address accounting and financial reporting for Pension Plans
- Focus on employer’s pension obligation – not funding policies
- Determines obligations reported in sponsors’ Annual Comprehensive Financial Reports

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Terminology

- **Total Pension Liability (TPL)**
  - Entry Age actuarial cost method
  - blended discount rate
- **Plan Fiduciary Net Position**
  - Fair Value of Assets
  - Volatile from year to year (vs. using a smoothed value)
- **Net Pension Liability (NPL)**
  - Total Pension Liability (TPL) – Fair Value of Assets (FVA)
  - NPL is similar to Unfunded Actuarial Accrued Liability (UAAL) based on the fair value of assets
  - Required disclosure – including NPL sensitivities to changes in discount rate

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Total Pension Liability
Blended Single Discount Rate

- Based on Projection of Plan Fiduciary Net Position
- If the plan's fiduciary net position and future contributions are projected to be sufficient to finance future benefit payments, then the GASB single discount rate is equal to the investment return assumption
  - if not, a blended discount rate must be used
  - excludes service cost contributions for future employees
  - can result in different determination of contribution sufficiency as compared to funding valuation
- As of June 30, 2024 contributions/assets projected to be sufficient
  - Total Pension Liability is based on investment return assumption (7.25%)

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Comparison of Funding and Accounting Results

	Funding	Accounting	
Actuarial Accrued Liability - Beginning of Year	$ 4,577,220,667	$ 4,577,220,667	Total Pension Liability (TPL) - Beginning of Year
Normal Cost	100,869,220	100,869,220	Service Cost
Interest on Actuarial Accrued Liability	325,551,942	325,551,942	Interest on the Total Pension Liability
Benefit Payments, Including Refunds of Employee Contributions	(277,660,534)	(277,660,534)	Benefit Payments, Including Refunds of Employee Contributions
(Gain)/Loss on Actuarial Accrued Liability	32,436,312	32,436,312	Difference between Expected and Actual Experience
Actuarial Accrued Liability - End of Year	**$ 4,758,417,607**	**$ 4,758,417,607**	**Total Pension Liability - End of Year**
Actuarial Value of Assets	**$ 3,408,483,045**	**$ 3,351,007,841**	**Plan Fiduciary Net Position**
Unfunded Actuarial Accrued Liability	**$ 1,349,934,562**	**$ 1,407,409,766**	**Net Pension Liability**
Funded Ratio	**71.63%**	**70.42%**	**Plan Fiduciary Net Position as a Percentage of TPL**

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Net Pension Liability Results ($ in millions)

	7/1/2024	7/1/2023
Total Pension Liability at 7.25%	$ 4,758	$ 4,577
Plan Fiduciary Net Position (FVA)	3,351	3,173
Net Pension Liability (NPL)	1,407	1,403
NPL as a % of Payroll	166%	175%
Sensitivity to changes in discount rate		
1% decrease to 6.25%	$ 1,982	$ 1,953
Current discount rate at 7.25%	1,407	1,403
1% increase to 8.25%	927	946

**total may not add due to rounding*

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Pension Expense
($ in millions)

- Change in NPL each year with deferred recognition of certain changes to NPL
- Differences due to changes in actuarial assumptions and actuarial gains and losses
  - Smoothed over the average expected remaining service lives of members
  - Recognition of Outflow (Inflow) of resources due to Liabilities
- Differences between actual and projected investment returns over the past year
  - Smoothed over 5 years
  - Recognition of Outflow(Inflow) of Resources due to Assets below

1. Service Cost	$	100,869
2. Interest on the Total Pension Liability		325,552
3. Current-Period Benefit Changes		0
4. Employee Contributions		(99,610)
5. Projected Earnings on Plan Investments		(227,544)
6. Pension Plan Administrative Expense		3,313
7. Other Changes in Plan Fiduciary Net Position		(1,284)
8. Recognition of Outflow (Inflow) of Resources due to Liabilities		(5,223)
9. Recognition of Outflow (Inflow) of Resources due to Assets		6,628
10. Total Pension Expense	$	102,701

**total may not add due to rounding*

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Details of Deferred Outflows (Inflows)

Year Established	Initial Amount	Initial Recognition Period	Current Year Recognition	Remaining Recognition	Remaining Recognition Period
Deferred Outflow (Inflow) due to Differences Between Expected and Actual Experience on Liabilities					
2018	(27,939,071)	7.0	(3,991,295)	0	0.0
2019	(23,494,914)	7.0	(3,356,416)	(3,356,418)	1.0
2020	(20,732,097)	7.0	(2,961,728)	(5,923,456)	2.0
2021	8,366,320	8.0	1,045,790	4,183,160	4.0
2022	(8,504,654)	8.0	(1,063,082)	(5,315,408)	5.0
2023	(55,451,354)	8.0	(6,931,420)	(41,588,514)	6.0
2024	32,436,312	7.0	4,633,759	27,802,553	6.0
Total			**(12,624,392)**	**(24,198,083)**	
Deferred Outflow (Inflow) due to Assumption Changes					
2018	0	7.0	0	0	0.0
2019	0	7.0	0	0	1.0
2020	51,813,028	7.0	7,401,861	14,803,722	2.0
2021	0	8.0	0	0	4.0
2022	0	8.0	0	0	5.0
2023	0	8.0	0	0	6.0
2024	0	7.0	0	0	6.0
Total			**7,401,861**	**14,803,722**	
Deferred Outflow (Inflow) due to Differences Between Projected and Actual Earnings on Plan Investments					
2018	(30,002,998)	5.0	0	0	0.0
2019	59,163,355	5.0	0	0	0.0
2020	114,538,151	5.0	22,907,630	0	0.0
2021	(493,904,813)	5.0	(98,780,963)	(98,780,961)	1.0
2022	434,694,288	5.0	86,938,858	173,877,714	2.0
2023	(640,737)	5.0	(128,148)	(384,441)	3.0
2024	(21,546,383)	5.0	(4,309,277)	(17,237,106)	4.0
Total			**6,628,100**	**57,475,206**	

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Cost-Sharing

10 largest participating employers:

Employer Name	Covered Payroll	Employer's Proportionate Share Allocation	Net Pension Liability	Total Employer Pension Expense
Fargo Public Schools	94,045,618	11.09129900%	156,100,027	12,593,498
Bismarck Public Schools	92,592,641	10.91994000%	153,688,302	11,355,521
West Fargo School	84,529,312	9.96898900%	140,304,525	12,538,843
Grand Forks School	59,432,327	7.00916900%	98,647,729	7,177,123
Minot School	52,306,798	6.16881800%	86,820,547	5,426,276
Williston Basin School Dist #7	31,441,356	3.70804600%	52,187,402	10,131,906
Mandan Public Schools	27,264,798	3.21548200%	45,255,008	3,726,443
Dickinson School	25,884,199	3.05266100%	42,963,449	3,498,990
Jamestown School	14,412,792	1.69977700%	23,922,827	1,266,642
Mckenzie County School	12,597,728	1.48571700%	20,910,126	2,363,038
Remaining 212 employers	353,415,012	41.68010200%	586,609,824	32,622,823
Grand Totals:	**$ 847,922,581**	**100.000000%**	**$ 1,407,409,766**	**$ 102,701,103**

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2025-2027 Legislative Session RIO Bill Tracker

Bill #	Topic	Description	Sponsor	Hearing Date	Committee	Status	Position
HB 1015	Budget bill	OMB Budget bill	Appropriations Committee	01/22/2025, 10:15 AM	House Appro - Govn't Ops	Introduced, referred to Appro	
HB 1022	Budget bill	RIO's Budget bill	Appropriations Committee	01/21/2025, 8:30 AM	House Appro - Govn't Ops	Introduced, referred to Appro	
HB 1026	Investment	Moving State Bonding Fund from Insurance to OMB	Legislative Management	n/a	House IBL	Introduced, referred to IBL	
HB 1027	Investment	Moving Fire & Tornado Fund from Insurance to OMB	Legislative Management	n/a	House IBL	Introduced, referred to IBL	
HB 1117	Retirement	TFFR Required Minimum Distribution	TFFR via Gov't Vets Affairs	n/a	House GVA	Introduced, referred to GVA	
HB 1163	Investment	Relating to a legacy fund school construction assistance loan fund; to amend and reenact section 21-10-11, relating to the legacy and budget stabilization fund advisory board; and to provide a continuing appropriation.	Representatives Jonas, Longmuir, Murphy, Richter, Schreiber-Beck, Warrey	n/a	House Educ	Introduced, referred to Educ	
HB 1176	Investments	Relating to legacy fund definitions, the legacy earnings fund, and estimated property tax and budget hearing notices; to provide an appropriation; to provide a transfer; to provide an effective date; to provide an expiration date; and to declare an emergency.	Rep. Nathe, Sen. Bekkedahl, Rep. Hagert, Rep. Headland, Sen. Hogue, Rep. Lefor, Rep. Porter, Sen. Rummel, Rep. Stemen, Rep. Swiontek, Rep. Vigesaa, Sen. Weber	n/a	House Fin & Tax	Introduced, referred to Finance and Taxation.	
HB 1184	Investment	Relating to digital asset and precious metal investments.	Rep. Toman, Christy, Heilman, Hendrix, D. Johnston, S. Olson, Porter and Senators Barta, Cory, Meyer, Paulson	n/a	House IBL	Introduced, referred to IBL	
HB 1319	Investments	Relating to a Legacy Fund disclosure website	Rep. Satrom, Sen. Conley, Rep. Ostlie	n/a	House Fin & Tax	Introduced referred to Finance and Taxation	
HB 1330	Investments	Relating to divestment from legacy fund investments in Chinese companies.	Rep. Satrom, Sen. Conley, Rep. Grueneich, Sen. Lemm, Rep. Ostlie	n/a	House IBL	Introduced, referred to IBL	
HB 1348	Investments	Repeal RIO's removal of the fiscal and investment FTE's from OMB's classified system	Rep. Ostlie, Rep. Beltz, Sen. Conley, Sen. Cory, Rep. Satrom, Sen. Weber	n/a	House GVA	Introduced, first reading, referred to GVA	
HB 1435	Investments	Legacy fund definition and legacy earnings fund	Rep. Kempenich and Warrey, Sen. Bekkadahl, Kessel and Meyer	n/a	House Fin & Tax	Introduced, first reading, (emergency), referred Financne and Taxation Committee	
HB 1453	Investments	Relating to prohibiting natural asset companies; and to provide a penalty.	Rep Hauck, Fisher, Hagert, Morton, Novak, Dressler and Sen Gerhardt, Kessel, Luick, Thomas	n/a	House Agriculture	Introducted, first reading, reffered to Agriculture	

HCR 3001	Investment	Encouraging the Treasurer and SIB to invest a potion of General Fund/Budget Stabilization/ Legacy in digital assets and precious metals.	Reps. Toman, Heilman, Hendrix, D. Johnston, S. Olson, Porter, and Sens. Barta, Paulson	n/a	House IBL	Introduced, referred to IBL	
SB 2072	Procurement	Red tape reduction relating to the contracts limiting liability to the state (the issue being we can't accept many low-cost, web-based application's terms and conditions due to state law).	Senate State and Local Govn't at request of OMB.	n/a	Senate State & Local Gov	Passed Senate, 46 yeas and 0 nays. House rec'd from Senate.	
SB 2097	Investments	Creation of a Rural Community Endowment Fund and including under 21-10.	Sens. Mathern & Wanzek, Rep. Brandenburg	n/a	Senate AgVA	Introduced, referred to AgVA	
SB 2134	Retirement	Calls for a change in language to allow the Superintendent and Treasurer to appoint a designee to the TFFR Board	Senator Roers	n/a	Senate State & Local Gov	Introduced, referred to State and Local	
SB 2151	Investments	Relating to a county and township bridge fund and a legacy earnings tax relief fund.	Sen. Thomas, Rep. Brandenburg, Rep. Monson, Sen. Myrdal, Sen. Wanzek, Sen. Weber	01/22/2025, 8:30 AM	Senate Appro- Govn't Ops	Introduced, referred to Appro	

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MEMORANDUM

TO: TFFR Board

FROM: Dr. Rob Lech, Chair and Sara Seiler, Supervisor of Internal Audit

DATE: January 17, 2025

RE: Executive Search Committee

The Executive Search Committee met on January 13, 2025. The Committee approved the request for proposal (RFP) for executive recruitment services. The purpose of the RFP is to hire a firm to assist in recruiting the Executive Director and Chief Financial and Operating Officer positions. The RFP has been issued, and the Committee will meet in February to review the proposals.

BOARD ACTION REQUESTED: Information Only.

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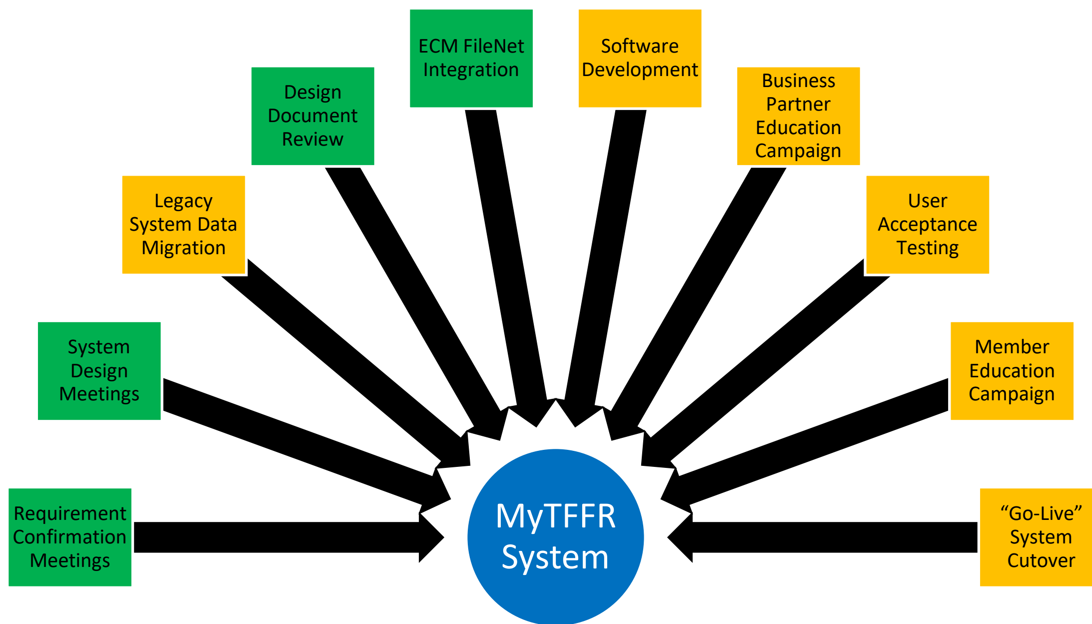
MEMORANDUM

TO: TFFR
FROM: Chad R. Roberts, DED/CRO
DATE: January 16, 2025
RE: January 2025 pension administration system project update

Project Status



The MyTFFR system launches live on February 10, 2025. The vendor will be coming on site to provide direct support to RIO staff for the launch of the system. As of 5 p.m. on January 15, 2025, business partners lost access to the current CPAS pension system. Staff and the vendor are finalizing the testing of a few deferred modules and addressing identified technical issues over the next two weeks.

For the last several weeks, RIO staff has been planning and performing cutover activities to move to the new system. Fiscal, Member Services, and Business Partner teams have been addressing tasks relevant to their areas of expertise.

A multimodal communications campaign to business partners and members has been ongoing since late 2023 and will continue well after the launch date.

Amendment 4 to the contract for the pension administration system was finalized on January 8, 2025. The amendment finalized the launch date as February 10, 2025, and identified the split for costs

related to the additional two months of hosting costs incurred by delaying the launch date from December 9, 2024, to the revised launch date. The total cost share for the RIO agency for this additional hosting is $46,283.81. Despite the increase in cost for the additional hosting, the final cost for the total project decreased to $10,529,084.87 from the original procurement cost of $10,530,458.72. The MyTFFR project will come in at $1,373.85 under the original budget due to efficiencies and savings discovered in development through the project.

Additional costs such as overtime and temporary staffing have yet to be accounted for, but they are expected to be well under their respective budgets.

The vendor will present to the TFFR Board at the March 2025 meeting and demonstrate the system to the Board then.

Unanticipated Issues

Despite incredible efforts by RIO staff to overcommunicate the system changes and provide live, hands-on training and guidance to all business partners, many have declined to participate in those efforts. It is expected that at least some of the business partners who have opted not to be active partners will face significant learning curves to report and submit contributions after the system goes live. RIO staff is confident in the interfaces developed by the vendors who provide services to the business partners. However, because those business partners have not participated in the learning and technical sessions, there may be complaints to the RIO agency and TFFR Board members because they have not prepared themselves for the transition. It could also lead to delayed contribution submission and late penalties for business partner accounts.

Board Action Requested: Information only.

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MEMORANDUM

TO: **TFFR Board**

FROM: **Chad R. Roberts, DED/CRO**

DATE: **January 15, 2025**

RE: **Repeal of WEP/GPO by the Federal Government and Communications to Membership**

The Social Security Fairness Act was signed into law on January 5, 2025. The Act eliminates the Windfall Elimination Provision (WEP) and the Government Pension Offset (GPO). The WEP reduced social security for pensioners of non-social security-covered jobs, and the GPO reduced spousal and survivor benefits of workers who had pensions from non-social security-covered jobs. Repealing these two acts will result in an increase in benefits for about three million Social Security recipients. How much each person impacted will benefit from the repeal of these acts will be determined by several factors, and the Social Security Administration has not yet released how the act will be implemented or how they will calculate a change in benefits.

The impact on recipients of TFFR benefits will be on a case-by-case basis. While TFFR-eligible employment is currently Social Security eligible, there are likely members who may have had TFFR eligible teaching positions with employers who in past years did not contribute to Social Security or non-teaching jobs that were not. Members may have had spouses who had other jobs that were not and are now receiving spousal survivor benefits. TFFR-paid benefits will not change; however, some members may receive increased Social Security benefits.

RIO staff received numerous phone calls about the issue. In response, staff developed a set of FAQs and disseminated them to the membership via an e-mail blast, through our website, and over the phone when inquiries are received. In the 24 hours following the e-mail blast, over 1,000 retired members opened the e-mail, indicating that the issue generated significant interest among the TFFR members. Other than developing a communication plan to help members understand the legislation, the passage of the act should have little to no impact on RIO operations.

Board Action Requested: Information only.

Agenda item V. A to follow.

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MEMORANDUM

TO: Teachers' Fund for Retirement Board of Trustees

FROM: Sarah Mudder, communications and outreach director

DATE: Jan. 23, 2025

RE: FY2025, Q2 Communications and Outreach Report

MEDIA RESPONSE – Date, Subject, and Publication

- Oct. 1, 2024, North Dakota Legacy Fund, North Dakota Monitor
- Oct. 10, 2024, North Dakota Legacy Fund, KX News
- Oct. 29, 2024, North Dakota Legacy Fund, Jamestown Sun
- Oct. 30, 2024, Asset Allocation Consultant, with Intelligence
- Oct. 30, 2024, In-state Investment Program Manager, with Intelligence
- Nov. 7, 2024, Measure #3, Pensions & Investments
- Nov. 13, 2024, North Dakota Legacy Fund, North Dakota Monitor
- Nov. 13, 2024, Measure #3, The Flag
- Nov. 13, 2024, Incentive Compensation, Jamestown Sun
- Nov. 22, 2024, Murtha resignation, North Dakota Monitor
- Nov. 26, 2024, Murtha resignation, Pensions & Investments
- Nov. 26, 2024, Murtha resignation, NASRA
- Nov. 26, 2024, Murtha resignation, NCTR
- Dec. 10, 2024, Asset Allocation Consultant, FundFire
- Dec. 10, 2024, Asset Allocation Consultant, Pensions & Investments
- Dec. 10, 2024, Asset Allocation Consultant, InForum

MEETINGS – Date and Activity

- Oct. 1, 2024, TFFR Executive Steering Committee Pension Administration System Project
- Oct. 17, 2024, SIB Investment Committee
- Oct. 21, 2024, SIB Governance & Policy Review Committee
- Oct. 25, 2024, SIB Board Meeting
- Oct. 28, 2024, Judicial Executive and Legislative
- Oct. 31, 2024, Employee Benefits Programs Committee
- Nov. 5, 2024, TFFR Executive Steering Committee Pension Administration System Project
- Nov. 7, 2024, SIB Governance & Policy Review Committee
- Nov. 8, 2024, SIB Investment Committee
- Nov. 11, 2024, SIB Client Fund (TFFR)
- Nov. 12 SIB Client Fund (Legacy Budget Stabilization Fund Advisory Board
- Nov. 13, 2024, SIB Governance & Policy Review Committee
- Nov. 18, 2024, SIB Audit Committee
- Nov. 21, 2024, TFFR Board Meeting
- Nov. 22, 2024, SIB Board Meeting
- Nov. 26, 2024, SIB Client Fund (PERS)
- Dec. 5, 2024, SIB Executive Search Committee
- Dec. 5, 2024, SIB Securities Litigation Committee
- Dec. 11, 2024, SIB Client Fund (WSI)
- Dec 13, 2024, SIB Investment Committee
- Dec. 16, 2024, Financial Literacy Commission
- Dec. 17, 2024, SIB Executive Search Committee
- Dec. 18, 2024, RIO Executive Steering Committee Investment Management Software Project
- Dec. 19, 2024, TFFR Executive Steering Committee Pension Administration System Project

OUTREACH – Date, Staff, and Activity

SIB Event
- Dec. 12, 2024, Client Fund Webinar (Asset Allocation), Virtual

TFFR Active Member Education
- Oct. 2, 2024, Group Benefit Presentation, Dickinson
- Oct. 3, 2024, Group Benefit Presentation, Bismarck
- Oct. 7, 2024, Group Benefit Presentation, West Fargo (two sessions)
- Oct. 8, 2024, Group Benefit Presentation, Devils Lake
- Oct. 10, 2024, Group Benefit Presentation, Grand Forks
- Oct. 30, 2024, Group Benefit Presentation, Virtual

Partner Event
- Oct. 3, 2024, Jan Murtha (presenter), Univ of Mary Career Day, Bismarck
- Oct. 5-9, 2024, Jan Murtha (presenter) and Chad Roberts, National Council on Teacher Retirement, Atlanta
- Oct. 12-16, 2024, Denise Weeks (presenter), National Pension Education Association, Greenville, SC
- Oct. 14, 2024, Sarah Mudder (presenter), NDSU Comms Career Day, Fargo
- Oct. 16-17, 2024, Chad Roberts (presenter), Sarah Mudder and Denise Leingang-Sargeant (booth), North Dakota Council on Educational Leaders, Bismarck
- Oct. 24, 2024, Chirag Gandhi (presenter), Beyond 2024: The Future of Fixed Income, New York
- Oct. 24-25, 2024, Chad Roberts (presenter), Denise Weeks and Tami Volkert (booth), North Dakota School Board Association, Bismarck
- Oct. 26, 2024, Jan Murtha (presenter), ND United, Bismarck
- Oct. 27-30, 2024, Rachel Kmetz, Susan Walcker and Robbie Morey, Public Pension Finance Forum, Indianapolis
- Dec. 18, 2024, Scott Anderson (presenter), PineBridge Investments Americas Client Group Year-end Meeting, Virtual

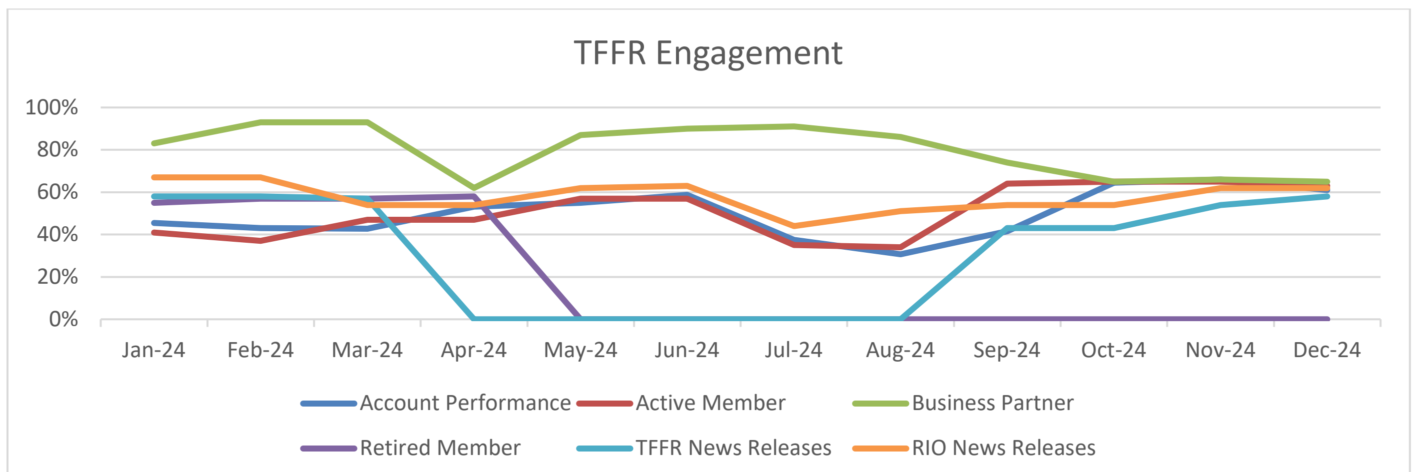
PUBLICATIONS (GovDelivery)

TFFR Business Partners newsletters and updates
- Oct. 22, 2024, newsletter sent to 523 recipients (63% open rate)

TFFR Active Members newsletters and events
- Oct. 23, 2024, group benefit presentation promo to 11,328 recipients (25% open rate)

TFFR news releases
- Dec. 3, 2024, “NDTFFR earns pension standards award,” 997 recipients (43% open rate)

TFFR Engagement Rate Monthly Metrics
From Oct. 1 to Dec. 31, most to least engaged TFFR topics were Business Partner at 65% and Active Members at 63% and TFFR News Releases at 58%. Retired Members have dropped off due to lack of communications. Per GovDelivery, the median engagement rate for education communications in 2023 was 66%. The median engagement rate for government emails overall was 47%.



SIB/Fiscal newsletters and updates

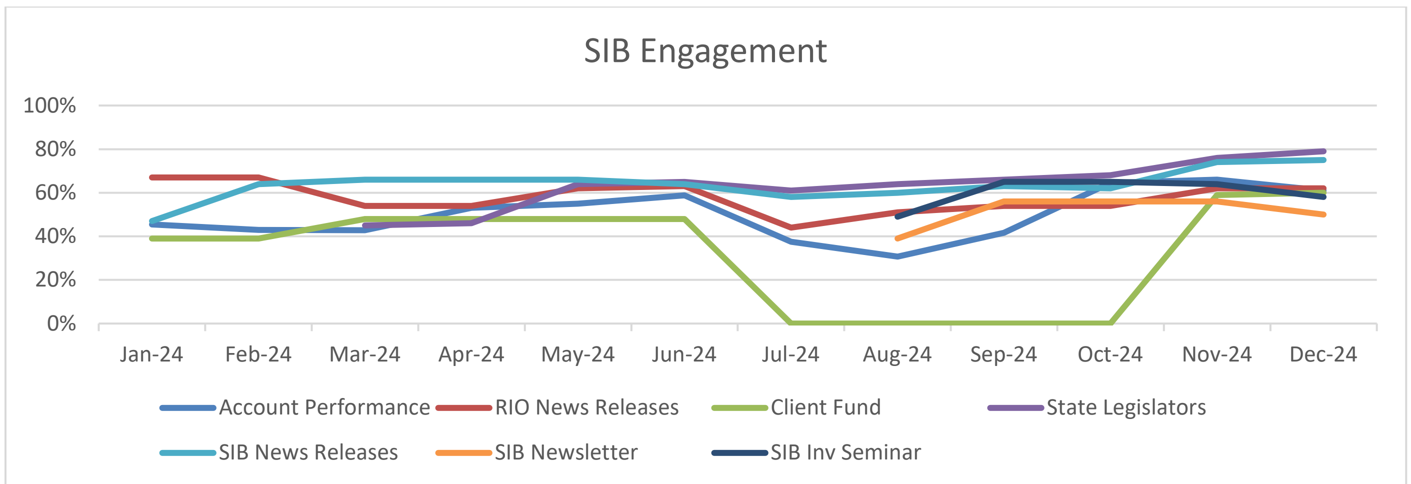
- Nov. 19, 2024, "FY2024 Financial Audit Report releases," 646 recipients (57% Open Rate)

SIB/Fiscal news releases and updates

- Oct. 31, 2024, "ND's Legacy Fund Demonstrates Responsible, Strategic Investment for Long-Term Growth," 810 recipients (43% open rate)
- Nov. 7, 2024, "ND's Legacy Fund is a sovereign wealth fund designed for long-term prosperity," 814 recipients (45% open rate)
- Nov. 14, 2024, "Legacy Fund Report: more than $450 million in 40 ND businesses and communities," 848 recipients (58% open rate)
- Nov. 22, 2024, "State Investment Board will transition to new leadership for 2025," 1,118 recipients (46% Open Rate)
- Dec. 10, 2024, "State Investment Board selects NEPC to enhance portfolio strategy," 742 recipients (48% Open Rate)

SIB Engagement Rate Monthly Metrics

From Oct. 1 to Dec. 31, most to least engaged SIB topics were State Legislators at 79%, SIB News Releases 75%, Client Fund and Financial Reports both at 60%, and Investment Seminar at 58%. Per GovDelivery, the median engagement rate for Finance & Commerce communications in 2023 was 56%. The median engagement rate for government emails overall was 47%.



SOCIAL MEDIA

LinkedIn

	Page Views	Unique Visitors	New Followers
	1,266	513	235
Most Popular Posts (Engagement Rate)	**Impressions**	**Clicks**	**Likes**
SIB Leadership Change (Murtha resignation)	1,961	188	46
Jac Collins welcome	4,768	445	88
Brian Hermanson welcome	1,458	90	48

YouTube

	Views	Watch time (hours)	New Subscribers
	756	67.9	4
Top Content	**Views**	**Average Duration**	
MyTFFR View Organization Info	215	2:04	
MyTFFR Upload Enrollment	132	7:39	
TFFR Group Benefits Presentation	97	12:47	

BOARD ACTION REQUESTED: Board Acceptance

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FACT SHEET

WHO WE ARE

The Retirement and Investment Office (RIO) is the state agency responsible for coordinating the activities of the State Investment Board (SIB) and the Teachers' Fund for Retirement (TFFR).

34 Full-Time Team Member Authority

1 Temporary Team Member

68 Consultants and Professional Services

WHAT WE DO

Investment Program

The SIB is responsible for setting the policies and procedures that guide the investment of client funds while RIO is the administrator responsible for investment program management.

Retirement Program

The TFFR program is a qualified defined benefit public pension plan. The TFFR board of trustees has statutory responsibility for the pension program, while RIO is the program administrator.

HOW WE DO IT

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

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

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.

THE PEOPLE WE SERVE

Citizens

are North Dakota residents who benefit from RIO's management of public funds including the North Dakota Legacy Fund, the state's sovereign wealth fund.

$22.3 billion total in assets under management

SIB Client Funds

are identified in statute. With the approval of the Industrial Commission, the SIB may provide services to and manage the money of any state agency, institution or political subdivision.

31 participants (15 statutory, 16 contracted)

TFFR Active Members

are licensed to teach in North Dakota and employed by public schools and state institutions.

11,945 total, average age 41.3

TFFR Retired Members

includes retired or disabled members and beneficiaries receiving a monthly benefit.

9,693 total; retired avg. age 73.6

TFFR Employers

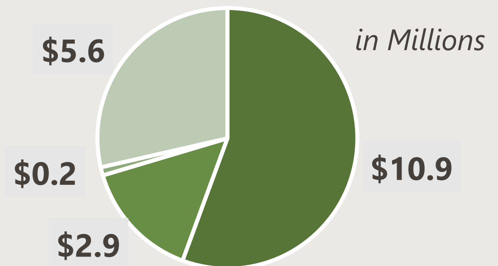
are public schools and state institutions that employ licensed North Dakota educators.

204 employer groups

as of 06/30/2024

2023-2025 BIENNIAL BUDGET

$19.6 Million Appropriation
RIO is a special fund agency and receives no general fund dollars.



WHAT WE'RE PROUD OF

Pension Administration System
In Feb. 2025, RIO will release MyTFFR, a pension administration system, making employer reporting more efficient and allowing members to manage a wide range of account transactions online.

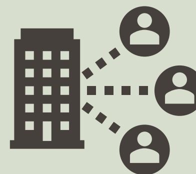
Internal Investment Program
RIO will launch an internal investment management initiative in spring 2025 that will result in significant client cost savings and provide greater control over investments.

HOW WE MEASURE SUCCESS

Actuarial Valuation
Actuarial valuation reports measure TFFR's funding progress. Based on the current valuation, the contribution rates are expected to fully fund TFFR in 2043.

Awards
For the 26th consecutive year, RIO received the Certificate of Achievement for Excellence in Financial Reporting. In addition, the TFFR program earned the 2024 Public Pension Standards Awards for Plan Funding and Plan Administration.

Engagement
RIO's most recent Gallup Q12 engagement mean was 4.5 out of 5. Our team members are "Engaged," highly involved in and enthusiastic about their work and workplace.



Financial Audit
Our FY2024 financial audit contains an unmodified and clean opinion. This independent evaluation of our financial statements, operations, and internal controls helps to ensure transparency and accountability.

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youtube.com/@ndrio8298

public.govdelivery.com/accounts/NDRIO/subscriber/new

RIO Publications
Newsletters, and financial and investment reports.
rio.nd.gov/publications

Rev. 01/2025

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701-328-9885 | 800-852-2979
www.rio.nd.gov | rio@nd.gov

ND TFFR Fast Facts

FY End 6/30/2024

The ND Teachers' Fund for Retirement pension (ND TFFR) provides ND educators with a financial foundation for the future that includes a secure and stable retirement. This is possible due to TFFR's plan design, professional plan management, strong investment performance, and outstanding customer service.

MEMBERS

WE SERVE

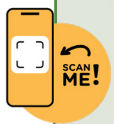
11,945 ACTIVE MEMBERS
9,693 RETIRED MEMBERS
4,025 INACTIVE MEMBERS
204 EMPLOYERS

Member Stats	Actives	Retirees
Avg. Annual Salary/Benefit	$69,570	$29,030
Avg. Service Credit	11.3 yrs	27.08 yrs
Avg. Current Age	41.3 yrs	73.6 yrs

MEMBER SATISFACTION: 3.7 (4.0 Scale)

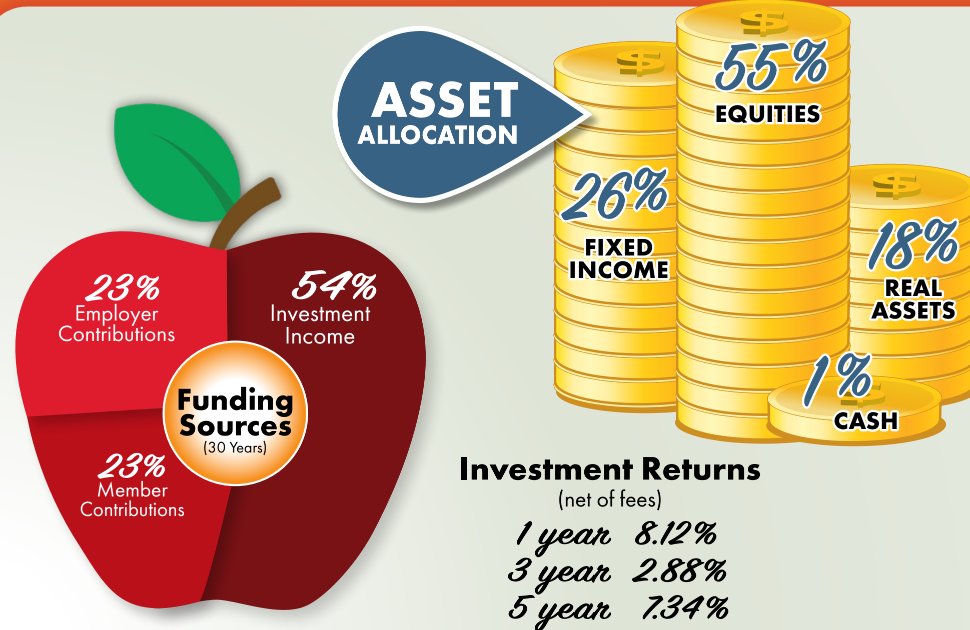
Download FY2024 Actuary Report

SCAN OR CLICK HERE



$268 million was distributed to retirees in FY2024.

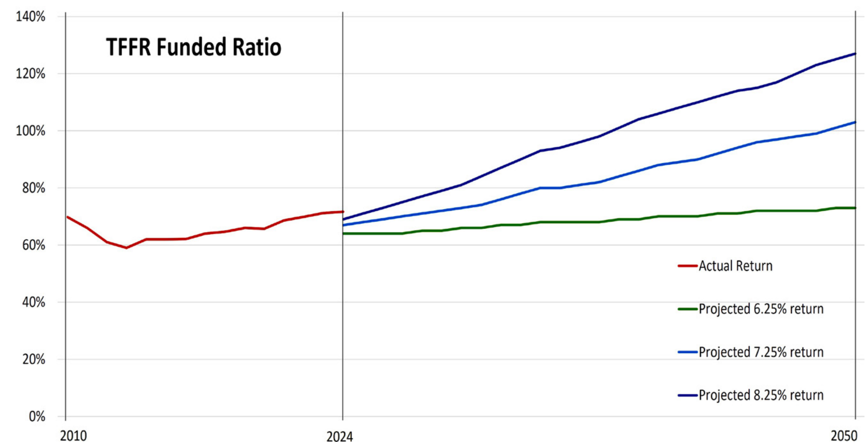
Net Asset Value of TFFR assets $3.29 billion



Investment Returns
(net of fees)

1 year 8.12%
3 year 2.88%
5 year 7.34%

71.6% of BENEFITS are PREFUNDED



In FY2024, funding status growth outperformed expectations. TFFR's long-term funding outlook is positive, and benefits are secure for past, present, and future ND educators.

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RETIREMENT & INVESTMENT

P.O. Box 7100, Bismarck, ND 58507-7100 | 1-800-952-2970 or 701-328-9885 | Email: rio@nd.gov | Website: www.rio.nd.gov

ND TFFR PLAN SUMMARY

Tier 1 is a member who had service credit in the TFFR plan prior to 7/1/08.

- Tier 1 Grandfathered member was less than 10 years away from retirement eligibility as of 6/30/13. Grandfathered member was vested, and either age 55 or had a combined total of service credit and age equal to or greater than 65 on 6/30/13.
- Tier 1 Non-Grandfathered member was more than 10 years away from retirement eligibility as of 6/30/13. Non-grandfathered member was less than age 55 and had a combined total of service credit and age which was less than 65 on 6/30/13.

Tier 2 is a member who began participation in the TFFR plan on 7/1/08 or after.

** Contribution rates are in effect until TFFR reaches 100% funded level, then rates reduce to 7.75% each.*

	Tier 1 Grandfathered Member	Tier 1 Non-Grandfathered Member	Tier 2 Member
Employee Contribution Rates (active and re-employed retirees)			
7/1/10 – 6/30/12	7.75%	7.75%	7.75%
7/1/12 – 6/30/14	9.75%	9.75%	9.75%
*7/1/14 ongoing	11.75%	11.75%	11.75%
Employer Contribution Rates			
7/1/10 – 6/30/12	8.75%	8.75%	8.75%
7/1/12 – 6/30/14	10.75%	10.75%	10.75%
*7/1/14 ongoing	12.75%	12.75%	12.75%
Vesting Period	3 yrs	3 yrs	5 yrs
Unreduced Retirement Eligibility			
Minimum Age	No	60	60
AND Rule	Rule 85	Rule 90	Rule 90
OR Normal Retirement Age	65	65	65
Reduced Retirement Eligibility			
Minimum Age	55	55	55
Reduction Factor	6%	8%	8%
Retirement Formula Multiplier	2%	2%	2%
X Final Average Salary	3 yr FAS	3 yr FAS	5 yr FAS
X Service Credit	Total years	Total years	Total years
Disability Retirement	Yes	Yes	Yes
Retirement Formula Multiplier (2%) X Final Average Salary (FAS) X Total Service Credit			
Death/Survivor Benefits	Yes	Yes	Yes
Refund of account value or Life Annuity to survivor based on member's vesting status.			

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MEMORANDUM

TO: **TFFR Board**
FROM: **Chad Roberts, DED/CRO**
DATE: **January 15, 2025**
RE: **TFFR Ends Report – 2nd Qtr. ending December 31, 2025**

This report highlights exceptions to the TFFR program's normal operating conditions from October 1, 2024, to December 31, 2024.

- The Executive Director announced her resignation at the November 22, 2024, SIB Board meeting, effective date of January 3, 2025.
- The part-time temporary administrative support specialist supporting RIO operations during the PAS project implementation resigned effective October 4, 2024. The employee accepted a permanent position with another employer. It was decided the position would not be filled due to the temporary status and training time involved.
- The CFO/COO announced his resignation with an effective date of January 3, 2025.
- The ED and DED/CRO attended the NCTR National Conference in Atlanta, GA.
- The Retirement Programs Manager attended the National Pension Education Association conference in Greenville, SC.

BOARD ACTION REQUESTED: Board acceptance.

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MEMORANDUM

TO: **TFFR**
FROM: **Chad R. Roberts, DED/CRO**
DATE: **January 15, 2025**
RE: **Board reading materials for January 2025 TFFR Board of Trustees**

Three suggested readings on teacher retirement cash balance plans are attached.

The first suggested reading is an article from Pew Research. Published in February 2014, "Public Pension Cash Balance Plans: A Primer" provides an easy-to-understand explanation and walk-through of what a cash balance plan is and is not.

The second suggested reading is a July 2018 study by the Society of Actuaries titled "*Are Most Teachers Better Off With a DB Pension, 401(k), or Cash Balance? The Case of CalSTRS*" It provides a thorough analysis of the CalSTRS cash balance experience.

Board Action Requested: Information only

Public Pension Cash Balance Plans

A Primer

Overview

More than $1 trillion in unfunded pension promises made to current and retired government employees are placing a strain on state and local budgets, prompting policymakers across the country to take a closer look at alternative ways to design a retirement plan. A number of states and municipalities have made the move to a pension design called a cash balance plan. While there is no one-size-fits-all solution, well-designed cash balance plans, like well-designed traditional defined benefit or defined contribution plans, can help government employers meet their recruitment and retention goals while offering the following key elements needed to help employees achieve a secure retirement:

- Fully funded retirement benefits.
- Access to professionally managed, low-fee, pooled investments with appropriate asset allocations.
- Access to lifetime income options, or annuities.

All public employees deserve a secure retirement. States need a fair set of solutions that will make their retirement system financially sustainable in the long run. By explicitly promising a minimum investment return and sharing any additional earnings, a cash balance plan may be a vehicle that public employers use to improve the predictability of their costs, which will protect their budgets from economic downturns while ensuring that employees receive a significant benefit.

This brief will provide an overview of cash balance plan designs and discuss related policy issues. Other types of retirement plans, such as defined benefit/defined contribution hybrids and double-defined benefit plans, will be discussed in subsequent briefs.

How does a cash balance plan work?

Accumulation of retirement benefits

Benefits under a cash balance plan are based on the value of individual employee retirement accounts maintained by the state.[1] Employee accounts grow as workers and their employers make annual contributions to the plan and as investment returns—called interest credits— accumulate on those contributions.

Employees' cash balance accounts are guaranteed a minimum annual investment return. Investment returns in excess of this minimum guarantee can be shared with employees or saved by the plan for years when actual returns fall short of the minimum. Employee accounts are not individually managed. Instead, they are pooled and professionally managed by the retirement plan, allowing employees to take advantage of low-fee, professional money management.

Benefits at retirement

Upon retirement, employees are eligible to receive a lifetime benefit based on the accumulated value of their account. This lifetime benefit, or annuity, can be structured various ways to provide employees with significant flexibility in how they receive benefits. Public employers have the authority to partially or even fully restrict lump sum distributions. Of the six state-sponsored cash balance plans, three permit employees to receive their entire retirement benefit as a lump sum and three permit partial lump sum payments.[2]

Portability

Cash balance plans provide employees with a portable retirement account that they can take with them if they leave their employer before retirement. Once employees have worked long enough to vest in their benefits, the value of the account includes employee and employer contributions and the interest credits associated with investment returns. For non-vested employees, the benefits they are able to withdraw may reflect only the value of their contributions plus some minimum amount of interest crediting that is typically less than what is offered to vested employees. (See Table 1.)

Table 1

How Retirement Plans Work

The terms and conditions of retirement plans

Term	Definition
Interest credits	Investment returns on employee cash balance accounts. Employee accounts are guaranteed to receive a minimum investment return, set by the plan. Plan rules can also allow employees to share in returns that exceed the guaranteed rate, sometimes called a dividend.
Annuity	A financial product that provides guaranteed benefit payments for a retiree's lifetime. This benefit protects retirees (and often surviving family members) from outliving their retirement savings and running out of money. This is a key protection in a well-designed retirement plan.
Vesting schedule	The number of years an employee must work before becoming fully eligible to receive an employer provided benefit upon retirement.
Traditional defined benefit plan	A final average salary defined benefit plan in which retirement income is provided at a specified age through a fixed annuity that is calculated based on employee length of service, highest average salary, and a multiplier, such as 2 percent of salary per year of service, applied to the employee's length of service.
Defined contribution plan	A plan in which retirement benefits are based on accumulated employer and employee pre-tax contributions, and the returns on those investments. The investment returns are generally based on market rates with no guaranteed return.[3]

Source: The Pew Charitable Trusts

© 2014 The Pew Charitable Trusts

Comparison with defined benefit and defined contribution plans

The design features of a cash balance plan contain attributes that are commonly associated with both traditional defined benefit plans, which provide guaranteed monthly retirement income based on a retiree's years of service and final salary, and defined contribution plans, which provide an individual account made up of contributions and market investment returns. The guaranteed rate of return, use of pooled investments, and access to annuities are characteristic of defined benefit plans, while the portability of benefits, predictability of costs, and employees bearing risk are more typical of defined contribution plans.

Considerations for public employers

More predictable costs

Under a cash balance plan, employers promise workers a periodic contribution, a minimum annual investment return, and an annuity upon retirement. By explicitly promising a minimum investment return and sharing any additional earnings, employers can largely ensure the predictability of their costs, which will protect their budgets from economic downturns while ensuring employees receive a significant benefit.

Cash balance plans can provide a more predictable cost structure than traditional defined benefit plans by reducing the number of assumptions policymakers must make to accurately project costs. The expected cost of a traditional defined benefit plan is based on many actuarial assumptions, which include long-term investment returns, salary increases, employee turnover, and life expectancy. Plan sponsors set aside funds for future benefits based on these assumptions and may incur unexpected liabilities if investment returns are lower than expected or life expectancy is longer than assumed. Cash balance plans move the annuity promise to the end of an employee's career rather than requiring the plan sponsor to estimate the cost of a lifetime benefit while the employee is still working—an important feature to consider as the average U.S. life expectancy increases.[4]

Case in point: Illinois' unfunded liability for the state's retirement plans increased by about $79 billion between 2001 and 2012. Although a significant portion of this increase was the result of missed contributions, more than half, about $40 billion, of the shortfall was due to failure to meet expected investment returns and changes in assumptions that weren't matching reality.[5] Other state and local pension plans faced similar challenges over the past 12 years.

Higher-return years can also contribute to cost uncertainty in a traditional defined benefit plan. When public pension plans approach 100 percent funding levels, often due to strong rate of returns in prior years, plans often face pressure to reduce contributions and increase benefits. When the market return rates fall to more typical levels, these changes can lead to a deficit. Many plan sponsors took pension holidays or increased benefits in the late 1990s, when the economy and investment returns were strong, placing plans in a weaker position through the tough economy of the 2000s.[6]

Cash balance plans are likely to have less predictable costs than a typical defined contribution plan. Under most defined contribution plans, employers contribute a set percent of employee's salary each year and do not guarantee any level of interest return or final benefit for employees. In contrast, under cash balance plans, employers have an established contribution rate and guarantee employee accounts a minimum rate of return. In years with very low returns, employers are responsible for making up the difference between the actual return and the guaranteed rate.

Considerations for public employees

Cash balance plans smooth retirement benefit accumulation

In a cash balance plan, contributions and interest credits build up retirement wealth through a "smooth accrual" in a consistent manner for all employees. Under this smooth accrual pattern, early and mid-career employees are able to build retirement savings, independent of age or whether they stay with their current employer until retirement. This pattern of accrual is similar to what employees experience under a defined contribution plan. As a result of the fairly even accrual pattern, cash balance and defined contribution plans distribute benefits more equally across the workforce than a traditional defined benefit plan.

Benefits under a traditional defined benefit plan are often described as "backloaded" because they are based on an employee's final average salary. In most cases, public sector retirement plans determine the employee's final average salary by averaging the three or last five years, often either the most recent years or the highest-earning years. Because of the backloaded accrual pattern, employees who leave before the plan's specified normal retirement age often earn significantly less than those who work an entire career under one system.[7] In addition, defined benefit plans discourage older employees from working past retirement age. Employees forfeit a year of retirement earnings for each year they work after becoming eligible for retirement.

Proponents of traditional defined benefit plans argue that the plans were designed with several objectives in mind: to encourage long-term public service, to attract career-minded workers to join public service, to retain experienced workers, and to encourage older workers to retire. With those goals in mind, backloaded retirement plans may be the appropriate design for some public sector employers who want to retain mid-career workers or encourage older workers to retire. Cash balance plans can also be designed to provide increased benefits for career workers by increasing employer contributions or interest returns for employees that have worked longer.

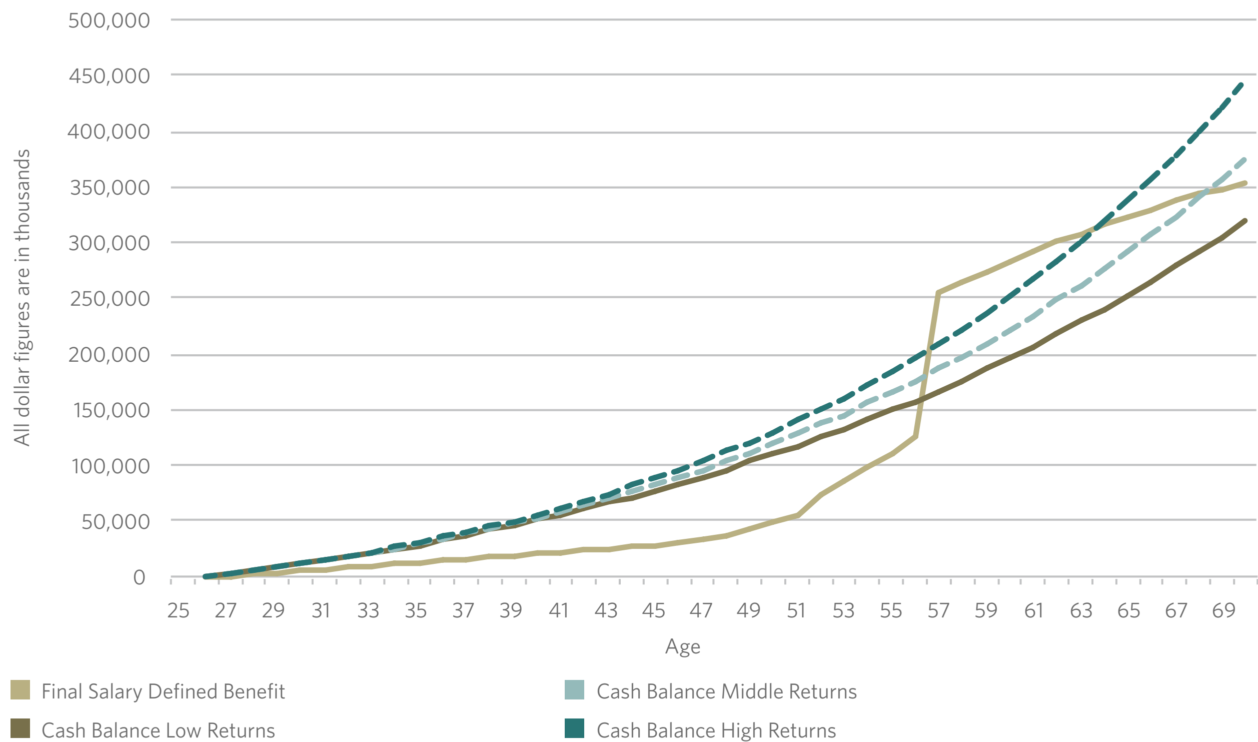
Critics of defined benefit pensions believe they leave workers who change employers before retirement with insufficient retirement savings, discourage some workers from joining public service, lock in workers who might otherwise prefer to work for a different employer, and push out older workers who may wish to work longer. As noted above, policymakers should think carefully about their recruitment and retention needs when selecting a plan design. In 2013, for example, the Kentucky Retirement System adopted a cash balance plan for new employees in the state retirement system. Prior to reform, Kentucky's traditional defined benefit plan was even more backloaded than most defined benefit plans due to a multiplier that increased with tenure and an early retirement option.[8] The state's new cash balance system allows workers to earn a more meaningful benefit earlier in their careers, while also providing career employees with a significant lifetime benefit. (See Figure 1).

Figure 1

Kentucky's Cash Balance Plan

Value of retirement benefits for a worker who entered at 25 and joined the state's employee retirement system non-hazardous plan

The cash balance plan is represented by three lines in order to illustrate the range of benefits an employee may experience under this plan. The middle line, the 50th percentile of investment returns, represents the expected benefit accrual for employees under this plan. The 75th and 25th percentile lines illustrate what the benefit might look like if investment returns are higher or lower than expected. The fourth line represents retirement benefit accrual under the state's traditional defined benefit plan.



Note: The y-axis values refer to the estimated present value of the sum of benefit payments.

Source: October Three, LLC

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Other considerations

As with any retirement system change, a move to a cash balance plan can raise concerns among policymakers, employers, or employees. For cash balance plans, the most common concerns include transition costs, investment performance, lump sum options, the level of benefits for career workers, and benefits for later-career workers. These are important factors for policymakers to consider, and they highlight the importance of providing complete and clear information around a plan's design.

Transition costs

Some critics argue that closing an existing defined benefit plan to new employees reduces cash flow into the plan, which in turn requires the plan sponsor to pay off any unfunded liability more quickly and to progressively lower investment risk and increase liquidity over time. The result of these necessary changes, it is argued, is higher contributions in the near term and potentially higher cost overall.

These "transition cost" arguments do not apply to a cash balance plan because the current defined benefit plan would not need to be closed. Instead, new employees would be covered by a new "tier" of benefits within the existing plan which would be supported by a single investment fund that would continue to be managed by the retirement system.

Investment return targets and investment performance

In states considering a move from defined benefit plans to cash balance plans, there are concerns among policymakers that retirement systems might lower investment targets, which would result in a reduction of benefits. Yet several retirement systems that currently manage cash balance plans have kept their investment targets and have had ten-year investment performance close to these targets. [9]

Retirement systems need to set investment return targets that are achievable, reflect an appropriate asset allocation strategy, and support an understanding of investment risk. The implementation of a cash balance plan does not, by itself, require a change in investment strategy. Defined contribution plans, however, often do not provide investment management of employee accounts. Instead, employees manage their account on their own. States considering adopting defined contributions plans should offer employees professional investment management and pooled accounts and set similar investment strategies and return targets as cash balance or defined benefit plans.

Lump sum options

Cash balance plans are required to provide workers with annuities, ensuring that all retirees have access to secure lifetime income. Like traditional defined benefit plans, cash balance retirement plans can also allow retirees to take a portion of their benefit as a lump sum. Defined contribution plans often offer employees only a lump sum option, but can be designed to provide employees with annuities options. While lump sum options can be a significant benefit to employees, they can also put employees at risk of outliving their retirement savings.

Policymakers should carefully consider whether and how to offer a lump sum option. Importantly, public sector employers have complete discretion to limit or completely eliminate lump sum options. Cash balance plan sponsors, as with traditional plans, have often chosen to tightly restrict lump sum dispersals. Kansas' cash balance system, for example, only allows an employee to take up to 30 percent of their account as a lump sum.[10]

Benefits for career workers

There are also concerns that cash balance plans may reduce the retirement benefits of a career worker when compared to a traditional defined benefit plan. Policymakers can design a cash balance plan that delivers a comparable benefit to a traditional defined benefit plan by paying careful attention to plan design in terms of the guaranteed rate of return, investment return target, and annuity structure. Policymakers can choose to provide a high guaranteed rate of return, such as the 7 percent provided by the Texas County and District Retirement Plan, in order to reduce benefit uncertainty for employees. Another strategy to reduce risk for employees when switching from a defined benefit plan to a cash balance plan is for employers to increase their contribution level. The higher contribution would increase an employee's minimum guaranteed benefit, thus increasing retirement security for employees.

Another element of benefit certainty is the design of the annuity. All stakeholders should have a clear understanding of how the annuities are calculated upon retirement, as annuity calculation determines benefit level. Annuity structure should be transparent and communicated clearly so that employees have a reasonable understanding of their expected final benefit.

A cash balance plan increases benefit certainty for employees compared to a typical defined contribution benefit where employee retirement savings can be severely reduced in a market downturn. By providing a guaranteed rate of return, a cash balance plan strikes a balance between traditional defined contribution plans, where the employee bears all the risk, and a typical defined benefit plan, where the employer bears all the risk.

Impact to late-career workers

Workers who switch to the public sector late in their careers will typically not receive as substantial a benefit as they would under a traditional defined benefit plan. A concern is that the reduced benefit may make it more difficult for employers hoping to attract late-career, highly skilled workers. If employers are concerned about their ability to attract late-career workers, they could implement other incentives or benefit enhancements that apply to workers later in their careers. Designing cash balance benefits that place a greater emphasis on contributions, relative to interest credits, to generate retirement wealth can also help late-career workers.

How to design a cash balance plan

All public sector retirement plans should meet four key principles. The principles described below outline the most basic provisions that all retirement system should provide:

- Benefits are fully funded. Employer and employee contributions are made consistently and on time, and the plan does not take on unmanageable risks.
- Career employees will be able to replace a substantial amount of their income at retirement. Short-term and medium-term employees will be able to accumulate a meaningful amount of retirement savings.
- There is access to professionally managed, low-fee, pooled investments with appropriate asset allocations.
- There are lifetime income options, or annuities.

When designing a cash balance plan, policymakers should carefully consider the following parameters:

- Contribution levels
- Interest crediting

- Retirement options
- Provisions for workers who separate before retirement
- Vesting schedule
- Death and disability benefits

For each of these parameters, the sections below provide a brief description and a discussion of the appropriate value and design. While the sections focus on how to set these parameter values for a cash balance design, most of these provisions would also be appropriate to consider when designing other types of retirement plans.

Contribution levels

Under a cash balance plan, employees and their employer make annual contributions that are credited to employee accounts. Employers should set a combined contribution rate that is high enough to place employees on a secure retirement savings path and is consistent with their human resources goals to attract and retain skilled workers and studies recommend a range of contribution rates. For example, the University of Michigan Retirement Research Center recommends a 68 percent replacement rate for individuals with average lifetime earnings. A 2008 study from the Georgia State RETIRE Project recommends that most retirees should be able to replace around 78 to 80 percent of their salary.[11] A TIAA-CREF analysis found that a combined contribution rate of at least 12 percent of salary if the employee has access to social security, and 18 to 20 percent without social security, is needed to achieve the RETIRE Project replacement rate.[12] However, this range is only a benchmark and determining the sufficient savings rate for a plan is a complicated undertaking. Policymakers need an analytical framework to assess the impact of plan design on their employees' retirement security.

Interest crediting

The plan's rules for crediting interest from investment returns to employee accounts determine the level of benefits in a plan and how much investment risk protection is offered by employers. In cash balance plans, the crediting of a guaranteed rate of return to an employee account and the interest above the guaranteed rate on that account are two different things. Employee accounts are guaranteed a set rate of return. But dividends can be distributed in a variety of ways. The plan rules can be designed to enable public employers to build a cushion against economic downturns while also sharing some or all of the upside with employees.

Policymakers should select a guaranteed minimum rate of return that ensures all employees have a basic level of retirement coverage while understanding the level of risk that is allocated to both employees and employers. Cash balance plans may not have an interest credit guarantee below zero, meaning that an employee account will not lose money in years with negative returns.

In practice, the states and localities with cash balance plans use a range of interest crediting designs. In Montgomery County, Maryland, for example, employees are guaranteed an annual return of 7.25 percent leaving much of the investment risk with employers.[13] But in Kentucky and Nebraska, employers and employees share risk more evenly. In Kentucky, employees receive a minimum guaranteed return of four percent and employee accounts are credited with 75 percent of any returns above this floor based on the five-year average of returns. Similarly, under the Nebraska plan, employee accounts receive 5 percent annually and will receive some of the upside when returns are above this guarantee and the plan achieves a certain funding level.

The way returns above the guaranteed rate are distributed can vary based on a state's or locality's decisions. In plans with high guaranteed returns, such as the Montgomery County plan, the plan often keeps all excess

dividends as a cushion for low-return years. Plans that provide a more modest guaranteed rate, such as the 4 percent in Kentucky, typically share some excess dividends with employees.[14]

A well-designed cash balance plan should also ensure that any excess dividends remain within the plan and are not used to fund other state services.

Retirement options

Employers are required to provide retirees in a cash balance plan with access to guaranteed lifetime income in the form of an annuity.[15] Public employers must offer members at least one annuity option and may choose to offer a range of annuity products, including options with inflation protection. Plans may require employees to annuitize their entire benefit or may offer employees a lump sum or partial lump sum option.

Setting the interest rate used to convert account balances into annuities has a significant impact on the value of retirement benefits. A lower interest rate would result in a lower monthly benefit, whereas a higher interest rate would mean a higher monthly benefit for retirees. Two retirees with the same account balance who are subject to different annuity interest rates will have different monthly benefits. The interest rate used for annuity conversion is set implicitly in traditional defined benefit systems—the annuity rate is equal to the plan's discount rate, or expected rate of return.

Under a cash balance system, the annuity rate needs to be set explicitly and can be set at a constant value or may be allowed to float more freely with interest rates. Nebraska's cash balance plan, for example, has set the annuity rate equal to the assumed rate of return for the plan. Similarly, Texas' cash balance plan for counties and districts converts account balances to annuities using a rate of 7 percent, which is also the plan's guaranteed rate of return.[16]

Lump sum payments can be a benefit to employees who would like to spend more of their retirement savings earlier in their retirement and those who wish to leave some of their wealth to their heirs. Lump sum payments, however, can also reduce retirement security if employees do not properly manage their spending or if they live longer than they expected. Retirees who cash out and spend their savings may face financial risk later in their lives. Policymakers should consider the pros and cons of lump sum payments, with special consideration to retirement security, when deciding whether or not to offer full or partial lump sum options.

Provisions for workers who separate before retirement

Plan sponsors must consider what benefits they will offer to employees who leave before retirement. An employee who changes jobs before reaching the plan's designated retirement age should have two options: keep the money in the plan and let it grow under the plan's interest crediting rules until retirement or move the entire retirement savings into a new qualified retirement account. The value of the account for vested employees includes employee contributions, employer contributions, and the interest credits associated with investment returns. For non-vested employees, the benefits they are able to withdraw should at least reflect the value of their contributions plus the market rate of interest or the full interest crediting provided by the plan.

Vesting schedule

Plans should offer employees a vesting schedule of five years or less, so that employees who do not spend a significant amount of time at one employer before switching employers are still able to build toward retirement security.

Unlike the private sector, public sector retirement plans face no regulation on retirement plan vesting. In the private sector, defined benefit plans are restricted to offering a maximum vesting period of five to seven years, depending on the type of vesting formula that is being used.[17] Private sector cash balance plans, which were designed in part for a more mobile workforce, have an even shorter vesting period requirement of only three years. In contrast, many public sector defined benefit plans have vesting periods of 10 years or more. These long vesting periods can unfairly penalize workers—particularly when typical public sector employee careers are just 7.8 years[18]—and harm public employees' ability to build a secure retirement.

Death and disability benefits

Plans should provide employees with adequate death and disability benefits. In many cases, it may be most appropriate to offer the death and disability benefits equal to the benefits provided under a state or locality's traditional defined benefit plan.

Current cash balance plans

Three states, California, Nebraska, and Texas, currently offer some state and local public employees a cash balance plan as their primary retirement benefit.[19] Two other states, Kansas and Kentucky,[20] recently voted to adopt cash balance plans for future employees.[21] (See Table 2.) And several more states offer an optional retirement plan with cash balance characteristics, such as the money purchase plan in Montana.[22]

Table 2

Comparing Public Sector State and Local Cash Balance Plans

A selection of different design features of plans offered by 5 states

	Employee contribution	Employer contribution	Guaranteed return	Dividends	Vesting schedule
California (State Teachers' Retirement Plan Cash Balance Benefit Program)	4%	4%	Based on the average of 30-year U.S. Treasury bonds	Granted when plan funding ratio is more than 100 percent funded; the exact rule depends on 30-year U.S. Treasury bond rates.	Immediate
Kansas (Tier 3 Cash Balance Plan)	6%	3 to 6%, based on tenure	5.25%	Unclear	5 years
Kentucky (Kentucky Retirement System)	5% for regular members, 8% for public safety members	4% for regular members, 7.5% for public safety members	4%	75% of long-run (five-year average) returns above the guarantee	5 years
Nebraska (State Employees Pension Plan and County Employees Pension Plan)	4.5% for county members, 4.8% for state members	6.8% for county members, 7.5% for state members	The greater of 5% or the federal mid-term rate plus 1.5%	Granted depending on the plan's funding level and board approval	3 years
Texas (Texas County and District Retirement System)	4 to 7%, depending on employer election	Between 100 and 250% of the member's contribution	7%	None provided	5, 8, or 10 years depending on employer election
Texas (Texas Municipal Retirement System)	5 to 7%, depending on employer election	Between 100 and 200% of the member's contribution	Member contributions earn 5%; employer contributions earn the annual return on assets	Granted upon board approval	5, 8, or 10 years depending on employer election

Sources: 2013 Overview of the California State Teachers' Retirement System and Related Issues; Kansas Tier 3 Cash Balance Plan; Kentucky Legislature S.B. 2, http://www.lrc.ky.gov/record/11rs/SB2.htm; 2013 Annual Report Nebraska Public Employees Retirement System; Texas Municipal Retirement System Facts; Texas County and District Retirement System Guide to Member Benefits

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Well-designed cash balance plans can provide workers with a secure retirement while also providing employers with increased cost certainty. As several states have shown, well-designed cash balance plans are affordable, sustainable, and secure.

Existing plans

California, Nebraska, and Texas currently provide some public-sector employees with a cash balance plan as their primary retirement savings vehicle. Texas has two plans that offer cash balance benefits to workers in participating municipalities, counties, and districts.

The Texas Municipal Retirement System was started in 1947, and the Texas County and District Retirement System was created in 1967.[23] The county and district system provides cash balance benefits for public workers in 641 counties and districts throughout Texas.[24] Each county and district has flexibility in setting benefits: employers can set their own rules for employee and employer contribution amounts, retirement eligibility, and vesting schedule.

The Texas Municipal Retirement System administers cash balance plans for 849 cities.[25] Each city selects the employee contribution rate and the city's matching rate. These plans are currently paying benefits to a substantial number of retirees. As of 2012, there were 46,801 and 42,931 retirees receiving benefits from the Texas County and District Retirement System and the Texas Municipal Retirement System, respectively.[26]

In 2002, Nebraska became the third state to operate a cash balance plan to cover state and local workers. Nebraska previously offered state and local employees a defined contribution plan. As of 2013, the Nebraska plan was paying benefits to 1,260 retirees or beneficiaries.[27]

California's Cash Balance Benefit program provides benefits to part-time or temporary workers employed by school districts or community colleges.[28] As of 2013, the plan had 33 contributing school districts and 33,888 participants.[29]

The Texas and Nebraska cash balance plans are relatively well-funded, though not 100 percent funded. As of 2012, the Texas County and District Retirement System was 88 percent funded, and the Texas Municipal Retirement System was 87 percent funded.[30] Similarly, the Nebraska state and county plans are 92 percent funded.[31] The California cash balance plan was 105 percent funded in 2011.[32]

New plans

Kansas and Kentucky recently passed legislation to adopt a cash balance plan as the primary retirement savings vehicle for some portion of their public workforce. While the two states chose the same basic plan structure, the plans vary in design specifics. Kansas provides a 5.25 percent annual interest credit and Kentucky provides a 4 percent guaranteed return. Under Kansas' plan, employee accounts may receive dividends in the future, but the law prohibits additional interest credits until all retirement plans are at least 80 percent funded.[33] With Kentucky's plan, if the average annual return over the previous five years is greater than the 4 percent guarantee, workers get 75 percent of the excess.[34]

Conclusion

All public employees deserve a secure retirement. While there are strengths and drawbacks to every retirement plan, a well-designed cash balance plan can help workers achieve a secure retirement while also providing employers with increased cost certainty. When crafting such a plan, policymakers must focus on setting an adequate level of employer and employee contributions, determining how to share investment uncertainty while providing retirement security between employees and employers, and how to offer benefits to employees who are retiring or leaving for a different job. As several states have shown, well-designed cash balance plans can be affordable, sustainable, and secure.

Endnotes

1 Employees get notional or hypothetical accounts, which track how much has been saved for individual workers' retirements. Actual plan assets, however, are pooled and invested by the plan rather than being individually managed by workers.

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3 Defined contribution plans can be designed with a guaranteed investment return. For example, the New York City Teacher's Tax-Deferred Annuity Program offers members the option of choosing to invest their funds in a fixed return fund which guarantees either a 7 percent of 8.25 percent rate of return.

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is 7.2 percent. Similarly, the Texas County and District Retirement System has targeted returns of 8 percent which plan's ten year return of 7.2 percent comes close to meeting and the plan's thirty year return of 9.2 percent exceeds

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Are Most Teachers Better Off With a DB Pension, 401(k), or Cash Balance Plan? The Case of CalSTRS

By Nari Rhee and William B. Fornia

Most public school teachers in the U.S. are covered by traditional defined benefit (DB) pensions designed to reward long service. Several studies have been released in recent years that argue that "most teachers" do not receive meaningful pension benefits—e.g., McGee and Winters (2013 and 2015), Aldeman and Rotherham (2014), Johnson and Southgate (2015), Aldeman and Johnson (2015), Costrell and Mcgee (2016), and Luecken (2017).[1] These studies cite high turnover among new-hire cohorts as the basis for claiming, as Aldeman and Johnston (2015) do, that "most teachers get nothing from their pensions" under a Final Average Salary (FAS) DB pension given its back-loaded benefit structure.[2]

A major failing of these studies is that they conflate new hire cohorts with the teaching profession as a whole. When policymakers, parents and the public think about teachers, they generally think about those working in classrooms today—that is, they think about the teaching workforce. Understanding how retirement plan design affects the teaching profession requires looking at a representative cross-section of the teaching workforce, weighted by teaching position, not just by new entrant.[3] Only then can we understand whether most teaching jobs are held by foot-loose itinerants who are better off with Defined Contribution (DC) plans, or those committed for the long haul who stand to benefit from a traditional DB pension.

In this study, we ask whether most teachers currently working in California public schools can expect to stay long enough to accrue higher benefits under their pension than alternative retirement plans with the same expected cost and the same capital market assumptions.[4]

We first project the distribution of currently active teachers by age and years of service at withdrawal or retirement. We then model retirement benefit outcomes for teachers at different entry ages under the California State Teachers' Retirement System (CalSTRS) DB pension, an idealized 401(k) plan, and an exceptionally generous cash balance (CB) plan that offers a guaranteed interest rate equal to the CalSTRS DB pension expected return. The alternative plans are assumed to receive contributions equal to the normal cost for retirement benefits provided by the CalSTRS DB pension. Finally, we estimate the share of teachers who, based on age and years of service at exit, would receive higher retirement income from the CalSTRS pension than the idealized 401(k) and CB plan.

Importantly, while we do not fully account for the value of the DB pension guarantee during the accumulation phase, we calculate retirement income outcomes on apples-to-apples terms by converting DC and CB account balances to a life annuity, priced with CalSTRS-specific mortality assumptions and (for DC) a reasonable rate for private insurance group annuities.

We find that most California teachers can expect a long career: 73 percent of teachers can expect to work at least 20 years, and 46 percent can expect to work at least 30 years. Furthermore, 83 percent of the California teacher population will stay until age 55, early retirement age. Even on an entering cohort basis, controlled for age, half of current new hire teachers in California (50 percent) are better off with the DB pension than the idealized DC plan. Ultimately, 85 percent of California's teaching population will accrue higher benefits under the CalSTRS DB pension than through an idealized 401(k), and 76 percent will accrue higher benefits than through a generous CB plan.

The remainder of this article is organized as follows. The following section analyzes teacher turnover and tenure based on the current demographics of the California teaching workforce. The next section describes our alternative benefit modeling methodology and results. Finally, we apply the benefit modeling results to our tenure analysis to estimate the share of currently active teachers that are better off in the DB plan, versus an idealized DC plan and generously structured CB plan.

TURNOVER AND TENURE AMONG CALIFORNIA TEACHERS

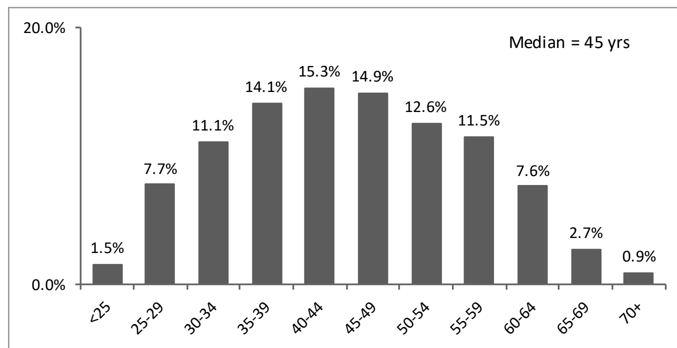
We obtained the following data from CalSTRS: detailed age-service tables for the active membership as of FY 2016; detailed actuarial assumptions adopted in 2016, including annual death, disability, withdrawal, and retirement rates, contingent on age and accrued service years, based on recent CalSTRS experience. We also obtained anonymized microdata for FY 2014 that includes each CalSTRS active member's accrued service credits, hire date, and birth year and month. For our tenure analysis, we conducted a survival analysis by applying the actuarial assumptions to the teacher counts in the age-service table in order to calculate the final age-service distribution, at exit, of currently active teachers.

Current Age And Service Profile

There are currently over 438,000 teachers working in California public schools, community colleges, and state and county job-training programs, based on the CalSTRS active membership count for the fiscal year ending June 30, 2016. Half of active teachers have 11 full years of service or less in California schools (**Figure 1**). Nearly 28 percent of the teacher population in our analysis is a relatively recent hire, with less than five years of service credits as of the end of the 2015–2016 school year.

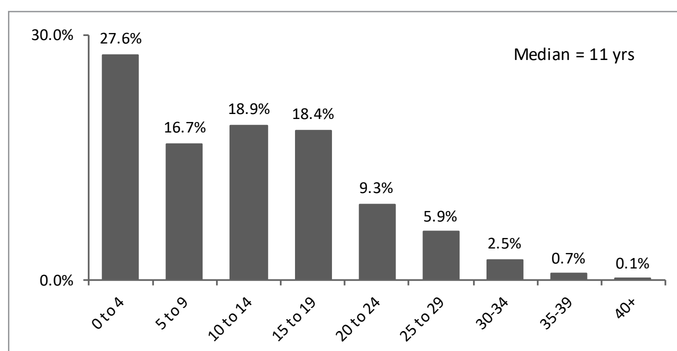
Although the service distribution is skewed towards recently hired teachers, the age distribution of the California teaching workforce mirrors the college-educated labor force, with a median age of 45 years (**Figure 2**). Looking at the age distribution of teachers hired in FY 2014, the mode is clearly age 25, but there is a long right-hand tail; thus the median is 29.2 years, and the mean is 32.7 (**Figure 3**).

Figure 1
Accrued Service Years Among California Teachers



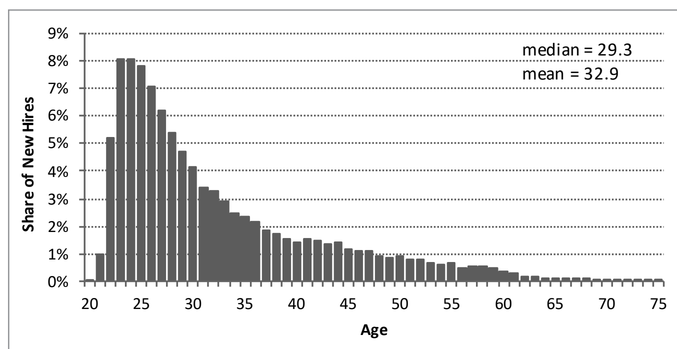
Note: Authors' analysis of CalSTRS active membership data as of June 30, 2016.

Figure 2
Age Distribution of California Teachers



Note: Authors' analysis of CalSTRS active membership data as of June 30, 2016.

Figure 3
Age Distribution of California New Hire Teachers



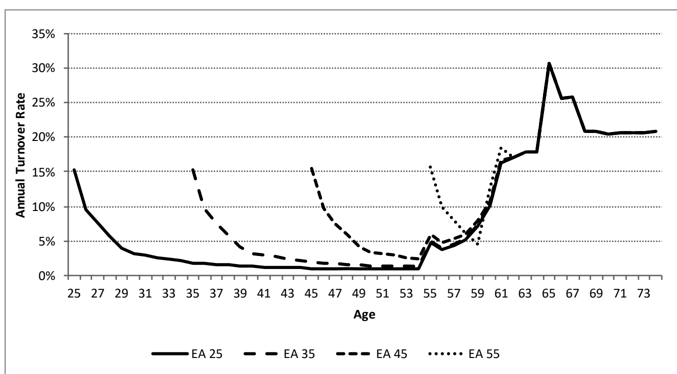
Note: Authors' analysis of CalSTRS active membership microdata for FY 2014.

Turnover And Tenure Analysis

We combined CalSTRS' separation, retirement, disability and pre-retirement mortality rates to construct survival curves for each age-service cohort in the active membership table, and projected the active membership counts in each cohort forward until age 75, when CalSTRS actuaries assume all surviving teachers will retire. We assumed that teachers who are currently age 75 or older will retire immediately.

Turnover rates indicate that retention of California teachers within the state as a whole is remarkably high after the initial churn of the pre-vesting years. **Figure 4** illustrates turnover by entry age. Turnover is highest in the first three years after hire, and then decreases dramatically until early retirement age. Indeed, for teachers hired at age 25, the cohort turnover rate for most years between vesting and age 55 is roughly 1 percent.

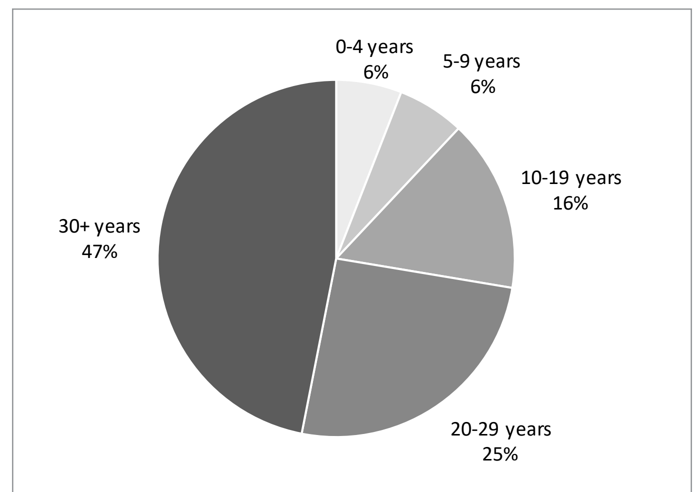
Figure 4
Age-Specific Turnover Rates, by Entry Age



Note: Authors' analysis of CalSTRS actuarial assumptions adopted FY 2016. Data reflect weighted average of male and female turnover rates.

When the careers of the current teaching workforce are projected forward, it turns out that the vast majority of California teachers can expect a long teaching career in the state, and that the typical California teacher will stay until retirement age. Nearly half (47 percent) of the teaching workforce will have earned at least 30 years of service by the time they leave the California schools (**Figure 5**). One-quarter (25 percent) will leave with 20 to 29 years of service. These add up to 72 percent of teachers staying at least 20 years. Only 6 percent will leave without vesting, and 22 percent will leave with five to 19 years of service.[5]

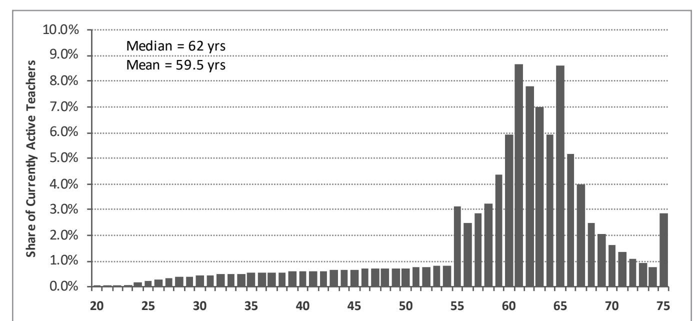
Figure 5
Projected Tenure of Current California Teachers



Note: Authors' analysis based on CalSTRS active membership data and actuarial assumptions as of June 30, 2016.

Figure 6 illustrates the distribution of projected exit ages among currently active teachers. The median projected exit age is 62 years, and the mean is 59.5. Before age 55, the share of the total current teaching workforce that will leave each year is miniscule, under 1 percent annually until age 54. A large majority of California teachers (83 percent) will leave when they are at least 55 years old, and virtually all of this group (82 percent of active teachers) will have vested by then.

Figure 6
Projected Age at Exit Among Current California Teachers



Note: Authors' analysis based on CalSTRS active membership data and actuarial assumptions as of June 30, 2016.

We find that most California teachers can expect a long career: 73 percent of teachers can expect to work at least 20 years, and 46 percent can expect to work at least 30 years. Furthermore, 83 percent of the California teacher population will stay until age 55, early retirement age. Even on an entering cohort basis, controlled for age, half of current new hire teachers in California (50 percent) are better off with the DB pension than the idealized DC plan. Ultimately, 85 percent of California's teaching population will accrue higher benefits under the CalSTRS DB pension than through an idealized 401(k), and 76 percent will accrue higher benefits than through a generous CB plan.

The remainder of this article is organized as follows. The following section analyzes teacher turnover and tenure based on the current demographics of the California teaching workforce. The next section describes our alternative benefit modeling methodology and results. Finally, we apply the benefit modeling results to our tenure analysis to estimate the share of currently active teachers that are better off in the DB plan, versus an idealized DC plan and generously structured CB plan.

TURNOVER AND TENURE AMONG CALIFORNIA TEACHERS

We obtained the following data from CalSTRS: detailed age-service tables for the active membership as of FY 2016; detailed actuarial assumptions adopted in 2016, including annual death, disability, withdrawal, and retirement rates, contingent on age and accrued service years, based on recent CalSTRS experience. We also obtained anonymized microdata for FY 2014 that includes each CalSTRS active member's accrued service credits, hire date, and birth year and month. For our tenure analysis, we conducted a survival analysis by applying the actuarial assumptions to the teacher counts in the age-service table in order to calculate the final age-service distribution, at exit, of currently active teachers.

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Although the service distribution is skewed towards recently hired teachers, the age distribution of the California teaching workforce mirrors the college-educated labor force, with a median age of 45 years (**Figure 2**). Looking at the age distribution of teachers hired in FY 2014, the mode is clearly age 25, but there is a long right-hand tail; thus the median is 29.2 years, and the mean is 32.7 (**Figure 3**).

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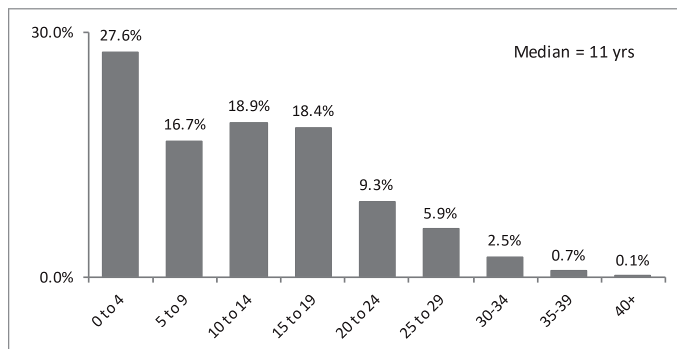
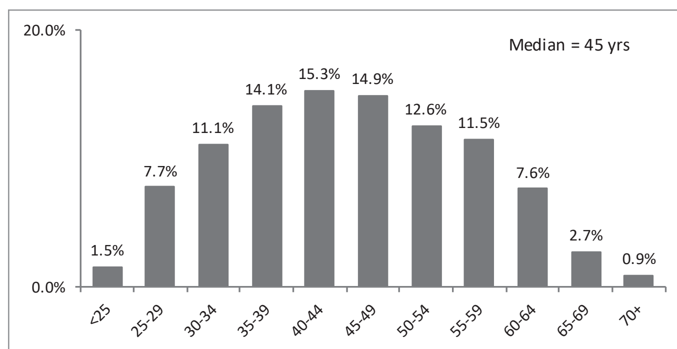


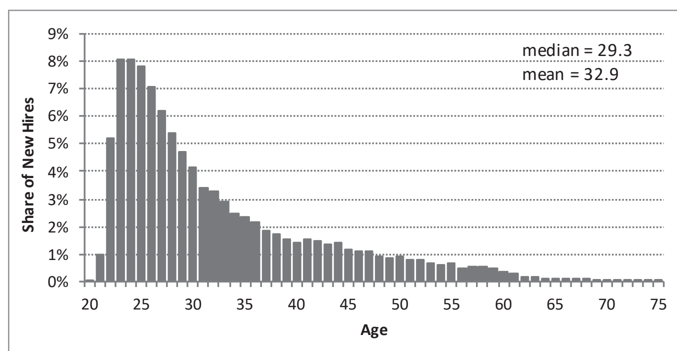
Note: Authors' analysis of CalSTRS active membership data as of June 30, 2016.

Figure 2
Age Distribution of California Teachers



Note: Authors' analysis of CalSTRS active membership data as of June 30, 2016.

Figure 3
Age Distribution of California New Hire Teachers



Note: Authors' analysis of CalSTRS active membership microdata for FY 2014.

Annuitization. In order to facilitate an apples-to-apples comparison with the DB plan, we assumed that the entire account balance at retirement is used to purchase a private insurance immediate annuity equivalent to the lifetime income stream provided by CalSTRS. In this way, we incorporate the value of the longevity insurance that is one of the key benefits of a DB pension.[9] We assumed a generous interest rate of 5 percent, which aligns with historical and projected long-term averages, but which significantly exceeds market interest rates in the low-interest environment that has persisted since 2008. We assume a cost (load) of 0.5 percent of the annuitized amount, in line with pricing for group annuities.

For the CB plan, we assumed a generous guaranteed interest rate of 7 percent. The employer is assumed to bear all the investment and longevity risk—highly unusual in public or private CB plans. However, the benefit accrual pattern is similar to a 401(k). That is, a compound annual interest rate of 7 percent was applied to contributions equal to 16.5 percent of salary. We assumed that the plan offered in-plan annuitization at 7 percent interest, on terms identical to the CalSTRS pension annuity. This is highly unusual among real world CB plans, which are almost always used as a means to facilitate risk-sharing between participants and employers.

Because DB plans express benefits in terms of income replacement (lifetime monthly income as a percentage of final pay), while DC plans and CB plans express benefits as lump sum account balances, we needed to create an apples-to-apples measure of retirement benefit value across these three plans. Given that the DC plan is the only plan in which there is an immediate cash value for individual participants, we converted the DB and CB plan benefits to 401(k)-equivalent values. For each year of separation, we identified the projected annuity benefit for the DB plan, and calculated the balance that would be required to fund the same benefit through the DC plan. We repeated the same procedure for the CB plan based on the assumed interest rate of 7 percent. In the cases where an employee contribution refund or lump sum cash-out in the DB plan had the greatest value, we simply used those cash values without adjustment. The same account balance will generate different income streams in a DC plan compared to the CB plan that we modeled, because the latter offers a higher interest rate on annuities.

Benefit Model Results

In order to simplify findings across entry ages and plan types, **Exhibit 7** provides a schematic illustration of benefit accumulation under the DC plan and the CalSTRS DB pension, and the share of current teachers that fall on each side of the crossover point between the two plans. (The CB plan in our model follows a similar accrual pattern to the DC plan, albeit with higher benefits due to the 7 percent in-plan annuity.) When benefit accrual patterns are considered in conjunction with projected tenure, we find that 85 percent of California teachers will receive higher retirement benefits from the CalSTRS DB pension than they would from an idealized DC plan, taking into account both retirement wealth and retirement income.

Under the CalSTRS pension, like most plans of its kind, teachers accumulate benefits more slowly than in a DC or CB plan in the beginning of their career. Pension accrual begins to accelerate mid-career so that the slope of the DB benefit curve becomes steeper than the slope of the DC benefit curve. Finally, after age 65—the age at which the CalSTRS pension benefit multiplier peaks—the growth of pension benefits as a multiple of current pay flattens out and in some cases becomes negative. Benefits continue to grow in absolute terms in tandem with salary growth and accumulated service years, but this is counterbalanced by the decrease in the number of years of benefit payments from delayed retirement.

Figure 7
Benefit Accumulation Under CalSTRS DB vs Idealized DC Plan

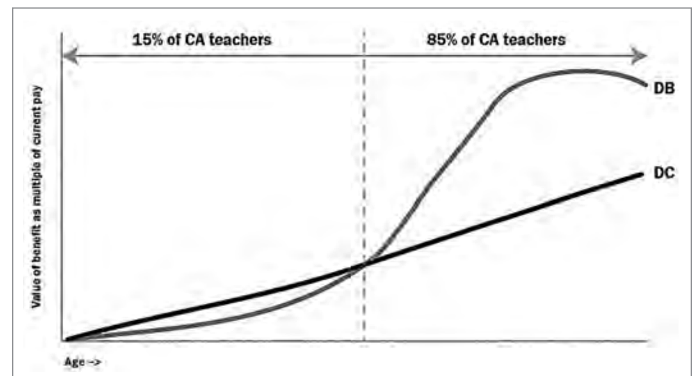


Figure 8 shows the age at which DB plan value exceeds the value of DC and CB plans for entry ages 25 to 45, in five-year increments. The comparison to the DC model has two sets of parameters: full normal cost versus just employee contributions, and idealized 401(k) returns versus a more realistic scenario in which typical individual behavior leads to 1 percent reduction of annual investment returns due to adverse investment behavior.

As expected for a back-loaded pension, it does take longer for younger workers to reach the break-even point compared to older workers. The CalSTRS DB pension becomes more valuable than the idealized DC plan at age 50 for teachers hired at age 25. This transition occurs at age 51 for those hired at age 30 and at age 50 for those hired at age 45. The CalSTRS DB pension becomes more valuable than the CB plan somewhat later—at age 57 for those hired at age 25, and at progressively younger ages for older hires.[10]

Figure 8 also shows that the addition of realistic individual investor behavior shortens the break-even horizon for the DB plan in relation to the DC plan, to age 47 for teachers hired at age 30. Realistic investor behavior also reduces the number of years to recover the full value of employee contributions vis-à-vis the DC plan to 11. Again, this assumes that teachers place no value on the guaranteed nature of DB pension benefits.

Figure 8
Age When Value of DB Plan Equals or Exceeds Value of Alternative Plans, by Entry Age

	Entry Age				
Comparison Plans	**25**	**30**	**35**	**40**	**45**
Idealzed DC Plan					
Full DC benefit	50	51	49	48	50
Value of employee contributions	41	42	41	45	50
DC Plan with Typical Investor Returns					
Full DC benefit	45	47	46	46	50
Value of employee contributions	36	38	40	45	50
CB Plan with Guranteed Equal to DB Expected Return	57	55	55	53	54

Note: Idealized DC plan assumes no investor mistakes. Realistic DC plan assumes 1% drag on returns from typical investor behavior. However, all plans assume consistent funding and no leakage. Difference between DB and CB value at age 56 was trivial, .06%.

While it does take a significant period of time for new hire teachers to accrue benefits under the CalSTRS DB pension that exceed the benefits they might have accumulated under an idealized DC plan, CalSTRS comes out ahead for a significant share of new hire teachers. **Figure 9** shows the share of new hires that will earn greater benefits under the DB pension than alternative plans, by sample entry ages and for all new hires combined. It includes an estimated share of all new hires who will accumulate greater benefits under the CalSTRS pension than the alternative plans, calculated by weighting the percentage of each entry group projected to stay until the benefit crossover points by its share of the new hire population in FY 2014. Notably, half of new hires (50 percent) are better off with the DB pension than a 401(k)-type plan—again, without fully accounting for the value of the pension guarantee. This contradicts the assertion that new teachers are unequivocally better off with a DC plan.

85 percent of teachers will earn greater retirement benefits from the CalSTRS DB pension than they could expect from DC.

We found that 45 percent of new hires are better off with the CalSTRS pension than a CB plan that guarantees 7 percent. However, it is unlikely that states would offer this level of guarantee for a new CB plan for public employees. Such a plan would impose the same liability on public employers as a traditional DB plan, while sacrificing retention incentives and potentially increasing turnover costs.

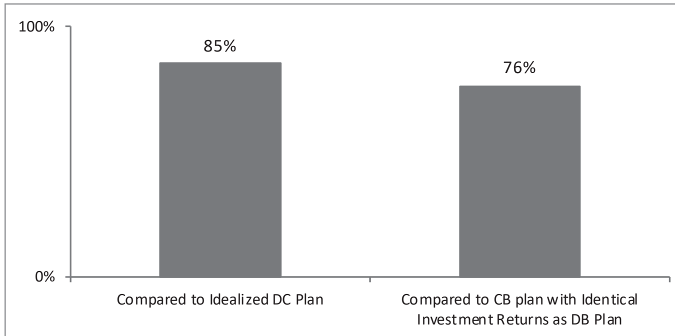
Figure 9
Share of New Hire Cohort for Whom Value of DB Pension Will Equal or Exceed Alternative Plans

	Entry Age					Weighted Average for All New Hires
	25	**30**	**35**	**40**	**45**	
Idealzed DC Plan	47%	51%	52%	58%	64%	**50%**
CB Plan	40%	46%	48%	52%	56%	**45%**

Note: Authors' analysis of FY 2014 membership microdata based on current actuarial assumptions.

Finally, in order to estimate the share of the California teaching workforce that is better off with a DB pension, we applied the highest age thresholds when the DB value exceeds the value of alternate plans (age 50 for DC and age 57 for CB) to the projected age-service distribution. Ultimately, 85 percent of active teachers will vest and stay long enough to earn greater retirement benefits from the CalSTRS DB pension than they could expect from an ideal DC plan (**Figure 10**). Similarly, 76 percent of active teachers are better off with the CalSTRS pension than with a generous CB plan that offers a guaranteed interest rate equal to the CalSTRS pension expected return.

Figure 10
Share of California Teachers Who Are Better Off With CalSTRS DB Pension Compared to Alternative Plans



Note: Authors' analysis based on CalSTRS active membership data and actuarial assumptions as of June 30, 2016.

CONCLUSION

Contrary to studies of retirement benefits based on new-hire cohorts that claim that most teachers do not benefit from a traditional pension, our analysis clearly shows that most teachers working in the profession can expect long careers, and are thus well-positioned to benefit from a traditional pension. Conversely, replacing DB pensions with DC or CB plans would reduce the retirement incomes of a large majority of teachers.

Nari Rhee, Ph.D., is a director of the Retirement Security Program at the UC Berkeley Center for Labor Research and Education. She can be contacted at *nari@berkeley.edu*.

William B. (Flick) Fornia, FSA, is president of Pension Trustee Advisors, consultant to public pensions and related parties. He can be contacted at *flick@pensiontrusteeadvisors.com*.

ENDNOTES

1 McGee, J. and M. Winters, "Better Pay, Fairer Pensions: Reforming Teacher Compensation." Manhattan Institute, 2013; McGee, J. and M. A. Winters. "Modernizing Teacher Pensions." *National Review*, No. 22 (2015); Aldeman, C. and A.J. Rotherham. "Friends without Benefits: How States Systematically Shortchange Teachers' Retirement and Threaten Their Retirement Security." Bellwether Education Partners, 2014; Johnson, R.W. and B. Southgate, "Are California Teacher Pensions Distributed Fairly?" Urban Institute, April 2015; Aldeman, C. and R. Johnson, "Negative Returns: How State Pensions Shortchange Teachers," Urban Institute, September 2015; Costrell, R. M. and J. McGee, "Cross-Subsidization of Teacher Pension Normal Cost: The Case of CalSTRS," University of Arkansas, EDRE Working Paper 2016-2017, October 2016; Luecken, M., "(No) Money in the Bank: Which Retirement Systems Penalize New Teachers?." University of Arkansas Thomas B. Fordham Institute, 2017.

2 Aldeman and Johnston (2015), op cit.

3 Morrissey, M., "Teachers and Schools are Well Served by Teacher Pensions," Economic Policy Institute, October 2017.

4 The results of this study were originally published in Nari Rhee and William B. Fornia, , "How do California Teachers Fare under CalSTRS? Applying workforce Tenure Analysis and Counterfactual Benefit Modeling to Retirement Benefit Evaluation," Journal of Retirement, Fall 2017. An earlier version of this study, based on 2014 data, was published as Nari Rhee and Flick Fornia, "Are California Teachers Better off with a Pension or 401(k)?," UC Berkeley Center for Labor Research and Education, February 2016.

5 Grouped totals may not add up due to rounding.

6 Normal cost for the CalSTRS DB pension, exclusive of death and disability benefits was provided by David Lamoreux, CalSTRS actuary, via email, April 17, 2017.

7 The only change in the capital market assumptions between FY 2014 and FY 2016 was a .25 percent reduction in the inflation assumption, and CalSTRS chose to reduce its discount rate by .50 percent as a measure of conservatism. For this study, we decreased the TDF portfolio annual returns by .25 percent to reflect the inflation decrease.

8 For an overview of research on individual investor behavior and underperformance, see Barber Odean (2011) and Tang, Mitchell, and Utkus (2011).

9 If an individual were to forgo the annuity, they would still have to pace their annual withdrawals to last well past average life expectancy, or else run a large risk of running out of money.

10 Comparing our current findings to our 2016 study of CalSTRS (Rhee and Fornia 2016), and looking across entry ages, the crossover points at which the CalSTRS pension benefit equals or exceeds alternative benefits have not significantly shifted as the result of the new actuarial and investment return assumptions. The reason is that, while our model shrank the gap in investment returns between the DB pension and alternative plans, and increased contributions to the alternative plans on par with the new normal cost for CalSTRS, this was offset by salary growth changes and increased life expectancy.

House Bill 1022
North Dakota Retirement and Investment Office (RIO)
Testimony before House Appropriations – Government Operations Division
Representative David Monson, Chair

Jodi Smith – Interim Executive Director
Chad Roberts, MAcc – Deputy Executive Director/Chief Retirement Officer
Scott Anderson, CFA, MBA – Chief Investment Officer
Rachel Kmetz – Interim Chief Financial Officer/Chief Operating Officer

I. RIO Statutory Authority and Responsibilities

The Retirement and Investment Office (hereinafter "RIO") was created by the 1989 Legislative Assembly to capture administrative and investment cost savings in the management of the investment program of the State Investment Board (SIB) and the retirement program of the Teachers' Fund for Retirement (TFFR). Statutory authority for the agency is found in North Dakota Century Code chapter 54-52.5 and the programs are governed by chapters 21-10 (SIB) and 15-39.1 (TFFR).

II. Organization of RIO

A. State Investment Board (SIB)

The SIB is responsible for oversight of over $23 billion of investments for 31 different client funds including TFFR and PERS within the over $8 billion Pension Pool and WSI in the nearly $3.5 billion Insurance Pool in addition to roughly $11.5 billion in the Legacy Fund. Funding for administration of the SIB Investment Program comes directly from investment clients' invested assets (both statutory and contracted).

SIB members include the Governor, State Treasurer, Director of Office of Management and Budget, State Land Commissioner, Workforce Safety & Insurance designee, two PERS board members, two TFFR board members, two members of the Legacy and Budget Stabilization Fund Advisory Board, and two Institutional Investment Professionals.

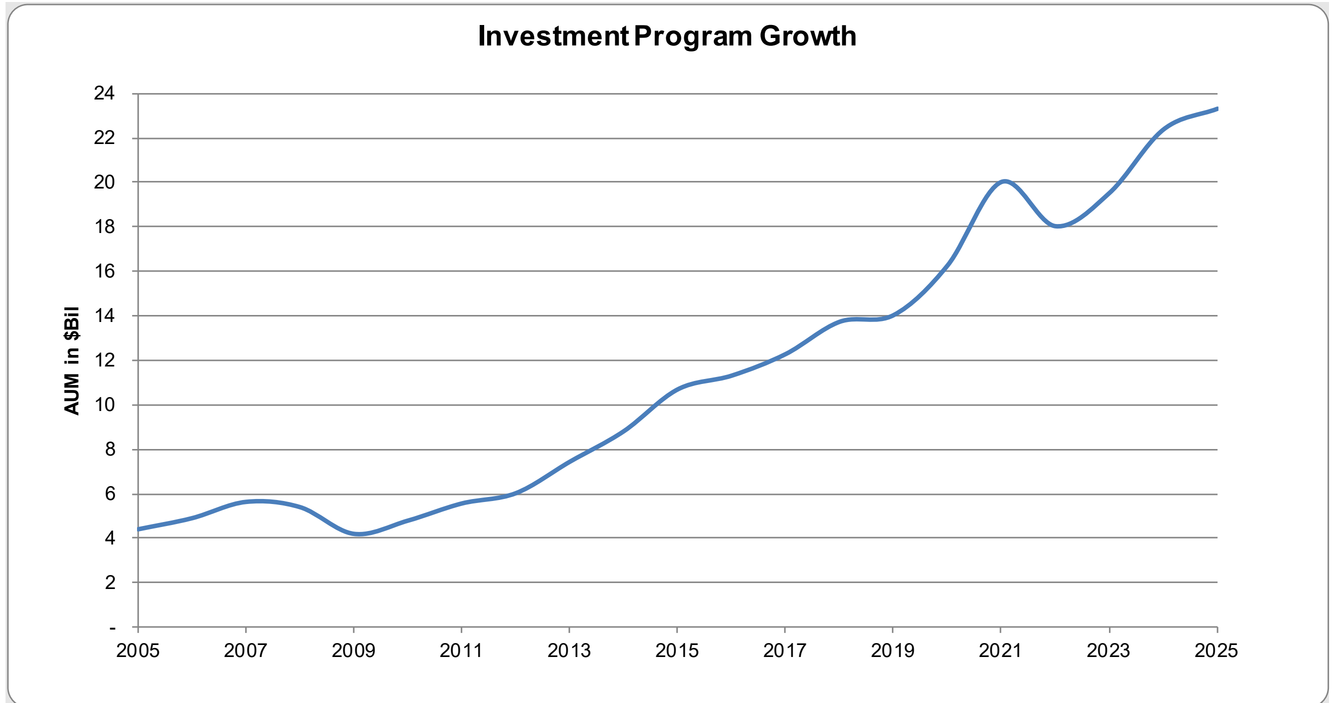
Investment guidelines and asset allocations are established by the governing bodies of the individual funds, with assistance from consultants and/or RIO staff, and subject to review and approval by the SIB prior to implementation.

	Fair Value (as of 10/31/24)
PENSION POOL PARTICIPANTS	
Teachers' Fund for Retirement	$ 3,352,221,348
Public Employees Retirement System	4,514,724,260
Bismarck City Employee Pension Fund	133,547,238
Bismarck City Police Pension Fund	56,108,250
City of Grand Forks Pension Fund	77,186,135
Grand Forks District Pension Fund	9,025,879
Subtotal Pension Pool participants	$ 8,142,813,109
INSURANCE POOL PARTICIPANTS	
Workforce Safety & Insurance Fund	$ 2,165,731,209
State Fire and Tornado Fund	20,213,035
State Bonding Fund	3,941,357
Petroleum Tank Relase Fund	6,313,649
Insurance Regulatory Trust Fund	215,148
State Rick Management Fund	4,214,280
State Risk Management Workers Comp	2,273,128
Cultural Endowment Fund	612,869
Budget Stabilization Fund	943,644,620
ND Assoc. of Counties (NDACo) Fund	3,940,015
City of Bismarck Deferred Sick Leave	872,473
PERS Group Insurance	60,303,175
State Board of Medicine	4,987,142
City of Fargo FargoDome Permanent Fund	45,349,032
Lewis & Clark Interpretive Center Endowment	944,261
Attorney General Settlement Fund	651,709
Veteran's Cemetary Trust Fund	512,402
ND University System Capital Building Fund	10,738
Arts Across the Prairie Maintenance Fund	1,257,708
Water Projects Stabilization Fund	147,363,929
OPIOID Settlement Fund	16,354,173
State Historical Endowment Fund	869,578
Subtotal Insurance Pool Participants	$ 3,430,575,630
INDIVIDUAL INVESTMENT ACCOUNTS	
Legacy Fund	11,498,016,442
Retiree Health Insurance Credit Fund	191,607,457
Job Service of North Dakota Pension Fund	84,056,315
Total	$ 23,347,068,952

(Amounts are unaudited)

The SIB selects investment managers to manage different types of portfolios within each asset class with the goal of maximizing return within the clients' acceptable risk levels.

Over the past two decades, the average assets under management (AUM) of the investment program has significantly grown in size. Amounts have grown from an average of roughly $4 billion during the 2003-2005 biennium to an average of over $23 billion during the current 2023-2025 biennium.



B. Teachers' Fund for Retirement (TFFR)

TFFR is a qualified defined benefit public pension plan. The program is managed by a seven-member board of trustees which consists of the State Treasurer, State Superintendent, two active teachers, two retired teachers and one school administrator all appointed by the Governor.

The plan covers North Dakota public school teachers and administrators. Benefit funding comes from member and employer contributions and investment earnings. During the past decade, active membership has increased 13.6% from 10,514 to 11,945 participants, while retirees and beneficiaries have increased 20.8% from 8,025 to 9,693.

The mission of TFFR, a trust fund, is to advocate for, develop, and administer a comprehensive retirement program for all trust fund members, North Dakota k-12 educators, in a manner consistent with its fiduciary obligations and approved resource allocation.

The TFFR Board reaffirmed its commitment to evolving governance to respond to program growth by establishing a Governance and Policy Review committee that is tasked with reviewing program policies and public policy affecting statutes and administrative rules to make recommendations to the full Board for making policy or requesting changes from the Legislature.

The TFFR program is currently in Phase 3 of 3 of a multi-year large IT Pension Administration Modernization Project (TFFR "Pioneer" Project) that will provide a better ROI for the agency and improve the member and employer experience with TFFR while aligning with state-wide initiatives to better utilize technology enabled processes.

TFFR plan is designed to provide lifetime normal retirement benefits, disability benefits, and death benefits for ND public school educators and certain state teachers. It provides ND educators with a financial foundation for the future that includes a secure and stable retirement. This is possible due to TFFR's plan design, professional plan management, strong investment performance, and outstanding customer service.

The TFFR plan is an important feature in the recruitment and retention of high-quality teachers and administrators in North Dakota, and not lose these quality individuals to out of state programs.

C. RIO Organizational Chart

(See attached)

III. RIO currently has 34 full-time FTEs across the two programs and four divisions along with two temporary positions and an intern. The four divisions include Investment, Retirement Services, Fiscal Services, and Internal Audit. The two temporary positions are directly attributable to additional workforce needs during the development and implementation of a large IT project for the TFFR program. The hiring of intern position's reflects an intent to consciously develop a robust internship program at RIO that will provide an opportunity to college and graduate students studying in North Dakota to participate in investment, accounting, benefit services, and public policy processes within the public sector.

IV. Audit Findings

RIO has received no financial audit findings in the past 20+ years.

V. 2023-25 Accomplishments and Challenges

RIO accomplishments during the 2023-2025 biennium have included:

1. Creating and implementing a new agency strategic plan identifying core priorities and transformational initiatives.
2. Reorganizing the agency to achieve greater economies of scale and support new strategic plan.
3. Developing and implementing intra-agency communication and training plan to support organizational culture as a core agency priority.
4. Completion of agency wide compensation study and creation of incentive compensation plan for investment related positions.
5. Procurement of new investment program software solution to facilitate the internal investment initiative.
6. Hosted multiple interns across the agency including the first ever investment focused intern within the investment program.
7. Entered into an internal audit co-sourcing relationship to enhance the internal audit capabilities alongside the agency evolution.
8. Developed and implemented a formal new board member onboarding program to educate new board members as they assume their roles on SIB and TFFR.
9. Enhancement of the agency-wide communications and outreach plan.
10. Assisting governing boards with the creation and operation of three new standing committees to create governance that supports program growth: a Governance & Policy Review committee of the SIB; an Investment Committee of the SIB; and a Governance & Policy Review committee of the TFFR Board (previously an ad hoc committee); as well as expanding the scope of the Executive Review and Compensation Committee.
11. Continuing to implement an in-state investment initiative with the creation of the ND Growth Fund, increasing funding of the BND match loan program, and supporting a

Legacy Fund Asset Allocation Study project commissioned by the Legacy and Budget Stabilization Advisory Board.

12. Completing two out of three phases of the TFFR Pension Administration System Modernization Project (TFFR "Pioneer" Project) and making significant progress through the third and final phase.
13. The Legislature approved an internal investment management initiative and authorized RIO to develop an incentive compensation plan to support the investment program and an additional 7 new FTE's for the 2023-2025 biennium, during the 2023 Legislative Session.

2025-27 Goals and Plans

Goals for RIO during the 2025-2027 biennium include:

TFFR Investment and Funding Goals

1. Continue to improve the Plan's funding status to protect and sustain current and future benefits.
2. Minimize the employee and employer contributions needed to fund the Plan over the long term.
3. Avoid substantial volatility in required contribution rates and fluctuations in the Plan's funding status.

TFFR Service Goals

1. Continue to implement an enhanced Outreach and Communication Plan for our members, employers, and other stakeholder groups related to the program in general.
2. Administer an accurate, efficient, and responsive pension benefits program.
3. Deliver high quality, friendly service to members and employers.

SIB Strategic Investment Plan

1. Reaffirm our organizational commitment to the importance of continuing board education and strong board governance to create and maintain an innovative and agile investment program.
2. Enhance understanding of our core goals and beliefs while enhancing overall transparency.
    a. Remain steadfast in our commitment to the prudent use of active investment management.
    b. Expand awareness to downside risk management which is essential to achieving our long-term investment goals.
    c. Given actual and projected growth of SIB client assets and the heightened public awareness of the Legacy Fund, align our investment platforms to promote greater clarity and efficiency in reporting and implementing client investment policies.
3. Expand RIO's influence and ability to create positive and sustainable change by building deeper relationships with existing clients, organizations, and legislative leaders.
    a. Enhance community outreach to build upon public awareness and confidence.
    b. Develop concise presentations which highlight our overall risk, return and cost control framework including our progress towards attaining our long-term goals.
    c. Continue to implement an in-state investment initiative and provide education and outreach efforts consistent with the roll-out of that initiative.

4. Encourage employee participation in staff meetings, offer team members more opportunities to impact RIO's change initiatives and improve the office environment for staff and clients.
5. Enhance our internal control environment by improving use of proven risk management solutions relating to fraud risk assessments, investment risk management and overall enterprise risk management.
    a. A robust risk management framework serves as a foundation to support a sound internal control environment and lessen downside risks.
    b. Broaden stakeholder awareness of the challenges faced in estimating Legacy Fund earnings for future budget planning.
    c. Evaluate and expand the efficient use of technology in our investment program activities including risk management, compliance monitoring, client satisfaction surveys, website design and communications.

RIO Strategic Plan
1. Continue to develop our organization culture as a recruitment and retention tool to develop a growth mindset and encourage employee engagement.
2. Create, develop, and maintain a robust internship program across both programs.
3. Continue to identify additional process areas where efficiencies can be gained through technology enabled processes and implement such processes.

VI. **Comparison agency request/recommendation totals, including full-time equivalent (FTE) positions, for the next biennium compared to the current biennium.**

Line Item Description	2023-25 Base Budget	2025-27 Executive Recommendation	2025-27 Total Agency Request
Salaries and Wages	$ 10,338,543	$ 12,651,746	$ 15,184,481
Operating Expenses	2,731,037	3,761,208	4,026,133
Contingencies	200,000	200,000	200,000
Total Special Funds	**$ 13,269,580**	**$ 16,612,954**	**$ 19,410,614**
FTE	34	35	44

During the current 2023-25 biennium, RIO has a base budget of $13.3 million. The majority of which consists of salaries and benefits for the 34 FTE and temporary team members. This amount includes the vacancy and FTE pool appropriation amount of $1,786,076.

The 2025-27 executive recommendation adds one FTE for internal audit as well as includes cost to continue salary amounts for investment positions that were appropriated during the 23-25 biennium that were only funded for one year of the biennium. It also includes the executive

compensation recommendation. The majority of the increase in the operating line is related to the continuation of our pension administration system modernization project and the related IT costs.

The 2025-27 total agency request includes added funding for an additional communications FTE and an internal audit FTE. The internal audit FTE was included in the executive recommendation. It also includes 8 FTE related to our strategic internal investment request package to make up the total 44 FTE.

VII. <u>New positions approved in 2023-25 biennium by the 2023 Legislative Assembly</u>

A. Nine new positions were added by the 2023 Legislative Assembly

i. Sr. Investment Accountant - Hired 7/18/23 - $219,735 (out of $219,735 in SPA) transferred from OMB pool, anticipate using entire amount +

ii. Fiscal & Investment Admin Assistant - Hired 9/5/23 - $154,886 ($154,886 in SPA) transferred from OMB pool, anticipate using entire amount +

iii. Portfolio Manager: Internal Equities - Hired 8/1/24 - $219,581 ($238,639 in SPA) transferred from OMB pool, anticipate using entire amount +

iv. Sr. Investment Analyst: Internal Equities - Hired 8/1/24 - $191,175 ($208,554 in SPA) transferred from OMB pool, anticipate using entire amount +

v. Portfolio Manager: Internal Fixed Income - Hired 9/3/24 - $222,508 ($238,639 in SPA) transferred from OMB pool, anticipate using entire amount +

vi. Investment Accountant - Hired 9/16/24 - $101,250 ($125,562 in SPA) transferred from OMB pool, anticipate using exact amount

vii. Analyst: Internal Fixed Income – Accepted Offer. Planned start date is 2/3/25 - $0 ($139,560 in SPA) transferred from OMB pool, anticipate using $68,048.

viii. Analyst: Internal Equities - Anticipate hiring Q1 '25 - $0 ($139,559 in SPA) transferred from OMB pool, anticipate using $56,520.

ix. *Investment Administrative Assistant - Anticipate hiring Q1 '25 - $0 ($82,813 in SPA) transferred from OMB pool, anticipate using 13,802.*

VIII. Employee turnover and number of vacant positions during the 23-25 biennium

A. Prior to November '24, only vacancies were caused by internal promotions

i. Sr. Analyst Private Markets was vacant as of 8/1/24 as incumbent was hired into new Portfolio Manager role. Position was advertised for and ultimately hired for in December '24. Total "savings" was $67,027.32 ($16,756.83 x 4 months)

ii. Investment Analyst was vacant as of 8/1/24 as incumbent was hired into new Sr. Analyst Internal Equities role. Position was advertised for and ultimately hired for in January '25. Total "savings" was $58,594.55 ($11,718.91 x 5 months)

iii. Analyst: Internal Fixed Income - Currently Interviewing - no savings realized as no funding will be transferred from the OMB pool until start date.

iv. Analyst: Internal Equities - Anticipate hiring Q1 '25 - no savings realized as no funding will be transferred from the OMB pool until start date.
v. Investment Administrative Assistant - Anticipate hiring Q1 '25 – no savings realized as no funding will be transferred from the OMB pool until start date.
vi. Executive Director vacant as of 1/3/25 – Interim Executive Director was hired 1/13/25. No savings will be realized.
vii. CFO/COO vacant as of 1/3/25 - no savings realized to date.

B. Anticipated amounts to be requested and transferred from the OMB pool:
   i. *New FTEs:*
      1. Analyst: Internal Fixed Income - a ratable amount depending on start date
         a. $139,560 was in SPA for 12 months so the portion of the year the position is not vacant will be requested from pool
      2. Analyst: Internal Equities - a ratable amount depending on start date
         a. $139,559 was in SPA for 12 months so the portion of the year the position is not vacant will be requested from pool
      3. Investment Administrative Assistant - a ratable amount depending on start date
         a. $82,813 was in SPA for 12 months so the portion of the year the position is not vacant will be requested from pool
   ii. *Vacant Pool:*
      1. Amount anticipated to be requested from the vacant FTE portion of the OMB pool is yet to be determined and will depend greatly on the upcoming searches and hirings for the ED and CFO/COO positions.

IX. Budget Summary

The Retirement and Investment Office (RIO) serves two important program boards: the State Investment Board (SIB) and the Teachers' Fund for Retirement (TFFR) Board. As such, its agency budget is separated into two separate programs, both of which are paid for with special funds.

Investment Program (SIB)
Funding for administration of the SIB Investment Program comes directly from investment clients' invested assets (both statutory and contracted).

Salary and benefits represent funding for 22.85 FTEs, which provide all the accounting, financial and administrative support, and investment performance services for the funds under management.

Operating funds needed to administer the SIB investment program include building rent, staff and board travel and education, and NDIT data processing.

Retirement Program (TFFR)
Funding for administration of the TFFR Pension Plan comes from member and employer contributions and investment earnings.

Salary and benefits represent funding for 11.15 FTEs responsible for administering the TFFR retirement program.

The operating funds required to administer the TFFR retirement program include NDIT data processing, IT contracts, building rent, staff and board travel and professional development.

2025-2027 Budget Request									
				#1	#2	#3	#4	#5	
Line Item Description	**Base Budget**	**Adjustments to Base to meet Budget Limit**	**Adjusted Base**	**2nd Half of New Positions**	**Cost to Continue IT Hosting/Support**	**Cost to Continue HR**	**Incremental Agency Evolution/ Retirement Education**	**Internal Investment 2.0**	**Total Agency Request**
Salaries and Wages	$ 10,338,543	70,450	$ 10,408,993	1,236,914	-	142,302	418,092	2,978,180	$ 15,184,481
Operating Expenses	2,731,037	(208,822)	2,522,215	-	1,201,268	-	90,450	212,200	4,026,133
Contingencies	200,000	(200,000)	-	-	-	-	200,000	-	200,000
Total Special Funds	**$ 13,269,580**	**(338,372)**	**$ 12,931,208**	**1,236,914**	**1,201,268**	**142,302**	**708,542**	**3,190,380**	**$ 19,410,614**
FTE	34	-	34	-	-	-	2	8	44

Request package #1 – 2nd Half of New Positions

During the 2023 Legislative Session, NDRIO received approval to move forward with its internal investment initiative. The proposal required five investment professionals, one operations professional and one administrative staff to manage approximately $3 billion of assets internally. Implementing this proposal can lower the net costs for RIO investments by $6 million per year and create opportunities for better liquidity management and rebalancing that may result in up to another $10 million in savings per year. The net costs and opportunities grow with assets under management and with the amount of assets managed internally.

Generally investment management costs fall within the scope of continuing appropriation authority granted by the legislature in NDCC 21-10-06.2; however because this proposal involves cost savings achieved by internalizing investment operations through additional permanent FTE's and infrastructure it falls within the scope of NDCC 54-52.5-03.

Due to the complexity of this plan RIO only asked for a salary budget for one year of the 2023-2025 biennium for these additional staff as we understood it would take significant time to develop the plan and stand up all the necessary processes and procedures to effectively implement.

Although one year's worth of salaries and benefits for these positions are included in our base budget, in order to continue the plan into the 2025-2027 biennium, appropriation for the salaries and wages for the second year is required.

This phased in proposal seeks to create a foundation to internalize additional investment functions in future biennium's. This initial proposal seeks to achieve cost savings by moving approximately $3 billion in AUM to internal management, however, future costs savings may be achieved in future biennium's with up to 50% of AUM moved to internal management. The net after cost estimated benefits of going to a greater portion of internal investment management and to a more sophisticated investment process is estimated at $45 million per year as the result of lower fees

(the savings is net after the cost of the additional FTE's and infrastructure) if up to 50% of the assets are managed internally. The decrease would be recognized within continuing appropriation expenses. The change to more internal investment would require more FTEs currently paid out of appropriated expenses.

All RIO client funds under management will benefit from the associated cost savings achieved by implementing some internal investment management of assets. At the present rate of growth for the program the impact of maintaining the current investment management structure results in failure to leverage client assets and achieve benefits from the scale of the program.

The total appropriation increase for this package is $1,236,914, which is all salary and fringe benefits. Of which the entire amount was included in Governor Burgum's executive recommendation.

Request package #2 – Information and Technology Hosting and Support

During the 2023-25 biennium, RIO is in the final stages of implementing a new pension administration system for the Teachers' Fund For Retirement (TFFR). Knowing that the system would not go live until the second year of the biennium, only one year of hosting fees was requested during the 2023 legislative session. This approved amount is included in our base budget and will carry over to 2025-2027 however, we are asking for the second year's hosting costs in order to run the new system for the entire biennium.

Additionally, as a unified agency, RIO is reliant on significant support from NDIT professionals. Currently, we are utilizing two dedicated NDIT staff to assist in all needed technology processes for the agency. This need will continue into the 2025-2027 biennium as the new pension system will continue its roll out along with significant increases in technology demands from our investment program as it continues its internal investment roll out. Along with other NDIT rate increases, we have been notified this application support agreement rate will be increased significantly as well.

Furthermore, as the visibility of the Legacy Fund and other funds under RIO's purview increase, we are also asking for modest increases in our communications software and equipment budget to assist our Communications and Outreach Director more efficiently and effectively communicate the specifics of RIO's activities to the public, legislators, and all other interested parties.

Our final request within this package is funding to acquire a consultant to review and determine what additional software would be available for the fiscal team. The fiscal team has not acquired any new software in many years and is still operating with Dynamics GP for our financials, which we have been notified is on an end of life track and will no longer be supported or updated by September of 2029.

Resources necessary for this decision package include the needed appropriation authority for the above mentioned activities. No additional FTEs are included in this request as current staff and application support team are in place to administer the activities.

Current resources will be used to administer the activities listed above. Additional funding is being requested to support these current resources as they will be live for the entire 2025-2027 biennium rather than just for part of the current biennium.

The more than 25,000 members in the Teacher Fund for Retirement are served by this project as well as the more than 200 K through 12 employers throughout the state that contribute to the fund and employ members of the fund. This project has modernized an antiquated pension administration system that not only required significant manual operations to maintain but fails to provide a welcoming user experience for both member and employer. In the event this optional package is not funded, the Retirement Investment Office would not be able to continue using the new pension administration system, which would not allow RIO to fulfill its statutory responsibility to successfully administer the TFFR plan and would cause the nearly 10,000 beneficiaries to lose access to the system and their respective benefit payments.

If additional NDIT application support costs are not approved, RIO would lose vital software and application support provided by these personnel. This would cause significant implementation struggles with both the pension administration system as well as the internal investment program. For TFFR, a similar impact to not funding the continued hosting costs would result if we were unable to procure the needed support for the system. Additionally, all RIO client funds under management will benefit from the associated cost savings achieved by implementing some internal investment management of assets. A reduction in application support availability would significantly hinder the effectiveness of this program.

The total appropriation increase for this package is $1,201,268. Of which the entire amount was included in Governor Burgum's executive recommendation.

	Total Agency			
#2 Information Technology Hosting and Support	Salaries & Benefits	Operating Expenses	Contingency	**Total Special Funds**
Additional Operating for Communications	-	21,500	-	**21,500**
Increased NDIT charges for unified staff	-	129,768	-	**129,768**
Increased hosting and support fees-PAS	-	800,000	-	**800,000**
Fiscal Operation Software Consultant	-	250,000	-	**250,000**
		1,201,268		**1,201,268**

<u>Request package #3 – Agency Cost-to-Continue Salaries/Internship Funding</u>

NDRIO was able to identify significant savings throughout its operating budget in an attempt meet the 3% base budget reduction. However, this 3% reduction is in addition to a cost to continue amount within the salary and benefits appropriations which would equate to an additional 1.2%.

In order to partially fund this reduction, NDRIO reduced the appropriation available for its internship program by $24,000. This left funding for just two interns during the upcoming biennium. This request is for an additional $24,000 in appropriation to allow for up to three additional interns (5 total) during the 2025-2027 biennium.

Additionally, NDRIO has historically been able to recognize salary and benefit budget savings through team members who receive health care coverage via family members working with the State of North Dakota and, as such, the cost of their health insurance benefits is currently included as a reduction in the Salaries - Other line in NDRIO's base budget. Beginning this biennium, two of the three will no longer be covered via other means and will have their health insurance premiums be paid through NDRIO. This request includes an additional $118,302 to offset the cost to continue salary increases throughout the agency.

Resources necessary for this optional request package are limited to the appropriation authority. NDRIO is currently housing an investment intern so all needed infrastructure is in place to transition into a new intern.

Currently, resources are not being required for either of these requests. For the internship funding, NDRIO has elected not to fill one of its available internships due to capacity constraints on the supervisory team and one additional internship was not filled due to an unsuccessful recruitment of candidates.

For the health insurance benefits that currently being paid by different agencies, as RIO begins paying those amounts during this current biennium, the current biennium resources will come from a rollup of vacant and unused salary appropriation.

Dedicated resources are needed to continue to offer internship opportunities across the agency. Reduced funding for the internship program would negatively impact the program and reduce the opportunities available for college students to experience work within state government.

The total appropriation increase for this package is $142,302, which is all salaries and benefits.

Request package #4 – Incremental Agency Evolution/Retirement Education

As RIO makes significant enhancements to both the retirement and investment sides of the agency, additional resources are needed to efficiently and effectively carryout its strategic plan. As part of the internal investment initiative discussion, it was communicated that the internalizing of assets would increase the burden on RIO's internal audit division. As such, we are requesting an additional internal audit position to assist with the compliance needs brought on by this additional activity.

Additionally, as the significance and visibility of the Legacy Fund and other areas of the agency continue to grow, RIO's strategic plan includes an increase and improvement in communication to all stakeholders. This plan includes the addition of a multi-media specialist to support our current communications and outreach director in their endeavor to efficiently and effectively communicate RIO activity through all appropriate channels.

Another part of RIO's strategic plan includes additional education in both the investment and retirement communities. In September of 2024, RIO hosted its first investment symposium to provide investment education not only to its client funds but also members of the legislature, other

state agencies, and the public at large. On the retirement side, RIO is planning a communication overhaul with all of its TFFR stakeholders to coincide with the roll out of the new pension administration software. This will include significant communication to assess satisfaction rates as well as the needs and asks of all TFFR members.

Finally, we are also requesting contingency dollars be added to our budget in the event RIO would be required to conduct one or more executive searches during the biennium. During previous biennia, the agency has lost its top two managers in both the retirement and investment programs within a short time period. While turnover of these positions is not planned in the short term, prudence requires preparing for what has not been an unusual need.

This request includes the addition of two new FTE. One multimedia specialist and one internal auditor along with all of the related IT, training, and supplies needs to support said positions. With some reconfiguration, current office space is sufficient to house these additional positions within the facility RIO currently occupies. Additionally RIO is requesting funding to support the continuation of the investment symposium through the 2025-2027 biennium as well as the funding needed to effectively survey TFFR stakeholders.

These would be new resources allocated to support new strategic duties necessitated by the enhancements RIO has been making during the 2023-2025 biennium.

All RIO client funds under management will benefit from the associated cost savings achieved by implementing some internal investment management of assets. Compliance and oversight of this new plan will be beyond the capacity of our current internal audit staff and not funding would require the continuation of significant outsourcing to handle these tasks at a potentially higher price point.

The more than 25,000 members in the Teacher Fund for Retirement are also served by this project as well as the more than 200 K through 12 employers throughout the state that contribute to the fund and employ members of the fund. The additional retirement education RIO plans to facilitate will impact not only the current, but future members of TFFR.

The total appropriation increase for this package is $708,542. Of which $446,771 and 1 FTE was included in Governor Burgum's executive recommendation.

#4 Incremental Agency Evolution/Retirement Education	Total Agency Salaries & Benefits	Operating Expenses	Contingency	Total Special Funds
Additional Communication FTE	184,864	18,800	-	**203,664**
Additional Internal Auditor FTE	233,228	16,650	-	**249,878**
Continuation of Investment Conference	-	20,000	-	**20,000**
Retirement Education Initiative *	-	35,000	-	**35,000**
Contingency **	-	-	200,000	**200,000**
	418,092	90,450	200,000	**708,542**

Notes:
* NDIT/other support for TFFR Membership Survey & materials
** Contingency fee for potential exec searches

Request package #5 – Internal Investment 2.0

As part of the 2023 legislative session, RIO was authorized to begin the first phase of an internal investment program. That first phase was to bring up to 15% of its assets under management in-house and authorized the hiring of 7 additional FTE to facilitate. Due to the complexity of the plan, that initial phase is currently being finalized with the intent to begin internal investment of assets by April of 2025.

Phase 2 of the internal investment plan would advance the program and bring in an additional 15% of assets in-house (30% total). There is an opportunity to continue creating significant benefits from the scale advantages of the growth of over $23 billion in assets under management. A typical public fund with similar assets under management as RIO has more internal investment management which creates the opportunity of better investment returns while decreasing costs from the advantages of more internal management versus money placed with external managers. Expansion of the plan into phase two would provide RIO with the opportunity to move into more advanced fund management and increase the benefits to each of its client funds.

Generally investment management costs fall within the scope of continuing appropriation authority granted by the legislature in NDCC 21-10-06.2; however because this proposal involves cost savings achieved by internalizing investment operations through additional permanent FTE's and infrastructure it falls within the scope of NDCC 54-52.5-03.

In order to expand into phase 2 of the internal investment program, RIO would need an additional 5 investment professionals along with 3 additional fiscal operations professionals to prudently manage and account for the absorption of these additional assets into the program. Additionally, RIO would require the operating, data processing, rent, and other necessary expenses related to onboarding and employing additional team members.

This phased in proposal seeks to expand upon the foundation of internalizing investment functions that has begun in the current biennium. This proposal seeks to achieve cost savings by moving approximately another $3 billion in AUM to internal management. The net after cost estimated benefits of going to a greater portion of internal investment management and to a more

sophisticated investment process is significant as the result of lower fees (the savings is net after the cost of the additional FTE's and infrastructure). The decrease would be recognized within continuing appropriation expenses. The change to more internal investment would require more FTEs currently paid out of appropriated expenses.

All RIO client funds under management can benefit from the associated cost savings achieved by implementing additional internal investment management of assets. At the present rate of growth for the program the impact of maintaining the current investment management structure results in failure to leverage client assets and achieve benefits from the scale of the program.

The total appropriation increase for this package is $3,190,380.

	Total Agency			
#5 Internal Investment 2.0	Salaries & Benefits	Operating Expenses	Contingency	**Total Special Funds**
5 Additional Investment Professionals *	2,133,410	149,500	-	**2,282,910**
3 Additional Fiscal Professionals **	844,770	62,700	-	**907,470**
	2,978,180	212,200	-	**3,190,380**

Notes:
* Additional investment professionals to support the internal investment program averaging $160,000/year.
** 2 additional fiscal professionals averaging $90,000/year and 1 at $120,000/year to support the split of the CFO/COO position.

X. Purpose and use of one-time funding in current biennium

For the 23-25 biennium we had a total of 624,900 one-time appropriations.

1. $486,000 in temporary salaries related to the implementation of the new TFFR pension administration system.
2. $138,900 in one-time operating expense related to the implementation of the new TFFR pension administration system.

We had also requested to carryover unexpended one-time funding appropriated in a prior biennium to continue work on our pension administration system (PAS) modernization project. We plan to finish this project in FY2024 and do not plan to request any further carryover for this project.

XI. Identify and justify need for any one-time funding requested

Only one-time funding being requested is $250,000 for a Fiscal IT Solution consultant. Fiscal is currently using a version of GP Dynamics that is scheduled to be decommissioned by 2030. This request is to procure a consultant to analyze the agencies current needs and help determine the best process forward for replacing the current system.

XII. Agency fees charged

RIO charges their client funds for administrative costs for their investments. Administrative fees are based on actual expenses of the agency.

XIII. Federal State Fiscal Recovery Funding

RIO was not appropriated any federal state fiscal recovery funds during the November 2021 special legislative session.

XIV. Need for any other sections requested to be included

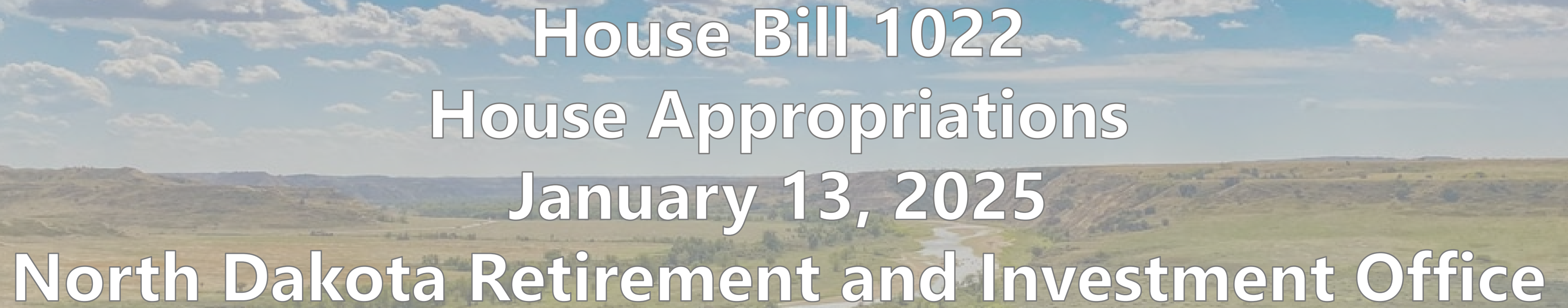
None currently anticipated.

XV. Any other bills being considered and potential impact on our budget

RIO reviews all submitted bills to monitor for potential impact on the agency. We have identified several bills that may impact our agency and/or budget including, but not limited to (see attached for complete current list of tracked bills):

- HB 1026 – Changing Administration of Bonding Fund
- HB 1027 – Changing Administration of Bonding Fund
- HB 1117 – Eligibility for normal retirement benefits
- HB 1176 – Legacy earnings fund and property tax relieft
- HB 1183 – Gold and Siver Investments
- HB 1184 – Digital asset and precious metal investments
- SB 2072 – Contracts Limiting liability to the state
- SB 2097 – Rural Community endowment fund
- HCR 3001 – SIB and STO to invest state funds in digital assets and precious metals

Potential fiscal impacts of these bills vary. Some minor changes may require small amounts of monitoring and compliance and require just a few thousand dollars of temporary salaries. While others may have a more pronounced effect. We will continue to monitor these and numerous other bills to determine if any additional budget action would be necessary.



Jodi Smith – Interim Executive Director

Chad Roberts, MAc – Deputy Executive Director/Chief Retirement Officer

Scott M Anderson, CFA, MBA – Chief Investment Officer

Rachel Kmetz – Interim Chief Financial Officer/Chief Operating Officer

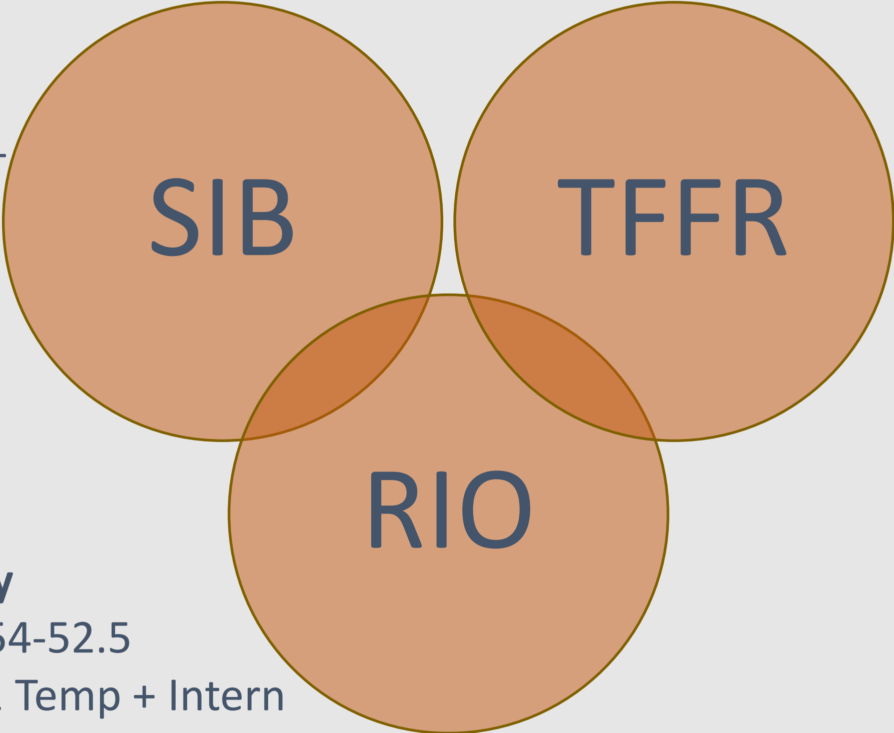
NORTH Dakota | Retirement & Investment

Be Legendary.

NORTH DAKOTA RETIREMENT AND INVESTMENT SUPPORTS TWO SPECIAL FUND PROGRAMS

RIO was established in 1989 to coordinate the activities of the State Investment Board (SIB) and the Teachers' Fund for Retirement (TFFR). The SIB is the oversight board for RIO and TFFR Board is responsible for the administration of the TFFR benefits program.

State Investment Board -
Investment Program
NDCC Ch. 21-10
~$23.3 Billion in AUM
As of 10/31/24



Teachers' Fund For Retirement –
ND Teachers' Retirement Program
NDCC Ch. 15-39.1
~$3.4 Billion in Fund Assets
Over 21,000 active and retired members and beneficiaries

RIO Agency
NDCC Ch. 54-52.5
34 FTEs + 2 Temp + Intern

STATE INVESTMENT BOARD – INVESTMENT PROGRAM

NORTH Dakota
Be Legendary.™

- State Investment Board (SIB) has the statutory responsibility for the administration of the investment program of several funds including:
  - TFFR, PERS, WSI, Legacy Fund
- SIB also maintains contractual relationships for investment management with multiple political subdivisions and governmental funds

- Currently ~$23.3 Billion in Assets Under Management (AUM)
- 31 client funds

Fund/Pool	AUM (10/31/24)
Pension Pool	$8.14B
Insurance Pool	$3.43B
Legacy Fund	$11.50B
Other Funds	$0.28B

TEACHERS' FUND FOR RETIREMENT

NORTH Dakota Be Legendary.™

- Qualified defined benefit public pension plan for North Dakota public school teachers and administrators providing them with a foundation for retirement security.

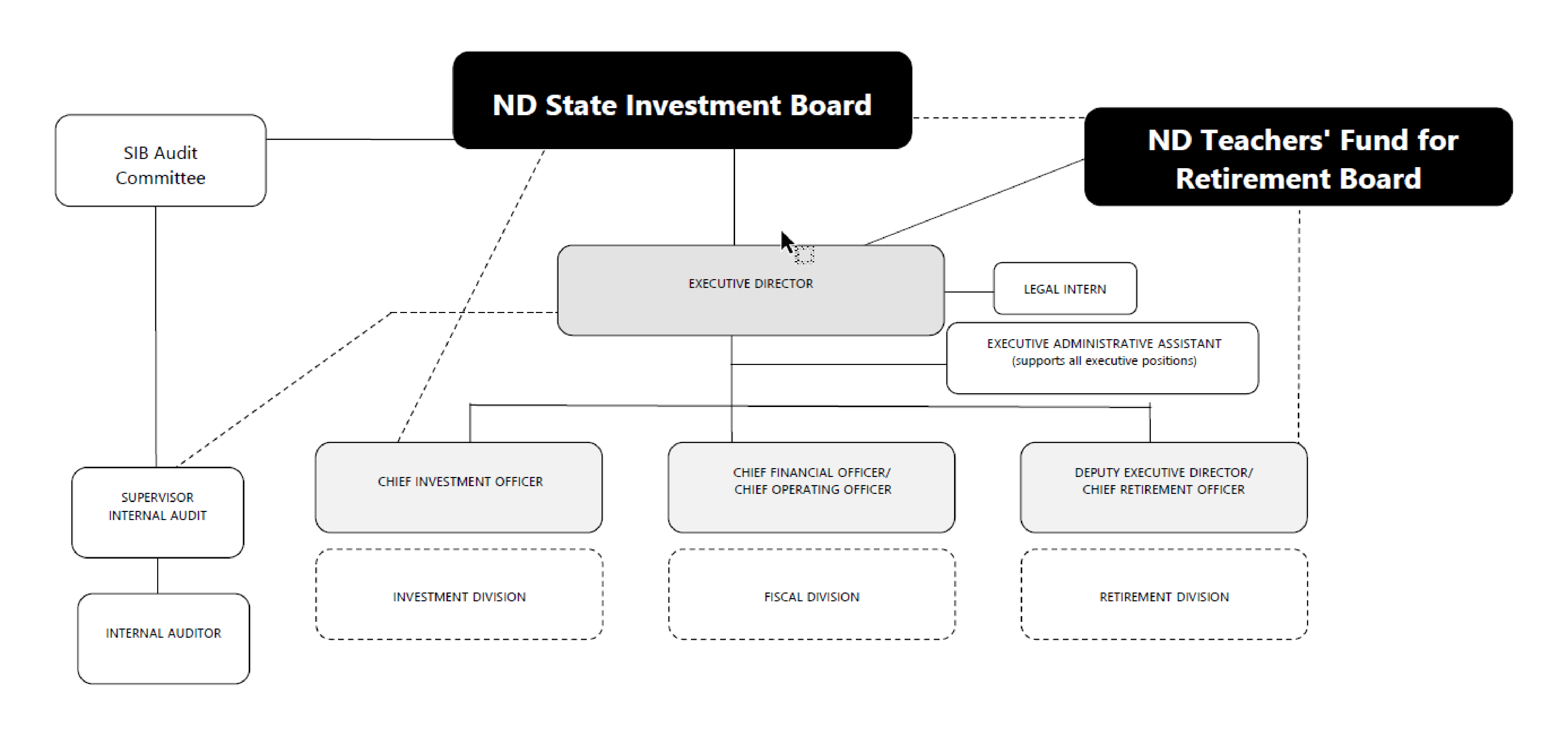
- 11,900+ Active Members
  - 13.6% increase over past decade
- 9,600+ Retired Members and Beneficiaries
  - 20.8% increase over past decade
- ~$3.3B Fund balance

- On-track to be 100% fully funded by 2043

- New Pension Administration System in development (est. Q1 2025)

Retirement Investment Office (RIO) Org Chart

NORTH Dakota Be Legendary.™



2023 – 2025 Accomplishments

NORTH Dakota Be Legendary.™

- Created and implemented new agency strategic plan
- Procurement of new Investment program software solution
- Continue to implement an in-state investment initiative
- Hosted multiple interns
- Internal Audit co-sourcing relationship
- Developed and implement new board member onboarding program
- Completed 2 of 3 phases of the TFFR Pension Administration system
- Hosted first Investment symposium

New FTE's Appropriated for the 23-25 Biennium

NORTH Dakota Be Legendary.™

- **9 new positions were added by the 2023 Legislative Assembly**
  - 7 of the 9 positions have been filled
    - Sr. Inv Acct (Hired 7/18/23)
    - Fiscal & Investment Admin Assistant (Hired 9/5/23)
    - Portfolio Manager * (Hired 8/1/24)
    - Sr. Investment Analyst * (Hired 8/1/24)
    - Portfolio Manager Internal Fixed Income * (Hired 9/3/24)
    - Investment Accountant * (Hired 9/16/24)
    - Internal Fixed Income Analyst * (Start date 2/3/25)
  - 2 of the 9 Positions are still vacant
    - Internal Equities Analyst * (anticipate hiring Q1 '25)
    - Investment Administrative Assistant * (anticipate hiring Q2 '25)

* Only funded for one year of the biennium

BUDGET REQUEST SUMMARY

NORTH Dakota Be Legendary.™

Line Item	Base Level	Adjustments to Meet Budget Limit	Adjusted Base	Requests	Total Agency Request
Salaries & Benefits	$10,338,543	$70,450	$10,408,993	$4,775,488	$10,408,993
Operating Expenses	2,731,037	(208,822)	2,522,215	1,503,918	2,522,215
Contingencies	200,000	(200,000)	-	200,000	200,000
Total Special Funds	**13,269,580**	**(338,372)**	**12,931,208**	**6,479,406**	**$19,410,614**
Included in the Exec. Recom.				2,900,375	
FTEs	34.0	-	34	10	44.0

Optional Requests

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Line Item	2nd Half of New Positions	Cost to Continue IT Hosting/ Support	Cost to Continue HR	Incremental Agency Evolution/ Retirement Education	Internal Investment 2.0	Total Optional Request
Salaries & Benefits	$1,236,914	-	142,302	418,092	2,978,180	$4,775,488
Operating Expenses	-	1,201,268	-	90,450	212,200	2,522,215
Contingencies	-	-	-	200,000	-	200,000
Total Special Funds	**$1,236,914**	**$1,201,268**	**$142,302**	**$708,542**	**$3,190,380**	**$6,479,406**
Included in Exec Recom.	1,236,914	1,201,268		462,193 & 1 FTE		
FTEs	-	-	-	2	8	10

INTERNAL INVESTMENT/ TALENT MANAGEMENT

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- LOWER COST THAN WITH EXTERNAL MANAGERS
- APPLIED WHERE THERE IS A COST/BENEFIT
- ENABLES ENHANCED LIQUIDITY MANAGEMENT, REBALANCING AND EXPOSURE MANAGEMENT

THE BENEFIT SCALES WITH THE SIZE OF THE COMMITMENT

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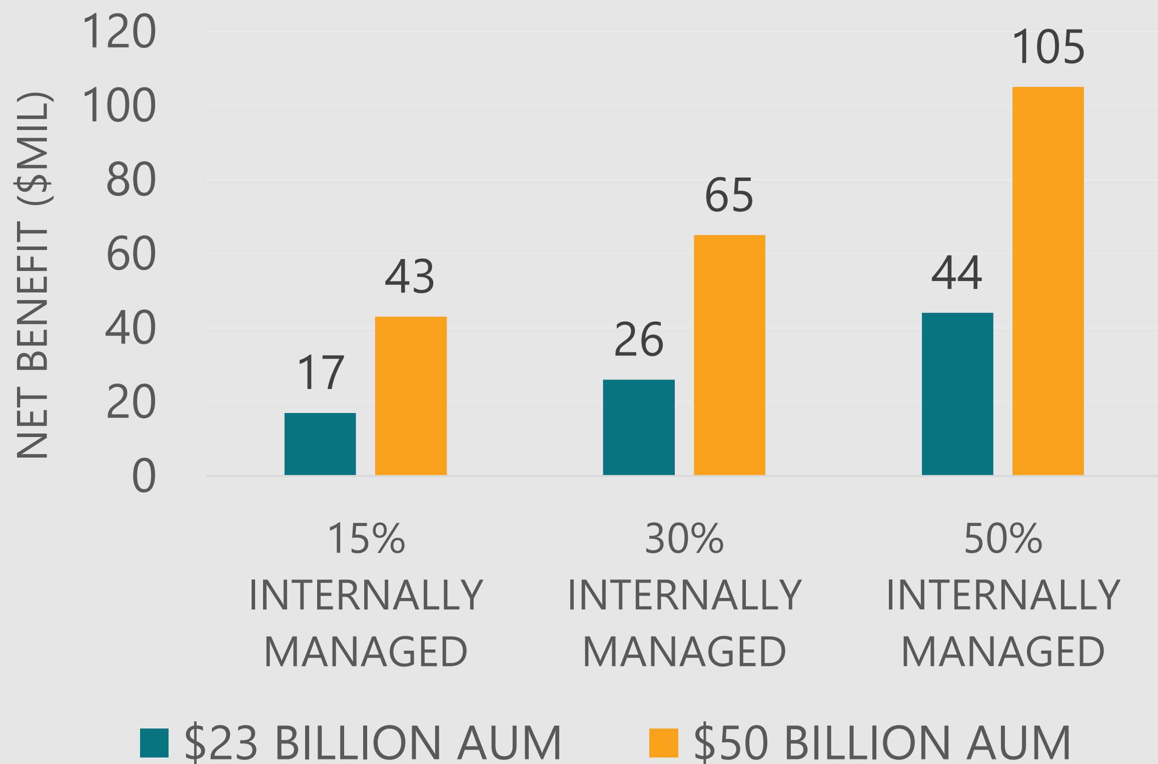

ESTIMATED ANNUAL SAVINGS PER YEAR ($23 BILLION AUM)

PLAN	15% OF ASSETS $(MIL)	30% OF ASSETS $(MIL)	50% OF ASSETS $(MIL)
PENSION	$6	$9	$16
INSURANCE	$3	$4	$6
LEGACY	$8	$13	$22
	$17	$26	$44

MINIMAL REQUIREMENTS WHEN COMPARED TO THE BENEFITS[1,2,3]

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5 INVESTMENT PROFESSIONALS[1]:
2 X SENIOR PORTFOLIO MANAGERS
3 X INVESTMENT ANALYSTS

+

3 X INVESTMENT OPS

THE STRATEGY AND STRUCTURE WOULD EVOLVE WITH THE SIZE OF THE PROGRAM

1. **The cost of staff is estimated to be approximately 15% of the total net cost savings.**
2. **Positive Client Fund feedback.**
3. **Supports greater control over investment strategies.**

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House Bill 1117
North Dakota Retirement and Investment Office (RIO)
Testimony before House Government and Veterans Affairs
Representative Austen Schauer, Chair

Chad Roberts, MAc – Deputy Executive Director/Chief Retirement Officer

I. RIO Statutory Authority and Responsibilities

The Retirement and Investment Office (hereinafter "RIO") was created by the 1989 Legislative Assembly to capture administrative and investment cost savings in the management of the investment program of the State Investment Board (SIB) and the retirement program of the Teachers' Fund for Retirement (TFFR). Statutory authority for the agency is found in North Dakota Century Code chapter 54-52.5 and the programs are governed by chapters 21-10 (SIB) and 15-39.1 (TFFR).

The State Investment Board has the statutory responsibility to administer the investment program for 31 funds including the Legacy Fund, TFFR, PERS, and WSI. It also maintains contractual relationships for the investment management of multiple political subdivisions and governmental funds. Currently SIB is responsible for the investment of the Legacy Fund, seven pension funds and 23 other non-pension funds for a total of 31 separate client funds with an overall fund value of roughly $23 billion as of October 31, 2024.

II. Support Testimony relating to H.B. 1184

The North Dakota Retirement and Investment Office and the TFFR Board of Trustees support House Bill 1117, which proposes amendments to subsection 4 of section 15-39.1-10 of the North Dakota Century Code regarding required minimum distributions (RMDs) for the Teachers' Fund for Retirement (TFFR).

House Bill No. 1117 is a necessary update to ensure compliance with the federal *Setting Every Community Up for Retirement Enhancement (SECURE) 2.0 Act of 2022*, which modified RMD age requirements under the Internal Revenue Code. The proposed amendments align the TFFR statutory language with the new federal provisions, ensuring that North Dakota's retirement plan remains compliant with federal law and avoids potential adverse tax consequences for members.

Under SECURE 2.0, the age at which required minimum distributions must begin has been incrementally increased. This bill ensures that TFFR members who reach the applicable RMD age under the revised federal framework are subject to the correct distribution requirements.
Specifically, the proposed changes:

1. Reflect the updated RMD age thresholds established under SECURE 2.0, replacing outdated references to age 70½ and 72 with the current federally mandated age; and

2. Clarify that distributions must be made in accordance with *Section 401(a)(9)* of the Internal Revenue Code and its accompanying regulations as applicable to governmental plans; and

3. Maintain consistency with federal guidelines, thereby providing certainty and ease of administration for both plan participants and administrators.

Aligning North Dakota law with federal requirements benefits TFFR members by ensuring compliance with tax regulations while allowing for appropriate flexibility in retirement planning. It also streamlines administrative processes and reduces confusion for retirees and beneficiaries. The change in language does not financially impact the plan or participants as it does not alter the amount of benefits paid. For these reasons, I respectfully urge the committee to support House Bill No. 1117. Thank you for your time and consideration.

NORTH Dakota | Retirement & Investment
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House Bill 1163
North Dakota Retirement and Investment Office (RIO)
Testimony before House Education
Representative Pat D. Heinert, Chair

Jodi Smith – Interim Executive Director
Scott Anderson, CFA, MBA – Chief Investment Officer

I. RIO Statutory Authority and Responsibilities

The Retirement and Investment Office (hereinafter "RIO") was created by the 1989 Legislative Assembly to capture administrative and investment cost savings in the management of the investment program of the State Investment Board (SIB) and the retirement program of the Teachers' Fund for Retirement (TFFR). Statutory authority for the agency is found in North Dakota Century Code chapter 54-52.5 and the programs are governed by chapters 21-10 (SIB) and 15-39.1 (TFFR).

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II. Neutral Testimony relating to H.B. 1163

Pursuant to NDCC Section 54-03-35, any bill which potentially affects the Legacy Fund, the advisory board shall request the state Retirement and Investment Office to arrange for the preparation and submission of a cost-benefit analysis. The investment consultancy RVK has been retained to provide business cases for this purpose.

RVK has provided an initial analysis to meet the requirements of the scheduled House Education Committee meeting. RVK's initial analysis suggests a negative fiscal impact on the Legacy Fund of $115.48 M in the Biennium that begins 7/1/25, followed by a negative fiscal impact of $131.14 M in the Biennium that begins 7/1/27. Total negative fiscal impact is an expected opportunity cost to the Legacy Fund of $246.62 M in the first 2 biennium.

Methods, Assumptions and Notes

The analysis begins by estimating what $1B invested in the current Legacy Fund is expected to return based on the current asset allocation of the fund and RVK's current

long-term capital market assumptions. The expected compound return for the current allocation is 6.09%. The analysis compares this output to what $1 B would earn at 0.5% as proposed in the bill.

Additional Analysis can be completed that provides a more detailed range of potential outcomes by modeling additional variables for pace of deployment into the loan program, reasonable measures and adjustments that the Legacy Fund would have to take to manage uncertainty in the pace of deployment and utilizing stochastic analysis to capture a range of potential return outcomes for the Legacy Fund.

The proposed size of the program is significant relative to the total size of the Legacy Fund (estimated at about 9% of current Legacy Fund assets). As such the program is likely to impose a high degree of disruption on the asset allocation structure and operation of the Legacy Fund, the costs of which are likely significant and difficult to fully estimate.

III. Summary

RVK's initial analysis suggests a negative fiscal impact on the Legacy Fund of $115.48M in the Biennium that begins 7/1/25, followed by a negative fiscal impact of $131.14M in the Biennium that begins 7/1/27. Total negative fiscal impact is an expected opportunity cost to the Legacy Fund of $246.62M in the first 2 biennium. The program is likely to impose a high degree of disruption on the asset allocation structure and operation of the Legacy Fund, the costs of which are likely significant and difficult to fully estimate. Additional Analysis can be completed that provides a more complete analysis but would require additional time and resources.

House Bill 1184
North Dakota Retirement and Investment Office (RIO)
Testimony before House Industry, Business and Labor
Representative Jonathan Warrey, Chair

Jodi Smith – Interim Executive Director
Scott Anderson, CFA, MBA – Chief Investment Officer

I. RIO Statutory Authority and Responsibilities

The Retirement and Investment Office (hereinafter "RIO") was created by the 1989 Legislative Assembly to capture administrative and investment cost savings in the management of the investment program of the State Investment Board (SIB) and the retirement program of the Teachers' Fund for Retirement (TFFR). Statutory authority for the agency is found in North Dakota Century Code chapter 54-52.5 and the programs are governed by chapters 21-10 (SIB) and 15-39.1 (TFFR).

The State Investment Board has the statutory responsibility to administer the investment program for 31 funds including the Legacy Fund, TFFR, PERS, and WSI. It also maintains contractual relationships for the investment management of multiple political subdivisions and governmental funds. Currently SIB is responsible for the investment of the Legacy Fund, seven pension funds and 23 other non-pension funds for a total of 31 separate client funds with an overall fund value of roughly $23 billion as of October 31, 2024.

II. Neutral Testimony relating to H.B. 1184

House Bill 1184 is well-intentioned in its goal of making North Dakota a leader in technology and innovation investments as well as broadening the asset allocation scope to produce diversification benefits for state investments. However, the Board already has authority to invest in digital assets and precious metals.

The client funds of RIO each have a governing board that make asset allocation and investment policy decisions. The asset allocation determines the amount invested in various asset classes that best meets the return, risk and liquidity needs of the client portfolio mandates. The range of asset classes is not limited but includes those that enable the client fund to meet the client needs. The asset allocation which is approved by the board is codified in an investment policy used to guide RIO's investment team to implement the mandate.

We recommend two changes: (1) place under Chapter 21-10 State Investment Board and (2) remove reference to "up to ten percent", leaving capital allocation to the respective governing boards.