

Teachers' Fund For Retirement

RETIREMENT & INVESTMENT

ND TFFR Board Meeting Thursday, January 25, 2024, 1:00 p.m. WSI Board Room (In Person), 1600 E Century Ave, Bismarck ND <u>Click here to join the meeting</u>

<u>AGENDA</u>

I. CALL TO ORDER AND ACCEPTANCE OF AGENDA (Board Action)

- A. Pledge of Allegiance
- B. Staff Introduction
- C. Conflict of Interest Disclosure
- D. Executive Summary

II. ACCEPTANCE OF MINUTES (November 16, 2023) (Board Action)

III. EDUCATION (30 Minutes) (Information)

A. Open Meeting & Records – Mr. DePountis

IV. GOVERNANCE (75 minutes)

- A. 2023 GASB Report GRS (Board Action)
- B. Administrative Rules Update Ms. Murtha (Board Action)
- C. RMD Implementation Ms. Murtha (Information)
- D. Pioneer Project Update Mr. Roberts (Information)
- E. Benefit Compliance Review¹ Ms. Murtha (Board Action)

(Break)

V. REPORTS (45 minutes) (Board Action)

- A. Annual TFFR Ends Report Mr. Roberts
- B. Quarterly TFFR Ends (12/31) Mr. Roberts
- C. Quarterly Outreach Report (12/31) Ms. Mudder
- D. Executive Limitations/Staff Relations Ms. Murtha

VI. CONSENT AGENDA - QDRO² (Board Action)

VII. OTHER BUSINESS

- A. Board Reading Materials Material References Included
- B. Next Meetings:
 - 1. TFFR GPR Comm Thursday, February 8, 2024, at 3:30 p.m.
 - 2. TFFR Board Meeting Thursday, March 21, 2024, at 1:00 p.m.

VIII. ADJOURNMENT

¹ Executive Session to discuss confidential member information and attorney consultation under N.D.C.C. 15-39.1-30, N.D.C.C. 44-04-19.1(2) and 44-04-19.2.

² Executive Session to discuss confidential member information under N.D.C.C. 15-39.1-30.

EXECUTIVE SUMMARY TFFR Regular Meeting Janaury 25, 2024 – 1:00pm CT

- I. Agenda: The January Board Meeting will be held in the Board Room at the WSI Building to accommodate in person attendance, however, a link will also be provided so that Board members and other attendees may join via video conference.
 - Attendees are invited to join the Board President in the Pledge of Allegiance.
 - Introduction of new staff members.
 - Conflict of Interest Disclosure: For best practice board members are asked to review the agenda and note any potential conflicts of interest for an item in advance of or at the start of the meeting. Conflicts can be documented using the following form: <u>Conflict of Interest Disclosure Form 8 17 2022 .pdf</u> (nd.gov)
- **II. Minutes (Board Action):** The November 16, 2023, Board meeting minutes are included for review and approval.
- III. Board Education Open Meetings & Records (Information): Assistant Attorney General Dean DePountis will provide board education on North Dakota public meeting and records law.
- IV. A. 2023 GASB Report (Board Action): Representatives from GRS will provide the board with an overview of the annual GASB report.
 - **B.** Administrative Rules (Board Action): Ms. Murtha will provide the board an update on the administrative rules promulgation process, and request final approval of updated proposed rules. This item will be updated when the Attorney General's office issues its opinion letter. The AGO has requested some minor changes to the rules which will be presented to the Board for review and approval.
 - **C. RMD Implementation (Information):** Ms. Murtha will provide the Board with an update on the current status of the changes required by the RMD age change discussed at the November TFFR Board meeting.
 - **D.** Pioneer Project Update (Information): Mr. Roberts will provide the Board with an update on the current status of the Pioneer project.
 - E. Benefit Compliance Review (Board Action): This item requires a discussion in executive session as noted on the agenda.
- V. **Reports (Board Action):** Staff will provide reports on annual and quarterly TFFR Ends, quarterly outreach, and executive limitations/staff relations.

Adjournment.

NORTH DAKOTA TEACHERS' FUND FOR RETIREMENT MINUTES OF THE NOVEMBER 15, 2023, BOARD MEETING

BOARD MEMBERS PRESENT: Dr. Rob Lech, President Mike Burton, Vice President Thomas Beadle, State Treasurer Scott Evanoff, Trustee Cody Mickelson, Trustee Jordan Willgohs, Trustee

BOARD MEMBERS ABSENT: Kirsten Baesler, State Supt. DPI

- STAFF PRESENT:Derek Dukart, Investment Officer
Rachel Kmetz, Accounting Manager
Missy Kopp, Exec. Assistant
Sarah Mudder, Communications/Outreach Dir.
Jan Murtha, Exec. Director
Matt Posch, Sr. Investment Officer
Chad Roberts, DED/CRO
Sara Seiler, Supvr. of Internal Audit
Ryan Skor, CFO/COO
Rachelle Smith, Retirement Admin.
Dottie Thorsen, Internal Auditor
Tami Volkert, Compliance Specialist
Denise Weeks, Retirement Program Mgr.
- OTHERS PRESENT: Dean DePountis, Atty. General's Office Donna Fishbeck, DPI Paul Wood, GRS Dana Woolfrey, GRS Members of the Public

CALL TO ORDER:

Dr. Lech, President of the Teachers' Fund for Retirement (TFFR) Board of Trustees, called the meeting to order at 1:00 p.m. on Thursday, November 15, 2023. The meeting was held in the WSI Board Room, 1600 E Century Avenue, Bismarck.

THE FOLLOWING MEMBERS WERE PRESENT REPRESENTING A QUORUM: TREASURER BEADLE, MR. BURTON, MR. EVANOFF, DR. LECH, MR. MICKELSON, AND MR. WILLGOHS.

ACCEPTANCE OF AGENDA:

The Board considered the agenda for the November 15, 2023, meeting.

IT WAS MOVED BY MR. MICKELSON AND SECONDED BY MR. BURTON AND CARRIED BY A VOICE VOTE TO APPROVE THE AGENDA AS DISTRIBUTED.

AYES: TREASURER BEADLE, MR. BURTON, MR. MICKELSON, MR. WILLGOHS, MR. EVANOFF, AND PRES. LECH NAYS: NONE ABSENT: SUPT. BAESLER MOTION CARRIED

ACCEPTANCE OF MINUTES:

The Board considered the minutes for the September 21, 2023, TFFR Board meeting.

IT WAS MOVED BY MR. MICKELSON AND SECONDED BY MR. EVANOFF AND CARRIED BY A VOICE VOTE TO ACCEPT THE SEPTEMBER 21, 2023, MINUTES AS DISTRIBUTED.

AYES: MR. MICKELSON, MR. EVANOFF, TREASURER BEADLE, MR. BURTON, MR. WILLGOHS, AND PRES. LECH NAYS: NONE ABSENT: SUPT. BAESLER MOTION CARRIED

LEGISLATION:

Secure 2.0 Changes:

Ms. Murtha provided an overview of the definition and changes to required minimum distributions (RMDs) because of the SECURE 2.0 Act. The new law raised the age that you must begin taking RMDs to 73. Ms. Murtha reviewed ND Century Code (NDCC) 15-39.1-34(1) and 15-39.1-35 which outlines the Board's responsibility to administer the plan in compliance with Federal law and the process for the Employee Benefits Programs Committee (EBPC) to make changes to NDCC prior to the next legislative session. Ms. Murtha collaborated with PERS leadership to coordinate changes for both plans. The proposed changes to NDCC 15-39.1-10 were provided. Board discussion followed.

IT WAS MOVED BY TREASURER BEADLE AND SECONDED BY MR. EVANOFF AND CARRIED BY A ROLL CALL VOTE TO APPROVE THE PROPOSED CHANGES TO NDCC 15-39.1-10 TO BE PRESENTED TO THE EBPC.

AYES: TREASURER BEADLE, MR. WILLGOHS, MR. EVANOFF, MR. BURTON, MR. MICKELSON, AND PRES. LECH NAYS: NONE ABSENT: SUPT. BAESLER MOTION CARRIED

EDUCATION:

Key Actuarial Concepts and Terms:

Mr. Paul Wood and Ms. Dana Woolfrey, GRS, provided education on key actuarial concepts and terms and the ND TFFR dynamic. An overview was provided of inflation and its affects on typical pension plans. Plan design trends were reviewed including variable benefit options and examples. GRS provided an overview of traditional defined benefit (DB) plans and actuarial terms. Board discussion followed.

GOVERNANCE:

Actuarial Valuation Report:

Mr. Wood and Ms. Woolfrey presented the Actuarial Valuation Report as of July 1, 2023. Highlights include the following:

- The funded ratio increased from 69.9% (as of 7/1/2022) to 71.2% (as of 7/1/2023).
- The unfunded liability decreased slightly from last year.
- The statutory contribution level of 12.75% exceeds the actuarially determined contribution rate.

Key factors in asset and salary experience were reviewed. GRS reviewed the recent updates to the Actuarial Standards of Practice (ASOP) number four – Low Default Risk Obligation Measure. Board discussion followed.

IT WAS MOVED BY TREASURE BEADLE AND SECONDED BY MR. BURTON AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE FY 2023 ACTUARIAL VALUATION REPORT.

AYES: MR. WILLGOHS, MR. BURTON, MR. MICKELSON, MR. EVANOFF, TREASURER BEADLE, AND PRES. LECH. NAYS: NONE ABSENT: SUPT. BAESLER MOTION CARRIED

Strategic Communication Plan:

Ms. Mudder presented the Strategic Communication Plan. A strategic communication plan outlines who the target audience is, when we need to communicate with them, and the channels that will be used. The plan should support agency goals, be research based, and use input from stakeholders. Ms. Mudder reviewed the communication goals and outlined the methods to achieve the goals. Progress will be monitored and shared with the Board. Board discussion followed.

IT WAS MOVED BY TREASURER BEADLE AND SECONDED BY MR. EVANOFF AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE STRATEGIC COMMUNICATIONS PLAN.

AYES: MR. EVANOFF, MR. MICKELSON, MR. WILLGOHS, TREASURER BEADLE, MR. BURTON, AND PRES. LECH NAYS: NONE ABSENT: SUPT. BAESLER MOTION CARRIED

The Board recessed at 3:12 p.m. and reconvened at 3:25 p.m.

PERS Board Decision and Special Legislative Session:

Ms. Murtha discussed the recent ND Supreme Court opinion on the Bd. Of Trustees of ND Public Employees Retirement System v. ND Legislative Assembly and the Special Legislative Session. Board discussion followed.

Administrative Rules:

Ms. Murtha outlined the Administrative Rules promulgation steps that had been completed by staff and the Board. The final step for the Board is to finalize and approve the proposed amendments to rules as presented and authorize staff to submit the rules to the Attorney General for approval. Board discussion followed.

IT WAS MOVED BY MR. BURTON AND SECONDED BY TREASURER BEADLE AND CARRIED BY A ROLL CALL VOTE TO APPROVE PROPOSED AMENDMENTS AS FINAL AND AUTHORIZE STAFF TO CONTINUE THE RULE PROMULGATION PROCESS AS PRESENTED.

AYES: MR. BURTON, MR. WILLGOHS, MR. EVANOFF, TREASURER BEADLE, MR. MICKELSON, AND PRES. LECH NAYS: NONE ABSENT: SUPT. BAESLER MOTION CARRIED

Pioneer Project Update:

Mr. Roberts provided an update on the progress of the Pioneer Project. Business partner education has started, and the project is still on schedule to go live during the fourth quarter of 2024. The project remains under budget. Mr. Roberts shared the new "MyTFFR" logo and reviewed technical aspects of the system. An overview was provided of the member and business partner portals. Mr. Roberts reviewed operational changes for business partners before and after the go live date and the training plan for users. Board discussion followed.

Governance & Policy Review (GPR) Committee Update:

Mr. Mickelson provided an update from the TFFR GPR Committee meeting on November 7, 2023. The Committee reviewed portions of the TFFR Policy Manual as outlined by the workplan. There was a discussion about member communication and the changes to RMDs. Board discussion followed.

REPORTS:

Quarterly Investment Report:

Mr. Posch provided an investment performance update as of September 30, 2023. Mr. Posch provided a summary of market returns for the third quarter and as of November 15, 2023. The competing narratives about recession were discussed. The TFFR fund has consistently performed well over the last five years. Most asset classes have performed well apart from real estate which has struggled. Relative to peer plans, TFFR has performed near the top quartile over the 3, 5, and 10-year period. Board discussion followed.

Annual Retiree Reemployment Report:

Mr. Roberts provided the Annual Retiree Reemployment Report. The report provided a breakdown of retiree return to teach trends, salary and contract information, and a breakdown of job category and subject areas. The number of retirees returning to teach (RTT) has fallen. RTT in the critical shortage areas has improved while both suspend and recalculate, and general rule declined. Board discussion followed.

Quarterly Internal Audit (IA) Report:

Ms. Seiler provided the IA report for the quarter ended September 30, 2023. At the November 14, 2023, Audit Committee meeting, the external auditors presented the FY 2023 Financial Statement Audit results. The audit had an unmodified clean opinion, and no material weaknesses or signification deficiencies were identified. The Audit Committee reviewed and approved an RFP as part of the IA Maturity Development process. Board discussion followed.

Quarterly TFFR Ends:

Mr. Roberts provided the TFFR Ends report for the quarter ended September 30, 2023. Staff and the pension administration system vendor completed Pilot three of the Pioneer Project and began pilot four of the system design phase. The Accounting Intern completed her time at RIO in August 2023. Staff attended the Governor's Summit on Innovative Education. The publication of an active member newsletter resumed and was delivered via the GovDelivery system. The open Retirement Specialist position was filled internally. Board discussion followed.

Executive Limitations/Staff Relations Report:

Ms. Murtha provided the Executive Limitations/Staff Relations Report. RIO will begin the strategic planning process in December with the intent of sharing the updated plan with both GPR Committees in February and the full boards in March. The next New Board Member Onboarding session is scheduled for December 15, 2023, at 9:00 a.m. The temporary Membership Specialist Position has been reposted. Ms. Murtha highlighted the current projects and presentations that were listed in the report. RIO received the Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association and the TFFR program received the Public Pension Standards Award for Funding and Administration from the Public Pension Coordinating Council. The results of the 2023 RIO Engagement Survey were provided. Board discussion followed.

IT WAS MOVED BY TREASURER BEADLE AND SECONDED BY MR. MICKELSON AND CARRIED BY A VOICE VOTE TO ACCEPT THE QUARTERLY INVESTMENT, ANNUAL RETIREE REEMPLOYMENT, QUARTERLY IA, QUARTERLY TFFR ENDS, AND THE EXECUTIVE LIMITATIONS/STAFF RELATIONS REPORTS.

AYES: MR. WILLGOHS, MR. MICKELSON, TREASURER BEADLE, MR. BURTON, MR. EVANOFF, AND PRES. LECH NAYS: NONE ABSENT: SUPT. BAESLER MOTION CARRIED

ADJOURNMENT:

With no further business to come before the Board, Pres. Lech adjourned the meeting at 4:57 p.m.

Prepared by,

Missy Kopp, Assistant to the Board

Open Records and Open Meetings (RIO)

Dean DePountis Assistant Attorney General

What is subject to open record laws?

• All records

- In the possession of a public entity
- Regarding **public business**

Unless otherwise provided by law, all records of public or governmental bodies, boards, bureaus, commissions, or agencies of the state or any political subdivision of the state, or organizations or agencies supported in whole or in part by public funds, or expending public funds, shall be public records, open and accessible for inspection during reasonable office hours.

North Dakota Constitution, Article XI, Section 6

What is a Record?

• Recorded information of any kind, regardless of the physical form or characteristic by which the information is stored, recorded, or reproduced ...

What is Public Business?

 All matters that relate or may foreseeably relate in any way to . . . the performance of the public entity's governmental functions, including any matter over which the public entity has supervision, control, jurisdiction, or advisory power; or...the public entity's use of public funds.

What is protected?

- All public business records are open unless a law specifically provides the record is protected.
- Protected means the record is "not subject to Article XI of the North Dakota Constitution," "not an open record," "exempt," or "confidential."

<u>Exempt</u>

- May be released.
- Public entity has discretion – needs entity action.
- May be called a "closed" record.
- Not against the law to release an exempt record.

Confidential

- Cannot be released.
- Public entity has no discretion.
- Can only be released pursuant to a statute.
- Class C felony to knowingly release confidential records.

Exempt

Public employee personal information, including:

- Month/Day of Birth;
- Home Address;
- Personal Phone Numbers;
- Photograph;
- DMV and Employee ID Numbers;
- Payroll Deduction Information;
- Dependent/emergency contact information;
- Any credit, debit, or electronic fund transfer card number;
- Any account number at a bank or other financial institution; and
- Type of leave taken, and leave applied for but not yet taken.

Confidential

- Social Security Numbers;
- Computer Passwords;
- Employee use of Employee Assistance Programs; and
- BCI background checks.

N.D.C.C. 15-39.1-30. Confidentiality of records

• All records relating to the retirement benefits of a member or a beneficiary under this chapter are confidential and are not public records.

N.D.C.C. 15-39.1-30 -The information and records may be disclosed, under rules adopted by the board, only to:

- 1. A person to whom the teacher has given written consent to have the information disclosed.
- 2. A person legally representing the teacher, upon proper proof of representation, and unless the teacher specifically withholds consent.
- 3. A person authorized by a court order.
- 4. A member's participating employer, limited to information concerning the member's years of service credit, years of age, employer and employee contribution amounts, and salary. The board may share other types of information as needed by the employer to validate the employer's compliance with existing state or federal law. Any information provided to the member's participating employer under this subsection must remain confidential except as provided in subsection 6.

N.D.C.C. 15-39.1-30 -The information and records may be disclosed, under rules adopted by the board, only to:

- 5. The administrative staff of the public employees retirement system for purposes relating to membership and benefits determination.
- 6. State or federal agencies for the purpose of validating member eligibility or employer compliance with existing state or federal law.
- 7. Member interest groups approved by the board, limited to information concerning the member's death.
- 8. A government child support enforcement agency for purposes of establishing paternity or establishing, modifying, or enforcing a child support obligation of the member.
- 9. The member's spouse or former spouse, that individual's legal representative, and the judge presiding over the member's dissolution proceeding for purposes of aiding the parties in drafting a qualified domestic relations order under section 15-39.1-12.2. The information disclosed under this subsection must be limited to information necessary for drafting the order.

N.D.C.C. 15-39.1-30 -The information and records may be disclosed, under rules adopted by the board, only to:

- 10. Beneficiaries designated by a participating member or a former participating member to receive benefits after the member's death, but only after the member's death. Information relating to beneficiaries may be disclosed to other beneficiaries of the same member.
- 11. The general public, but only after the board has been unable to locate the member for a period in excess of two years, and limited to the member's name and the fact that the board has been unable to locate the member.
- 12. Any person if the board determines disclosure is necessary for treatment, operational, or payment purposes, including the completion of necessary documents.
- 13. A person if the information relates to an employer service purchase, but the information must be limited to the member's name and employer, the retirementprogram in which the member participates, the amount of service credit purchased by the employer, and the total amount expended by the employer for that service credit purchase. Information identified under this subsection may only be obtained from the member's employer.

What is a Meeting?

- A quorum of
- A governing body
- Of a public entity
- Discussing public business

Unless otherwise provided by law, all meetings of public or governmental bodies, boards, bureaus, commissions, or agencies of the state or any political subdivision of the state, or organizations or agencies supported in whole or in part by public funds, or expending public funds, shall be open to the public.

North Dakota Constitution, Article XI, Section 5

What is a Quorum?

 One-half or more of the members of the governing body, or any smaller number if sufficient for a governing body to transact business on behalf of the public entity.

Committees

- Committee: **Two or more people** acting collectively pursuant to authority delegated to that group by the governing body.
 - Includes delegation of <u>any</u> public business, including information gathering.
 - Applies even if the public business being discussed was not delegated to the committee by the governing body, so long as it relates to the business of the public entity.

Key questions:

- Did the governing body delegate any sort of authority?
- Is the committee doing something the governing body could do itself?

Committees

It does not matter...

- If the committee does not have final authority;
- If the committee is just "brainstorming" or "factfinding;"
- If the committee is only intended to recommend something to the governing body;
- If the subject being discussed is not a subject within the authority delegated to the committee.

...a quorum of a committee is still a meeting.

A Meeting can happen...

- By conference call;
- On very short notice;
- Over video conference; or
- At a restaurant

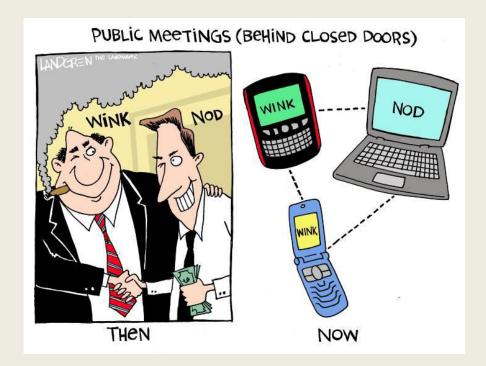
Anywhere a quorum is present.

Open Meeting Exceptions

- Chance or social gatherings where no public business is considered or discussed.
- Emergency operations during a disaster or emergency declared under section 37-17.1-10 or an equivalent ordinance if a quorum of the members of the governing body are present but are not discussing public business as the full governing body or as a task force or working group.
- Attendance at meetings of national, regional, or state associations.
- Training seminars where no public business is discussed.

Common Violations

• Using technology to circumvent open meetings laws.



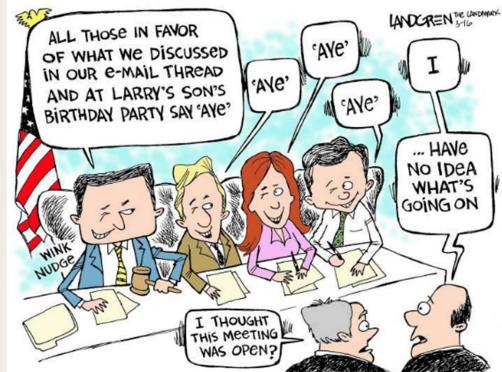
Common Violations

Using emails or other communication methods where a quorum is involved to discuss public business.

- Permissible
 - To provide information for members to review before a meeting;
 - To set a meeting date.
- Violation
 - A member sharing thoughts, ideas, or opinions to a quorum of a public entity or a committee, even if no one responds.
 - Hitting "reply all" to a permissible communication to hold a discussion or provide an opinion.

Common Violations

- Telephone straw polling (no matter who does the polling).
- Serial meetings a series of smaller gatherings which collectively constitute a quorum - and public business is discussed.



Executive Session

Must be legally authorized:

- Most common: exempt/confidential records, attorney consultation, and negotiation strategy.
- Most common violation: closing meeting to discuss personnel matters.

Executive Session

Attorney consultation – 2 Ways

- 1. Advice regarding and in anticipation of <u>reasonably</u> <u>predictable or pending litigation</u> or adversarial administrative proceedings **OR**
- 2. To receive attorney's <u>advice and guidance on the</u> <u>legal risks, strengths, and weaknesses of an action</u> of a public entity, which, if held in public, **would have an adverse fiscal effect**.
- <u>Remember</u>: Just because attorney is sitting in does not automatically make it an attorney consultation.

Executive Session

Negotiation strategy

- Must relate to <u>strategy or provide instructions</u> to an attorney or other negotiator,
- Regarding a <u>pending claim, litigation, adversarial</u> <u>administrative proceedings, or contracts</u>,
- Which is <u>currently being negotiated</u> or for which <u>negotiation is reasonably likely to occur in the</u> <u>immediate future</u>,
- AND must have adverse fiscal effect if the discussion would be held in public.

Executive Session Procedure

- Convene in open meeting;
- Announce in open meeting the topics to be discussed and legal authority;
 - Note: To discuss confidential information no motion necessary. To discuss exempt/closed information motion to enter executive session.
- Record the session (keep for 6 months);
- Note time of executive session and who attended in minutes;
- Only discuss topics in announcement;
- (usually) Final action in open meeting.

Resources

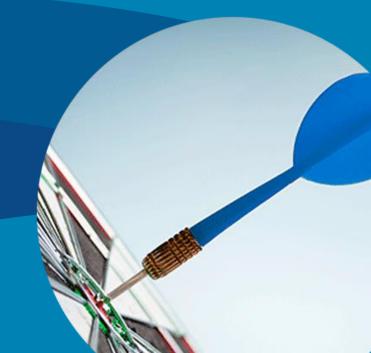
Attorney General's website: <u>www.attorneygeneral.nd.gov</u>.

- Open Records & Meetings Laws
 - Manuals & Guides
 - Open Records Guide ("One pager")
 - Template for Responding to Records Requests
 - Open Meetings Guide ("One pager")
 - Sample Form for Closing Executive Session
 - Sample Meeting Notice
 - Notice Checklist



GASB 67 & 68 Fiscal Year Ending June 30, 2023

January 25, 2024 Krysti Kiesel, ASA Dana Woolfrey, FSA



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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



Terminology

• Total Pension Liability (TPL)

- Entry Age actuarial cost method
- blended discount rate

• 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

Plan Fiduciary Net Position

- Fair Value of Assets
- Volatile from year to year (vs. using a smoothed value)



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, 2023 contributions/assets projected to be sufficient
 - Total Pension Liability is based on investment return assumption (7.25%)



Comparison of Funding and Accounting Results

| | Funding | Accounting | |
|--|------------------|------------------|--|
| Actuarial Accrued Liability - Beginning of Year | \$ 4,479,973,211 | \$ 4,479,973,211 | Total Pension Liability (TPL) - Beginning of Year |
| Normal Cost | 96,101,453 | 96,101,453 | Service Cost |
| Interest on Actuarial Accrued Liability Benefit Payments, Including Refunds of Employee | 318,879,410 | 318,879,410 | Interest on the Total Pension Liability Benefit Payments, Including Refunds of Employee |
| Contributions | (262,282,053) | (262,282,053) | Contributions |
| (Gain)/Loss on Actuarial Accrued Liability | (55,451,354) | (55,451,354) | Difference between Expected and Actual Experience |
| Actuarial Accrued Liability - End of Year | \$ 4,577,220,667 | \$ 4,577,220,667 | Total Pension Liability - End of Year |
| Actuarial Value of Assets | \$ 3,259,558,143 | \$ 3,173,908,455 | Plan Fiduciary Net Position |
| Unfunded Actuarial Accrued Liability | \$ 1,317,662,524 | \$ 1,403,312,212 | Net Pension Liability |
| Funded Ratio | 71.21% | 69.34% | Plan Fiduciary Net Position as a Percentage of TPL |



Net Pension Liability Results (\$ in millions)

| | 7/1/2023 | 7 | 7/1/2022 | |
|---|----------------------|----|----------------|--|
| Total Pension Liability at 7.25% | \$ 4,577 | \$ | 4,480 | |
| Plan Fiduciary Net Position (FVA) | <u>3,173</u> | | 3,024 | |
| Net Pension Liability (NPL) | 1,403 | | 1,456 | |
| Sensitivity to changes in discount rate 1% decrease to 6.25% Current discount rate at 7.25% | \$ 1,953 1,403 | \$ | 2,000 1,456 | |
| 1% increase to 8.25% | 946 | | 1,005 | |

*total may not add due to rounding





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 | \$ 96,101 |
|--|---------------|
| 2. Interest on the Total Pension Liability | 318,879 |
| 3. Current-Period Benefit Changes | 0 |
| 4. Employee Contributions | (94,284) |
| 5. Projected Earnings on Plan Investments | (216,831) |
| 6. Pension Plan Administrative Expense | 2,891 |
| 7. Other Changes in Plan Fiduciary Net Position | (1,098) |
| 8. Recognition of Outflow (Inflow) of Resources due to Liabilities | (11,392) |
| 9. Recognition of Outflow (Inflow) of Resources due to Assets | 22,770 |
| 10. Total Pension Expense | \$ 117,037 |
| *total may not add due to rounding | |



Details of Deferred Outflows (Inflows)

| Year Established Initial Amoun | | Initial Recognition Period | Current Year Recognition | Remaining Recognition | Remaining Recognition Period |
|-----------------------------------|-----------------------|----------------------------------|-----------------------------|--------------------------|------------------------------------|
| Deferred Outflo | ow (Inflow) due to Di | fferences Betwee | en Expected and Act | ual Experience on | Liabilities |
| 2017 | (10,748,944) | 7.0 | (1,535,566) | 0 | 0.0 |
| 2018 | (27,939,071) | 7.0 | (3,991,296) | (3,991,295) | 1. |
| 2019 | (23,494,914) | 7.0 | (3,356,416) | (6,712,834) | 2. |
| 2020 | (20,732,097) | 7.0 | (2,961,728) | (8,885,184) | 3. |
| 2021 | 8,366,320 | 8.0 | 1,045,790 | 5,228,950 | 5. |
| 2022 | (8,504,654) | 8.0 | (1,063,082) | (6,378,490) | 6. |
| 2023 | (55,451,354) | 8.0 | (6,931,420) | (48,519,934) | 7. |
| Total | | | (18,793,718) | (69,258,787) | |
| Deferred Outflo | ow (Inflow) due to As | sumption Change | s | | |
| 2017 | 0 | 7.0 | 0 | 0 | 0. |
| 2018 | 0 | 7.0 | 0 | 0 | 1. |
| 2019 | 0 | 7.0 | 0 | 0 | 2. |
| 2020 | 51,813,028 | 7.0 | 7,401,861 | 22,205,583 | 3. |
| 2021 | 0 | 8.0 | 0 | 0 | 5. |
| 2022 | 0 | 8.0 | 0 | 0 | 6 |
| 2023 | 0 | 8.0 | 0 | 0 | 7. |
| Total | | | 7,401,861 | 22,205,583 | |
| Deferred Outflo | ow (Inflow) due to Di | fferences Betwee | en Projected and Ac | tual Earnings on Pl | an Investment |
| 2017 | (103,235,815) | 5.0 | 0 | 0 | 0. |
| 2018 | (30,002,998) | 5.0 | 0 | 0 | 0. |
| 2019 | 59,163,355 | 5.0 | 11,832,671 | 0 | 0. |
| 2020 | 114,538,151 | 5.0 | 22,907,630 | 22,907,630 | 1. |
| 2021 | (493,904,813) | 5.0 | (98,780,963) | (197,561,924) | 2. |
| 2022 | 434,694,288 | 5.0 | 86,938,858 | 260,816,572 | 3. |
| 2023 | (640,737) | 5.0 | (128,148) | (512 <i>,</i> 589) | 4. |
| Total | | | 22,770,048 | 85,649,689 | |



Cost-Sharing

10 largest participating employers:

| Employer Name | Covered | P d Payroll | Employer's roportionate Share Allocation | et Pension Liability | al Employer sion Expense |
|--------------------------------|---------|----------------|--|-------------------------|-----------------------------|
| Bismarck Public Schools | | 88,291,709 | 11.00327900% | 154,410,358 | 13,419,591 |
| Fargo Public Schools | | 87,232,089 | 10.87123200% | 152,557,331 | 13,120,509 |
| West Fargo School | | 77,868,330 | 9.70427400% | 136,181,262 | 13,940,392 |
| Grand Forks School | | 52,319,987 | 6.52033400% | 91,500,643 | 6,651,815 |
| Minot School | | 50,864,587 | 6.33895600% | 88,955,344 | 6,754,825 |
| Williston Basin School Dist #7 | | 29,492,663 | 3.67549800% | 51,578,712 | 10,561,954 |
| Mandan Public Schools | | 25,122,502 | 3.13087000% | 43,935,881 | 3,945,010 |
| Dickinson School | | 24,638,477 | 3.07054900% | 43,089,389 | 4,035,375 |
| Jamestown School | | 12,206,707 | 1.52125100% | 21,347,901 | 924,820 |
| Devils Lake School | | 11,843,918 | 1.47603800% | 20,713,422 | 1,537,731 |
| Remaining 211 employers | | 342,531,743 | 42.68771900% | 599,041,969 | 42,145,392 |
| Grand Totals: | \$ | 802,412,711 | 100.000000% | \$ 1,403,312,212 | \$ 117,037,414 |



Disclaimers

- This presentation is intended to be used in conjunction with the valuation report issued in October. This presentation should not be relied on for any purpose other than the purpose described in the valuation report.
- This presentation shall not be construed to provide tax advice, legal advice or investment advice.







October 13, 2023

Board of Trustees North Dakota Teachers' Fund for Retirement 3442 East Century Avenue Bismarck, ND 58507-7100

Subject:GASB Statements No. 67 and 68 Reporting and Disclosure Information for the North
Dakota Teachers' Fund for Retirement Fiscal Year Ending June 30, 2023

Dear Trustees:

This report provides information required by the North Dakota Teachers' Fund for Retirement (NDTFFR) in connection with the Governmental Accounting Standards Board (GASB) Statement No. 67, "Financial Reporting for Pension Plans." Additionally, this report provides information required by the governmental employers participating in NDTFFR in connection with the GASB Statement No. 68, "Accounting and Financial Reporting for Pensions."

It is our understanding that this information will be used by governmental employers in financial reporting for the fiscal year ending June 30, 2023. The information provided herein was prepared for the purpose of assisting NDTFFR and the governmental employers in the compliance with the financial reporting and disclosure requirements of GASB Statement Nos. 67 and 68.

The net pension liability is not an appropriate measure for measuring the sufficiency of plan assets to cover the estimated cost of settling the employer's benefit obligation. The net pension liability is not an appropriate measure for assessing the need for or amount of future employer contributions. A calculation of the plan's liability for purposes other than satisfying the requirements of GASB Statement Nos. 67 and 68 may produce significantly different results. This report may be provided to parties other than NDTFFR only in its entirety and only with the permission of NDTFFR.

Based on the available data, the information contained in this report is accurate and fairly represents the actuarial position of the NDTFFR as of the reporting date. All calculations have been made in conformity with generally accepted actuarial principles and practices as well as the Actuarial Standards of Practice. If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this report, please contact the author of the report prior to making such decision.

This report is based upon information, furnished to us by NDTFFR, which include benefit provisions, membership information, and financial data. This information was checked for internal consistency, but it was not audited. GRS is not responsible for the accuracy or completeness of the information provided to us by NDTFFR.

Board of Trustees October 13, 2023 Page 2

Certain tables included in the Required Supplementary Information should include a 10-year history of information. As provided for in GASB Statement No. 67, this historical information is only presented for the years in which the information was measured in conformity with the requirements of GASB Statement No. 67. The historical information in this report will begin with the information presented for the fiscal year ending June 30, 2014. Information disclosed for years prior to June 30, 2023 were disclosed by the prior actuary.

This report complements the actuarial valuation report that was provided to NDTFFR and should be considered in conjunction with that report. Please see the actuarial valuation report as of July 1, 2023 for additional discussion of the nature of actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions. The Schedule of Employer Allocations and the Schedule of Pension Amounts by Employer are provided in Appendix A and B of this report.

To the best of our knowledge, this report is complete and accurate and is in accordance with generally recognized actuarial practices and methods. Ms. Woolfrey, Mr. Wood, and Ms. Kiesel are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Respectfully submitted, Gabriel, Roeder, Smith & Company

Dana Woolfrey, FŚA, EA, MAAA Senior Consultant

Kugsti Kiesel

Krysti Kiesel, ASA, MAAA Senior Analyst

Paul T. Wood, ASA, MAAA Senior Consultant and Team Leader



Summary of Population Statistics

The total pension liability described in this report is based on the plan membership as of July 1, 2023:

| Inactive Plan Members or Beneficiaries Currently Receiving Benefits | 9,615 |
|---|--------|
| Inactive Plan Members Entitled to But Not Yet Receiving Benefits | 3,721 |
| Active Plan Members | 11,766 |
| Total Plan Members | 25,102 |

Measurement of the Net Pension Liability

The net pension liability is measured as the total pension liability, less the amount of the plan's fiduciary net position. In actuarial terms, this is analogous to the accrued liability less the market value of assets (not the smoothed actuarial value of assets that is often encountered in actuarial valuations based on the Board's adopted assumptions and methods).

A single discount rate of 7.25% was used to measure the total pension liability as of June 30, 2023. This single discount rate was based on an expected rate of return on pension plan investments of 7.25% and a municipal bond rate of 3.86%. Based on the stated assumptions and the projection of cash flows, the pension plan's fiduciary net position and future contributions were projected to be available to finance all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

The source of the municipal bond rate as of June 30, 2023 is the rate for Fixed Income Market Data/Yield Curve/Data Municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity Index's "20-Year Municipal GO AA Index." In describing this index, Fidelity notes that the municipal curves are constructed using option adjusted analytics of a diverse population of over 10,000 tax-exempt securities. The rate shown is as of the last date available on or before the measurement date.

The projection of cash flows used to determine this single discount rate assumed that plan member and employer contributions will be made based on the current funding policy as documented in statutes.



Sensitivity of the Net Pension Liability to the Single Discount Rate Assumption

Below is a table providing the sensitivity of the net pension liability to changes in the discount rate as of June 30, 2023. In particular, the table presents the plan's net pension liability, if it were calculated using a single discount rate that is one-percentage-point lower or one-percentage-point higher than the single discount rate:

| Current Single Discount | | | | | | | | |
|-------------------------|-----------------------------|----------------|--|--|--|--|--|--|
| 1% Decrease | 1% Decrease Rate Assumption | | | | | | | |
| 6.25% | 7.25% | 8.25% | | | | | | |
| \$ 1,953,805,517 | \$ 1,403,312,212 | \$ 946,493,303 | | | | | | |



Schedules of Required Supplementary Information

Schedule of Changes in the Employers' Net Pension Liability and Related Ratios

| Fiscal year ending June 30, | | 2023 | | 2022 | | 2021 | | 2020 | | 2019 | | 2018 | 2017 | | 2016 | | 2015 | 2014 |
|---|----|---------------|----|---------------|----|---------------|----|---------------|----|---------------|----|------------------|---------------|----|---------------|----|---------------|---------------------|
| Total pension liability | | | | | | | | | | | | | | | | | | |
| Service cost | \$ | 96,101,453 | \$ | 92,335,934 | \$ | 87,088,239 | \$ | 80,591,201 | \$ | 77,755,965 | \$ | 78,041,335 \$ | 75,476,063 | \$ | 68,239,440 | \$ | 60,617,900 | \$ 56,751,722 |
| Interest on the total pension liability | | 318,879,410 | | 311,929,245 | | 300,698,090 | | 306,790,705 | | 296,875,949 | | 287,375,333 | 276,412,402 | | 265,439,909 | | 249,063,837 | 237,820,894 |
| Changes of benefit terms | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 | | 0 | | 0 | 0 |
| Difference between expected and | | | | | | | | | | | | | | | | | | |
| actual experience | | (55,451,354) | | (8,504,654) | | 8,366,320 | | (20,732,097) | | (23,494,914) | | (27,939,071) | (10,748,944) | | (8,092,800) | | 2,209,258 | 9,347,346 |
| Changes of assumptions | | 0 | | 0 | | 0 | | 51,813,028 | | 0 | | 0 | 0 | | 0 | | 171,324,647 | 0 |
| Benefit payments, including refunds | | | | | | | | | | | | | | | | | | |
| of employee contributions | | (262,282,053) | | (251,847,455) | | (241,128,271) | | (230,851,234) | | (221,228,566) | | (207,978,699) | (196,516,544) | | (185,968,680) | | (172,239,433) | (162,259,276) |
| Net change in total pension liability | | 97,247,456 | | 143,913,070 | | 155,024,378 | | 187,611,603 | | 129,908,434 | | 129,498,898 | 144,622,977 | | 139,617,869 | | 310,976,209 | 141,660,686 |
| Total pension liability - beginning | _ | 4,479,973,211 | | 4,336,060,141 | | 4,181,035,763 | | 3,993,424,160 | | 3,863,515,726 | | 3,734,016,828 | 3,589,393,851 | | 3,449,775,982 | | 3,138,799,773 | 2,997,139,087 |
| Total pension liability - ending (a) | \$ | 4,577,220,667 | \$ | 4,479,973,211 | \$ | 4,336,060,141 | \$ | 4,181,035,763 | \$ | 3,993,424,160 | \$ | 3,863,515,726 \$ | 3,734,016,828 | \$ | 3,589,393,851 | \$ | 3,449,775,982 | \$ 3,138,799,773 |
| Plan fiduciary net position | | | | | | | | | | | | | | | | | | |
| Employer contributions | \$ | 102,307,888 | \$ | 100,331,347 | \$ | 98,264,202 | \$ | 93,032,453 | \$ | 89,444,881 | \$ | 86,675,715 \$ | 86,058,868 | \$ | 82,839,932 | \$ | 78,422,098 | \$ 62,355,146 |
| Employee contributions | | 94,283,739 | | 92,462,223 | | 90,557,210 | | 85,735,134 | | 82,429,594 | | 79,877,611 | 79,309,153 | | 76,342,685 | | 72,268,451 | 56,554,767 |
| Contributions - purchased service credit | | 1,108,690 | | 2,017,055 | | 2,559,121 | | 2,175,497 | | 1,916,787 | | 2,181,106 | 2,553,200 | | 2,768,245 | | 1,600,739 | 2,034,289 |
| Contributions - other | | (10,492) | | 25,166 | | 126,112 | | 158,683 | | 158,713 | | 194,028 | 235,890 | | 44,966 | | 172,474 | 47,766 |
| Pension plan net investment income | | 217,471,487 | | (198,880,583) | | 684,172,530 | | 86,206,117 | | 135,043,319 | | 211,345,369 | 266,688,651 | | 8,238,996 | | 73,204,806 | 294,246,449 |
| Benefit payments, including refunds | | (262,282,053) | | (251,847,455) | | (241,128,271) | | (230,851,234) | | (221,228,566) | | (207,978,699) | (196,516,544) | | (185,968,680) | | (172,239,433) | (162,259,276) |
| Pension plan administrative expense | | (2,891,047) | | (2,592,340) | | (2,678,375) | | (2,095,405) | | (2,251,083) | | (2,128,794) | (2,173,431) | | (1,851,656) | | (1,923,392) | (1,586,045) |
| Other | _ | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 | | 0 | | 0 | 0 |
| Net change in plan fiduciary net position | | 149,988,212 | | (258,484,587) | | 631,872,529 | | 34,361,245 | | 85,513,645 | | 170,166,336 | 236,155,787 | | (17,585,512) | | 51,505,743 | 251,393,096 |
| Plan fiduciary net position - beginning | | 3,023,920,243 | | 3,282,404,830 | | 2,650,532,301 | | 2,616,171,056 | | 2,530,657,411 | | 2,360,491,075 | 2,124,335,288 | | 2,141,920,800 | | 2,090,415,057 | 1,839,583,960 |
| Plan fiduciary net position - ending (b) | \$ | 3,173,908,455 | \$ | 3,023,920,243 | \$ | 3,282,404,830 | \$ | 2,650,532,301 | \$ | 2,616,171,056 | \$ | 2,530,657,411 \$ | 2,360,491,075 | \$ | 2,124,335,288 | \$ | 2,141,920,800 | \$ 2,090,977,056 |
| Net pension liability - ending (a) - (b) | \$ | 1,403,312,212 | \$ | 1,456,052,968 | \$ | 1,053,655,311 | \$ | 1,530,503,462 | \$ | 1,377,253,104 | \$ | 1,332,858,315 \$ | 1,373,525,753 | \$ | 1,465,058,563 | \$ | 1,307,855,182 | \$ 1,047,822,717 |
| Plan fiduciary net position as a percentage | | | _ | | - | | _ | | _ | | _ | | | - | | _ | | |
| of total pension liability | | 69.34 % | | 67.50 % | | 75.70 % | | 63.39 % | | 65.51 % | | 65.50 % | 63.22 % | | 59.18 % | | 62.09 % | 66.62 % |
| Covered-employee payroll | \$ | 802,412,711 | \$ | 786,912,450 | \$ | 770,699,600 | \$ | 729,660,661 | \$ | 701,528,450 | \$ | 679,809,385 \$ | 674,971,342 | \$ | 649,724,868 | \$ | 615,104,860 | \$ 580,053,235 |
| Net pension liability as a percentage | | | | | | | | | | | | | | | | | | |
| of covered-employee payroll | | 174.89 % | | 185.03 % | | 136.71 % | | 209.76 % | | 196.32 % | | 196.06 % | 203.49 % | | 225.49 % | | 212.62 % | 180.64 % |
| Single Discount Rate Used | | 7.25 % | | 7.25 % | | 7.25 % | | 7.25 % | | 7.75 % | | 7.75 % | 7.75 % | | 7.75 % | | 7.75 % | 8.00 % |
| Notes to Schedule | | | | | | | | | | | | | | | | | | |

Notes to Schedule:

-- The covered employee payroll is an estimate of the actual payroll, imputed from individual employer contributions.



Schedules of Required Supplementary Information

Schedule of Employer Contributions

| FY Ending June 30, | Actuarially Determined Contribution | Actual Contribution | Covered Payroll | Actual Contribution as a % of Covered Payroll | |
|-----------------------|---|------------------------|--------------------|---|---------|
| 2014 | \$ 59,513,485 | \$ 62,355,146 | \$ (2,841,661) | \$ 580,053,235 | 10.75 % |
| 2015 | 71,167,632 | 78,422,098 | (7,254,466) | 615,104,860 | 12.75 % |
| 2016 | 84,724,122 | 82,839,932 | 1,884,190 | 649,724,868 | 12.75 % |
| 2017 | 89,231,211 | 86,058,868 | 3,172,343 | 674,971,342 | 12.75 % |
| 2018 | 88,307,239 | 86,675,715 | 1,631,524 | 679,809,385 | 12.75 % |
| 2019 | 90,777,781 | 89,444,881 | 1,332,900 | 701,528,450 | 12.75 % |
| 2020 | 93,688,429 | 93,032,453 | 655,976 | 729,660,661 | 12.75 % |
| 2021 | 101,655,277 | 98,264,202 | 3,391,075 | 770,699,600 | 12.75 % |
| 2022 | 97,341,070 | 100,331,347 | (2,990,277) | 786,912,450 | 12.75 % |
| 2023 | 97,252,421 | 102,307,888 | (5,055,467) | 802,412,711 | 12.75 % |

Notes to Schedule of Contributions

| Valuation Date: Notes | July 1, 2023 Actuarially determined contributions are calculated as of the July 1 preceding start of the fiscal year in which contributions are made. Specifically, the Actuarially Determined Contribution calculated in the July 1, 2022 actuarial valuation is applicable for fiscal year ended June 30, 2023. |
|---|---|
| | Employees currently contribute 11.75% while the employer contributes 12.75%. |
| Methods and Assumptions Used to Calcula | te the Actuarially Determined Contribution Rate for Fiscal Year End June 30, 2023: |
| Actuarial Cost Method | Entry Age Normal |
| Amortization Method | Level percent of pay, closed |
| Payroll Growth Rate | 3.25% |
| Remaining Amortization Period | 21 years as of July 1, 2022 |
| Asset Valuation Method | The amortization of unfunded actuarial accrued liability (UAAL) within the actuarially determined contribution rate calculation is based on the level percentage of pay required to amortize the UAAL over the 30-year closed period that began July 1, 2013. 5-Year smoothed market |
| Inflation | 2.30% |
| Salary Increases | Composed of 3.80% wage inflation, plus step-rate promotional increases for members with less than 30 years of service. 7.25% |
| Retirement Age | Experience-based table of rates based on age and gender. |
| Mortality | Post-retirement Non-Disabled: 104% of the Pub T-2010 Retiree Table and 95% of the Pub T-2010 Contingent Survivor Table with generational mortality improvement using Scale MP-2019. Pre-retirement Non Disabled: Pub T-2010 Retiree Table with generational mortality improvement using Scale MP-2019. Disabled: Pub NS-2010 Retiree Table with generational mortality improvement |
| Oth an Information. | using Scale MP-2019. |
| Other Information: | There were no henefit changes during the year |
| Notes | There were no benefit changes during the year. |



Governmental Employer Financial Statements

Pension Expense for Fiscal Year Ending June 30, 2023 To be used for Governmental Employer Reporting for Fiscal Years Ending Between June 30, 2023 and June 30, 2024

| 1. Service Cost | \$ 96,101,453 |
|--|-------------------|
| 2. Interest on the Total Pension Liability | 318,879,410 |
| 3. Current-Period Benefit Changes | 0 |
| 4. Employee Contributions | (94,283,739) |
| 5. Projected Earnings on Plan Investments | (216,830,750) |
| 6. Pension Plan Administrative Expense | 2,891,047 |
| 7. Other Changes in Plan Fiduciary Net Position | (1,098,198) |
| 8. Recognition of Outflow (Inflow) of Resources due to Liabilities | (11,391,857) |
| 9. Recognition of Outflow (Inflow) of Resources due to Assets | 22,770,048 |
| 10. Total Pension Expense | \$ 117,037,414 |

Recognition of Deferred Outflows and Inflows of Resources

According to paragraph 33 of GASB No. 68, *differences between expected and actual experience* and *changes in assumptions* are recognized in pension expense using a systematic and rational method over a closed period equal to the average of the expected remaining service lives of all employees that are provided with pensions through the pension plan (active employees and inactive employees) determined as of the beginning of the measurement period.

At the beginning of the 2023 fiscal year, the expected remaining service lives of all employees was 185,701 years for NDTFFR. Additionally, the NDTFFR plan membership (active employees and inactive employees) was 24,490. As a result, the average of the expected remaining service lives for purposes of recognizing the applicable deferred outflows and inflows of resources established in the 2023 fiscal year is 8 years.

Additionally, *differences between projected and actual earnings on pension plan investments* should be recognized in pension expense using a systematic and rational method over a closed five-year period.

For this purpose, the deferred outflows and inflows of resources are recognized in the pension expense as a level dollar amount over the closed period identified above.



Governmental Employer Financial Statements

Statement of Outflows and Inflows Arising from Current and Prior Reporting Periods For NDTFFR Fiscal Year Ending June 30, 2023 To be used for Governmental Employer Reporting for Fiscal Years Ending Between June 30, 2023 and June 30, 2024

A. New Deferred Outflows and Inflows of Resources by Source Established in Fiscal Year

| | Out | flows | | Inflows | Ν | let Outflows |
|---|--------|--------|----|-------------|----|--------------|
| | of Res | ources | 0 | f Resources | | of Resources |
| 1. Differences between expected and actual experience | \$ | 0 | \$ | 55,451,354 | \$ | (55,451,354) |
| 2. Assumption Changes | | 0 | | 0 | | 0 |
| 3. Net Difference between projected and actual | | | | | | |
| earnings on pension plan investments | | 0 | | 640,737 | | (640,737) |
| 4. Total | \$ | 0 | \$ | 56,092,091 | \$ | (56,092,091) |

B. Outflows and Inflows of Resources by Source to be recognized in Current Pension Expense

| | Outflows | | | Inflows | Ν | let Outflows |
|---|----------|--------------|----|--------------|----|--------------|
| | | of Resources | 0 | of Resources | C | of Resources |
| 1. Differences between expected and actual experience | \$ | 1,045,790 | \$ | 19,839,508 | \$ | (18,793,718) |
| 2. Assumption Changes | | 7,401,861 | | 0 | | 7,401,861 |
| 3. Net Difference between projected and actual | | | | | | |
| earnings on pension plan investments | | 121,679,159 | | 98,909,111 | | 22,770,048 |
| 4. Total | \$ | 130,126,810 | \$ | 118,748,619 | \$ | 11,378,191 |

C. Deferred Outflows and Deferred Inflows of Resources by Source to be recognized in Future Pension Expense

| | Deferred Outflows of Resources | | | ferred Inflows of Resources | - | let Outflows of Resources |
|---|-----------------------------------|-------------|----|--------------------------------|----|------------------------------|
| 1. Differences between expected and actual experience | \$ | 5,228,950 | \$ | 74,487,737 | \$ | (69,258,787) |
| 2. Assumption Changes | | 22,205,583 | | 0 | | 22,205,583 |
| 3. Net Difference between projected and actual | | | | | | |
| earnings on pension plan investments** | | 283,724,202 | | 198,074,513 | | 85,649,689 |
| 4. Total | \$ | 311,158,735 | \$ | 272,562,250 | \$ | 38,596,485 |

D. Deferred Outflows and Deferred Inflows of Resources by Year to be recognized in Future Pension Expenses

| | Outflows | | | Inflows | Net Outflows | | | |
|--------------------|----------|--------------|----|--------------|--------------|--------------|--|--|
| Fiscal Year Ending | | of Resources | | of Resources | | of Resources | | |
| 2024 | \$ | 118,294,139 | \$ | 117,213,052 | \$ | 1,081,087 | | |
| 2025 | | 95,386,509 | | 113,221,757 | | (17,835,248) | | |
| 2026 | | 95,386,507 | | 11,084,378 | | 84,302,129 | | |
| 2027 | | 1,045,790 | | 8,122,647 | | (7,076,857) | | |
| 2028 | | 1,045,790 | | 7,994,502 | | (6,948,712) | | |
| Thereafter | | 0 | | 14,925,914 | | (14,925,914) | | |
| Total | \$ | 311,158,735 | \$ | 272,562,250 | \$ | 38,596,485 | | |



Governmental Employer Financial Statements

Recognition of Deferred Outflows and Inflows of Resources For NDTFFR Fiscal Year Ending June 30, 2023 To be used for Governmental Employer Reporting for Fiscal Years Ending Between June 30, 2023 and June 30, 2024

| Year Established | Initial Amount | Initial Recognition Period | Current Year Recognition | Remaining Recognition | Remaining Recognition Period |
|---------------------|-------------------------------|----------------------------------|-----------------------------|--------------------------|------------------------------------|
| | | | | | |
| Deferred Outflo | w (Inflow) due to Di | fferences Betwee | en Expected and Act | ual Experience on | Liabilities |
| 2017 | (10,748,944) | 7.0 | (1,535,566) | 0 | 0.0 |
| 2018 | (27,939,071) | 7.0 | (3,991,296) | (3,991,295) | 1.0 |
| 2019 | (23,494,914) | 7.0 | (3,356,416) | (6,712,834) | 2.0 |
| 2020 | (20,732,097) | 7.0 | (2,961,728) | (8,885,184) | 3.0 |
| 2021 | 8,366,320 | 8.0 | 1,045,790 | 5,228,950 | 5.0 |
| 2022 | (8,504,654) | 8.0 | (1,063,082) | (6,378,490) | 6.0 |
| 2023 | (55,451,354) | 8.0 | (6,931,420) | (48,519,934) | 7.0 |
| Total | | | (18,793,718) | (69,258,787) | |
| | | | | | |
| Deferred Outflo | w (Inflow) due to As | sumption Change | S | | |
| 2017 | 0 | 7.0 | 0 | 0 | 0.0 |
| 2018 | 0 | 7.0 | 0 | 0 | 1.0 |
| 2019 | 0 | 7.0 | 0 | 0 | 2.0 |
| 2020 | 51,813,028 | 7.0 | 7,401,861 | 22,205,583 | 3.0 |
| 2021 | 0 | 8.0 | 0 | 0 | 5.0 |
| 2022 | 0 | 8.0 | 0 | 0 | 6.0 |
| 2023 | 0 | 8.0 | 0 | 0 | 7.0 |
| Total | | | 7,401,861 | 22,205,583 | |
| Deferred Outfle | w (Inflow) due to Di | fforoncos Botwoo | n Projected and Ac | tual Farnings on Dl | an Invastments |
| | (103,235,815) | 5.0 | | 0 | 0.0 |
| 2017 | (103,233,813) (30,002,998) | 5.0 | 0 | 0 | 0.0 |
| 2018 | | 5.0 | 0 11,832,671 | 0 | 0.0 |
| 2019 | 59,163,355 | 5.0 | 22,907,630 | 0 22,907,630 | 0.0 |
| 2020 | 114,538,151 | | | | |
| 2021 | (493,904,813) | 5.0 | (98,780,963) 86,038,858 | (197,561,924) | 2.0 |
| 2022 | 434,694,288 | 5.0 | 86,938,858 | 260,816,572 | 3.0 |

5.0

(128,148)

22,770,048



2023

Total

(640,737)

4.0

(512,589)

85,649,689

APPENDIX A

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Schedule of Employer Allocations as of June 30, 2023

| Employer Name | Covered Payroll | Employer's Proportionate Share Allocation |
|---|------------------------|---|
| Alexander School | \$ 1,993,854 | 0.24848200% |
| Anamoose School | 808,331 | 0.10073800% |
| Apple Creek Elem School | 420,043 | 0.05234700% |
| Ashley School | 1,143,297 | 0.14248200% |
| Bakker Elem School | 55,575 | 0.00692600% |
| Barnes County North | 1,789,632 | 0.22303100% |
| Beach School | 2,237,325 | 0.27882500% |
| Belcourt School | 10,378,314 | 1.29338800% |
| Belfield Public School | 1,606,360 | 0.20019100% |
| Beulah School | 3,829,060 | 0.47719300% |
| Billings Co. School Dist. | 1,029,190 | 0.12826200% |
| Bismarck Public Schools | 88,291,709 | 11.00327900% |
| Blessed John Paul II Catholic Sch Network | - | 0.0000000% |
| Bottineau School Bowbells School | 4,081,548 | 0.50865900% 0.10054400% |
| Bowman School | 806,780 3,354,045 | 0.41799500% |
| Burke Central School | 906,469 | 0.11296800% |
| Burleigh County Spec. Ed. | 130,206 | 0.01622700% |
| Carrington School | 2,979,595 | 0.37133000% |
| Cavalier School | 2,662,806 | 0.33185000% |
| Center Stanton School | 1,807,480 | 0.22525600% |
| Central Cass School | 4,957,242 | 0.61779200% |
| Central Elementary School | - | 0.0000000% |
| Central Regional Education Association | 1,724,354 | 0.21489600% |
| Central Valley School | 1,380,371 | 0.17202800% |
| Dakota Prairie School | 2,207,585 | 0.27511800% |
| Devils Lake School | 11,843,918 | 1.47603800% |
| Dickinson School | 24,638,477 | 3.07054900% |
| Divide School | 2,962,530 | 0.36920300% |
| Drake School | 559,997 | 0.06978900% |
| Drayton School | 1,557,899 | 0.19415200% |
| Dunseith School | 3,935,771 | 0.49049200% |
| E Central Ctr Exc Childn Earl Elem. School | 617,753 | 0.07698700% 0.00353900% |
| Edgeley School | 28,400 1,444,494 | 0.18001900% |
| Edmore School | 637,944 | 0.07950300% |
| Eight Mile School | 2,058,342 | 0.25651900% |
| Elgin-New Leipzig School | 1,274,747 | 0.15886400% |
| Ellendale School | 1,621,046 | 0.20202100% |
| Emerado Elementary School | 780,510 | 0.09727000% |
| Enderlin Area School District | 2,283,180 | 0.28453900% |
| Fairmount School | 826,758 | 0.10303400% |
| Fargo Public Schools | 87,232,089 | 10.87123200% |
| Fessenden-Bowdon School | 1,258,589 | 0.15685100% |
| Finley-Sharon School | 1,058,544 | 0.13192000% |
| Flasher School | 1,392,633 | 0.17355600% |
| Fordville Lankin School | 659,883 | 0.08223700% 0.02763900% |
| Fort Ransom Elem School | 221,778 2,093,258 | 0.26087100% |
| Fort Yates School | 694,904 | 0.08660200% |
| Gackle-Streeter Pub Sch | 974,729 | 0.12147500% |
| Garrison School | 2,418,773 | 0.30143700% |
| Glen Ullin School | 1,199,691 | 0.14951000% |
| Glenburn School | 1,828,825 | 0.22791600% |
| Goodrich School | 350 | 0.00004400% |
| Grafton School | <u>-</u> | 0.0000000% |
| Grafton School District | 4,591,491 | 0.57221100% |
| Grand Forks School | 52,319,987 | 6.52033400% |
| Great North West Cooperative | 401,490 | 0.05003500% |
| Grenora School | 1,243,748 | 0.15500100% |
| Gst Educational Services | 1,508,311 1,827,019 | 0.22769100% |
| Halliday School | 44,077 | 0.00549300% |
| Llankingen Cehael | 1,662,070 | 0.20713400% |
| Hankinson School | 2,427,325 | 0.30250300% |
| Hatton Eielson Psd | 1,403,078 | 0.17485700% |
| Hazelton - Moffit School | 1,118,761 | 0.13942500% |
| Hazen School | 3,266,653 | 0.40710400% |
| Hebron School | 1,175,711 | 0.14652200% |
| Hettinger School | 1,584,378 | 0.19745200% |
| Hillsboro School | 3,063,849 | 0.38183000% |
| Hope School | <u>-</u> | 0.0000000% |
| Hope-Page Public School District | 1,620,368 | 0.20193700% |
| Horse Creek Elem. School | 58,527 | 0.00729400% |
| | | |



Schedule of Employer Allocations as of June 30, 2023

| Employer Name | Covered Payroll | Employer's Proportionate Share Allocation |
|---|--|---|
| James River Multidistrict Spec Ed Unit | \$ 1,331,768 | 0.16597000% |
| Jamestown School | 12,206,707 | 1.52125100% |
| Kenmare School | 1,980,748 | 0.24684900% |
| Kensal School | 292,930 | 0.03650600% |
| Kidder County School District | 2,322,660 | 0.28946000% |
| Killdeer School | <u>3,921,785</u> 4,527,902 | 0.48874900% |
| Kulm School | 1,039,951 | 0.12960300% |
| Lake Region Spec Ed | 1,992,157 | 0.24827100% |
| Lakota School | 1,156,282 | 0.14410100% |
| Lamoure School | 1,680,211 | 0.20939500% |
| Langdon Area School | 2,481,840 | 0.30929700% |
| Larimore School | 2,119,541 | 0.26414600% |
| Leeds School | 1,011,095 | 0.12600700% |
| Lewis And Clark School Lidgerwood School | 2,840,342 | 0.35397500% 0.14837400% |
| Linton School | 1,190,572 1,564,137 | 0.19492900% |
| Lisbon School | 4,232,337 | 0.52745100% |
| Litchville-Marion School | 973,382 | 0.12130700% |
| Little Heart Elem. School | 186,040 | 0.02318500% |
| Logan County | - | 0.0000000% |
| Lone Tree Elem. School | 270,367 | 0.03369400% |
| Lonetree Spec Ed Unit | - | 0.0000000% |
| Maddock School | 823,518 | 0.10263000% |
| Mandan Public Schools | 25,122,502 | 3.13087000% |
| Mandaree School | 2,013,174 | 0.25089000% |
| Manning Elem School Manvel Elem. School | 148,771 1,079,684 | 0.13455500% |
| Maple Valley School | 1,670,133 | 0.20813900% |
| Mapleton Elem. School | 1,615,308 | 0.20130600% |
| Marmarth Elem. School | 217,175 | 0.02706500% |
| Max School | 1,194,435 | 0.14885500% |
| May-Port C-G School | 2,903,770 | 0.36188000% |
| Mcclusky School | 916,794 | 0.11425500% |
| Mckenzie County | 75,710 | 0.00943500% |
| Mckenzie County School | 11,522,071 | 1.43592800% |
| Medina School Menoken Elem School | 1,241,998 253,598 | 0.15478300% 0.03160400% |
| Midkota | 1,107,670 | 0.13804200% |
| Midway School | 1,448,706 | 0.18054400% |
| Milnor School | 1,520,812 | 0.18953000% |
| Minnewaukan School | 2,036,683 | 0.25382000% |
| Minot School | 50,864,587 | 6.33895600% |
| Minto School | 1,601,409 | 0.19957400% |
| Mohall Lansford Sherwood | 1,963,843 | 0.24474200% |
| Montpelier School | 881,686 | 0.10987900% |
| Morton County Mott-Regent School | - 1,415,473 | 0.17640200% |
| Mt Pleasant School | 2,015,456 | 0.25117400% |
| Munich School | 1,038,719 | 0.12944900% |
| N Central Area Career And Tech Center | - | 0.0000000% |
| Napoleon School | 1,645,645 | 0.20508700% |
| Naughton Rural School | 177,013 | 0.02206000% |
| Nd Center For Distance Education | 1,673,445 | 0.20855200% |
| Nd Dept Of Public Instruction | 446,321 | 0.05562200% |
| Nd School For Blind | 717,404 | 0.08940600% |
| Nd School For Deaf Nd United | 870,924 | 0.10853800% 0.00000000% |
| Nd Youth Correctional Cnt | 203,258 | 0.02533100% |
| Nedrose School | 3,930,457 | 0.48983000% |
| Nelson County | 12,385 | 0.00154300% |
| Nesson School | 2,601,718 | 0.32423700% |
| New England School | 1,845,810 | 0.23003300% |
| New Rockford Sheyenne School | 1,833,696 | 0.22852300% |
| New Salem-Almont | 2,259,986 | 0.28164900% |
| New Town School | 6,556,859 | 0.81714300% |
| Newburg United District | 850,858 | 0.10603700% 0.32473600% |
| North Border School | 2,605,720 1,632,223 | 0.20341400% |
| North Sargent School | 1,032,223 | |
| North Sargent School North Star | 1 871 054 | () 7.3.3170000% |
| North Star | <u>1,871,054</u> 960,530 | 0.23317900% |
| Marth Ctar | <u>1,871,054</u> 960,530 3,872,921 | |
| North Star North Valley Area Career | 960,530 | 0.11970500% |



Schedule of Employer Allocations as of June 30, 2023

| Employer Name | Covered Payroll | Employer's Proportionate Share Allocation |
|--|--|---|
| Oakes School | \$ 2,471,056 | 0.30795300% |
| Oberon Elem School | 494,557 | 0.06163400% |
| Oliver - Mercer Spec Ed | 1,048,747 | 0.13069900% |
| Page School | <u> </u> | 0.0000000% |
| Park River Area School District | 2,380,673 | 0.29668900% |
| Parshall School | 1,947,464 | 0.24270100% |
| Peace Garden Spec Ed | 740,609 | 0.09229800% |
| Pembina Spec Ed Coop | 131,410 | 0.01637700% |
| Pingree - Buchanan School | 993,182 | 0.12377400% 0.18344800% |
| Powers Lake School Richardton-Taylor | 1,472,011 1,806,527 | 0.22513700% |
| Richland School | 1,873,065 | 0.23342900% |
| Robinson School | - | 0.0000000% |
| Rolette School | 1,267,826 | 0.15800200% |
| Roosevelt School | 384,260 | 0.04788800% |
| Roughrider Area Career And Tech Center | 284,886 | 0.03550400% |
| Roughrider Service Program | 212,137 | 0.02643700% |
| Rugby School | 3,955,203 | 0.49291400% |
| Rural Cass Spec Ed | 2,021,487 | 0.25192600% |
| Sargent Central School | 1,680,217 | 0.20939600% |
| Sawyer School Scranton School | 797,626 | 0.14676600% |
| Se Region Career And Tech | 1,177,671 2,048,250 | 0.25526100% |
| Selfridge School | 621,980 | 0.07751400% |
| Sheyenne Valley Area Voc | 1,017,223 | 0.12677000% |
| Sheyenne Valley Spec Ed | 1,588,948 | 0.19802100% |
| Slope County | 28,302 | 0.00352700% |
| Solen - Cannonball School | 1,884,533 | 0.23485800% |
| Souris Valley Spec Ed | 1,132,251 | 0.14110600% |
| South Cent. Prairie Sp Ed | 366,716 | 0.04570200% |
| South East Education Cooperative | 744,797 | 0.09282000% |
| South Heart School | 2,446,483 | 0.30489100% |
| South Prairie School District | 2,979,371 | 0.37130200% |
| South Valley Spec Ed Southwest Special Education Unit | 394,794 | 0.04920100% 0.01329100% |
| St. John's School | 106,647 3,613,153 | 0.45028600% |
| St. Thomas School | | 0.00000000% |
| Stanley School | 3,492,736 | 0.43527900% |
| Starkweather School | 639,383 | 0.07968300% |
| Sterling School | 192,500 | 0.02399000% |
| Strasburg School District | 1,051,697 | 0.13106700% |
| Surrey School | 2,637,232 | 0.32866300% |
| Sweet Briar Elem School | 149,595 | 0.01864300% |
| Tgu School District | 2,532,988 | 0.31567100% |
| Thompson School | 3,127,412 | 0.38975100% |
| Tioga School | 4,003,175 | 0.49889200% 0.17699200% |
| Turtle Lake-Mercer School Twin Buttes Elem. School | 1,420,203 514,144 | 0.06407500% |
| Underwood School | 1,499,105 | 0.18682500% |
| United School | 3,744,901 | 0.46670500% |
| Upper Valley Spec Ed | 2,723,271 | 0.33938500% |
| Valley - Edinburg School | 1,599,587 | 0.19934700% |
| Valley City School | 6,205,490 | 0.77335400% |
| Velva School | 2,970,282 | 0.37016900% |
| Wahpeton School | 7,172,968 | 0.89392500% |
| Ward County | 33,206 | 0.00413800% |
| Warwick School | 1,874,224 | 0.23357400% |
| Washburn School | 2,243,465 | 0.27959000% |
| West Fargo School | 77,868,330 | 9.70427400% 0.08701400% |
| West River Student Services | <u> 698,213 </u> | 0.16365300% |
| White Shield School | 1,688,134 | 0.21038200% |
| Williams Co School Dist #8 | 1,000,104 | 0.00000000% |
| Williston Basin School Dist #7 | 29,492,663 | 3.67549800% |
| Williston School | - | 0.0000000% |
| Wilmac Special Education | 5,561,608 | 0.69311100% |
| Wilton School | 1,782,761 | 0.22217500% |
| Wing School | 724,479 | 0.09028800% |
| Wishek School | 1,475,228 | 0.18384900% |
| Wolford School | • | 0.0000000% |
| Wyndmere School | 1,562,020 | 0.19466500% |
| Yellowstone Elem. School | 628,292 | 0.07830000% |
| Zeeland School | 473,382 \$ 802 412 711 | 0.05899500% |
| | \$ 802,412,711 | 100.000000// |



APPENDIX B

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

| | | | | | Dis | count Rate Sensitiv | vity | | Schedule of Contributions | | | | Pension Expense Net Amortization | |
|---|---|----------------|-------------------|-----------------|-------------|---------------------|--------------|-----------|---------------------------------------|-------------|----------------------------------|----------------------------------|---|-----------------------------------|
| Amade Schort 0.74640000 1 1.446.70 4 1.446.70 4 1.446.70 </th <th>Employer Name</th> <th>Proportionate</th> <th>Pension Liability</th> <th>Covered Payroll</th> <th></th> <th>Discount Rate</th> <th></th> <th></th> <th>Relation to the Statutory Required</th> <th>Deficiency/</th> <th>as a Percentage of Covered</th> <th>Share of Plan Pension Expense</th> <th>Changes in Proportion and Differences Between Employer Contributions and Proportionate</th> <th>Total Employer Pension Expense</th> | Employer Name | Proportionate | Pension Liability | Covered Payroll | | Discount Rate | | | Relation to the Statutory Required | Deficiency/ | as a Percentage of Covered | Share of Plan Pension Expense | Changes in Proportion and Differences Between Employer Contributions and Proportionate | Total Employer Pension Expense |
| American Barta 0.0072007 11.500 00.20 11.500 10.200 < | | | | (-) | | (-) | (6) | | (8) | (9) | | . , | () | (13) |
| Amel Cart Print 0.00214070 77.8 40 40 77 | | 0.24848200% \$ | | | | \$ 3,486,978 | \$ 2,351,865 | | | \$- | | | \$ 118,675 | \$ 409,492 |
| Adds (party) 0 0 1 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td><td>(21,409)</td><td>96,492</td></t<> | | | | | | | | | | - | | | (21,409) | 96,492 |
| Bate Emergen Biologicolity 91300 91300 91300 9 | | | | | | /34,592 | | | | - | | | | 59,172 159,028 |
| Bases Converban 52000000 1.10211 1.10212 1.10212 1.10212 1.10212 2.110213 2.11021 1.10210 2.110213 2.11021 1.10210 2.1102133 | | | | | 135 321 | 1,999,407 | 65 554 | 7 086 | | ·· | 12.75% | | 2 939 | 11,045 |
| Inc. Name 0.7780000 3.97.78 2.20.50 3.44.000 52.700 750.50 < | | | | | | | | | | - | | | | 223,559 |
| Belles Astronom Control Participant Source Pa | Beach School | | 3,912,785 | | 5,447,698 | 3,912,785 | 2,639,060 | 285,260 | | - | | 326,330 | (89,465) | 236,865 |
| Bauh Bouls 0.77 10000 6.66.05 1.800.00 1.300.00 1.300.00 1.300.00 1.400.00 1.440.00 | | | | | | | | | | | 12.75% | | | 1,533,256 |
| Bing Cs and Ds. 0.1280100 1.200.90 1.99.910 1.1.202 1.1.202 1.0.274 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td>183,207</td> | | | | | | | | | | - | | | | 183,207 |
| Binster Artis Stand 1 0007700 124/123 141/227 127/22 127/24 <th127 24<="" th=""> <th127 24<="" th=""></th127></th127> | | | | | | | | | | | 12.75% | | | 474,262 172,001 |
| Baneri, Angel Cardy, Baneri, Angel Cardy, Baneri, Baneri, Angel Cardy, Baneri, Angel Cardy, Baneri, | | | 154.410.358 | | 214.982.672 | 154.410.358 | 104.145.299 | | | - | | | 541.638 | 13,419,591 |
| Backersbelarin 0.034400 1.410548 1.940,443 1.410,548 1.921,44 1.923,44 1.923,44 1.923,44 1.923,44 1.923,44 1.923,44 1.923,44 1.923,45 1.923,44 1.923,45 | Blessed John Paul II Catholic Sch Network | 0.0000000% | - | - | - | - | - | - | | | 0.00% | - | | - |
| Densent School (1996) 6.41798000 (2007) 6.417980000 (2007) 6.417980000 (2007) 6.4179800000 (2007) 6.41798000000000000000000000000000000000000 | | | 7,138,074 | | | 7,138,074 | 4,814,423 | 520,398 | | - | 12.75% | 595,321 | | 468,424 |
| Bake End 0.1982/000 0.188/000 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td>12.75%</td><td></td><td></td><td>143,046</td></t<> | | | | | | | | | | - | 12.75% | | | 143,046 |
| Bunkgh Courty Spec. Ed. 0.0152770/m 227.15 133.267 135.267 135.267 155.277 157.277 157.277 157.277 157.277 157.277 157.277 157.277 157.277 157.277 157.277 157.277 157.277 157. | | | 5,865,775 | 3,354,045 | 8,166,809 | 5,865,775 | 3,956,295 | 427,642 | | ···- | | 489,211 | (5,906) | 483,305 |
| Camage Shoul 0.2171300% 6.210.110 2.217.56 6.210.110 2.314.414 27.200 77.200 7.257 44.565 (122.82) Constant Shoul 0.2273000% 5.515.55 3.507.60 5.216.56 3.526.65 5.526.65 -27.57 72.516 4.507.60 2.200 4.507.60 4 | | | 1,585,294 | 900,469 | 2,207,175 | 1,585,294 | 1,009,235 | | | - | 12.75% | | (04,088) | 68,127 24,265 |
| Cranif: Stand: Calified Stand: Construction Construc | | 0.37133000% | | | | 5 210 919 | 3 514 614 | 379,900 | | | 12.75% | 434,595 | | 281,953 |
| Cale Bases Control Control Control Control Contro Contr | | 0.33185000% | 4,656,892 | 2,662,806 | 6,483,704 | 4,656,892 | 3,140,938 | 339,509 | 339,509 | - | 12.75% | 388,389 | (23,386) | 365,003 |
| Christ Bennarty School 0.000000h - - - - - 0.000h - (T.88) Christ Mexing Low Construction 0.00000h - 1.00000h 1.0000h | Center Stanton School | | 3,161,045 | 1,807,480 | 4,401,064 | 3,161,045 | 2,132,033 | 230,455 | | - | | 263,634 | 2,330 | 265,964 |
| Central Registration Association 0.2145800% 0.016682 7.72.142 4.19660 2.716.06 7.216.06 7.216.06 7.2175 5.14.00 999.61 Devis Law School 1.7725000 2.775.00 2.775.00 2.775.00 2.775.00 2.775.00 1.725300 2.775.00 1.725300 2.775.00 1.725300 2.775.00 1.725300 2.775.00 1.727.57 <td< td=""><td></td><td></td><td>8,669,551</td><td>4,957,242</td><td>12,070,454</td><td>8,669,551</td><td>5,847,360</td><td>632,050</td><td>632,050</td><td>-</td><td></td><td>723,048</td><td>156,639</td><td>879,687</td></td<> | | | 8,669,551 | 4,957,242 | 12,070,454 | 8,669,551 | 5,847,360 | 632,050 | 632,050 | - | | 723,048 | 156,639 | 879,687 |
| Comme Operator Comme | | | - | - | - | | - | - | - | - | | - | | (17,888) |
| Decks Princis School 0.277181007b 3.880.764 2.208.872 2.380.774 2.380.774 2.380.774 2.380.774 2.201.342 1.310.701 1.511.1 1.7725.1 1.2775.1 <t< td=""><td></td><td></td><td>3,015,662</td><td>1,724,354</td><td>4,198,650</td><td>3,015,662</td><td>2,033,976</td><td>219,856</td><td>219,856</td><td></td><td>12.75%</td><td>251,509</td><td>389,401</td><td><u>640,910</u> 170,801</td></t<> | | | 3,015,662 | 1,724,354 | 4,198,650 | 3,015,662 | 2,033,976 | 219,856 | 219,856 | | 12.75% | 251,509 | 389,401 | <u>640,910</u> 170,801 |
| Denk Las School 1.47633800% 20.71.422 11.44.918 28.88.912 20.71.4423 1.510.103 - 2.72% 1.72.757 (1987.768) Dates School 0.0054500% 979.558 556.967 1.30.85.11 977.858 660.548 71.400 - 2.72% 91.76 1.40.859 Date School 0.0054500% 979.558 556.967 1.30.511 977.858 660.548 71.400 - 2.72% 91.76 1.60.76 1.60.76 1.60.76 1.60.76 1.60.76 1.60.76 1.72.75 1.67.97 1.60.76 1.72.75 1.67.97 1.60.76 1.72.75 1.67.97 1.60.76 1.72.75 1.60.96 1.72.75 1.60.96 1.60.76 1.72.75 1.60.96 1.72.75 1.60.96 1.72.75 1.60.96 1.72.75 1.60.96 1.72.75 1.60.96 1.72.75 1.60.96 1.72.75 1.60.96 1.72.75 1.60.96 1.72.75 1.60.96 1.72.75 1.60.96 1.72.75 1.60.96 1.72.75 1.60.96 1.72.75 | | | | | | | | | | | | | | 305,448 |
| Distance 3.07744007 4.200.307 2.400.347 9902.540 3.101.41 3.114.14 C.775 3.800 cm 4.100.41 Debas Shoot 0.9907.2007 2.962.30 7.355.00 5.90.71 3.400 cm 7.255.00 7.255.00 7.255.00 7.255.00 7.270 7.257.0 7.275.0 7.270 7.257.0 7.275.0 7.270 7.257.0 7.275.0 7.275.0 7.275.0 7.275.0 7.275.0 7.275.0 7.275.0 7.270 7.200 | Devils Lake School | | | | | | | | | - | | | | 1,537,731 |
| Dake School 0.007800% 973.38 59.967 1.383.541 977.388 600.548 71.400 - 12.75% 81.679 (4.022) Depring School 0.0983000% 40.334 47.772 1.094.033 42.772 77.724 77.7250 77.724 77.7250 77.243 77.744 77.7350 77.724 77.724 77.724 77.724 77.724 77.724 77.724 77.724 77.724 77.724 77.724 77.724 77.724 77.724 77.724 77.724 <td></td> <td></td> <td>43,089,389</td> <td>24,638,477</td> <td>59,992,556</td> <td>43,089,389</td> <td>29,062,541</td> <td>3,141,414</td> <td>3,141,414</td> <td>-</td> <td>12.75%</td> <td>3,593,691</td> <td>441,684</td> <td>4,035,375</td> | | | 43,089,389 | 24,638,477 | 59,992,556 | 43,089,389 | 29,062,541 | 3,141,414 | 3,141,414 | - | 12.75% | 3,593,691 | 441,684 | 4,035,375 |
| Daylog School 0.19415007% 2.724.559 1.577.857 0.187.056 1.987.858 1.98.053 - 2.725 5.772 Depring School 0.00053000% 4.96.07 5.712 5.712 5.772 7.726 7.726 Earl Elem, School 0.00053000% 4.96.07 5.712 2.252.252 1.44.44 5.772 2.252.252 1.44.44 5.772 2.252.252 1.7726 7.726.00 7.726.00 7.756.00 7.756.00 7.756.00 7.756.00 7.756.00 7.756.00 7.756.00 7.756.00 7.756.70 7.706.00 7.756.70 7.706.00 7.756.70 7.756.00 7.756.70 | | | | | | | | | | - | | | | 455,255 |
| Description 0.6481.134 3.081.71 9.83.120 6.98.134 4.44.247 50.182 50.112 - 72.758 57.409 77.289 Contral CFE Scholm 0.00190070 2.256.229 1.44.494 5.577.212 2.256.229 1.70.808 18.174 18.174 18.174 - 2.757 56.104 (7.768) Edgesy Stock 0.00190070 2.256.229 1.44.494 5.537.233 1.118.075 27.264 18.338 1.338 - 2.757 58.040 (1.657) Eignin Microson 0.00190070 2.256.229 1.44.494 5.557.12 27.263 1.2570 2.264.20 - 2.757 58.040 (1.164) Eignin Microson 0.2567.100 2.04.49 2.47.957 2.264.40 3.44.107 2.263.50 2.263.50 2.263.50 2.275 3.11.02 2.263.50 2.275 3.11.02 2.263.50 2.275 1.11.640 2.475 2.275 1.11.640 2.475 2.275 1.11.640 2.475 2.275 3.577 4.4 | | | | | 1,363,541 | 979,358 | 660,548 | 71,400 | | - | | 81,679 | (14,022) | 67,657 |
| Earl Earl Earl 0.053590% 49,683 28,400 69,454 49,663 33,366 5,621 5,621 -12,75% 4,142 (2,14) Earl Earl Earl 0.0501000% 2.05220 1.444.44 5,5721 2.202,205 1.5233 1.2135 1.275% 4,142 1.275% 4,142 1.275% | | | 2,724,559 | | 3,793,352 | 2,724,559 | 1,837,636 | 198,633 | | - | | 227,230 | 5,772 | 233,002 |
| End Edm 0.0035390% 49.683 29.400 69.454 49.663 33.466 5.621 5.621 -12.75% 4.142 (2.14) Entrops School 0.0001000% 2.552.20 1.444.44 3.57.21 2.552.20 1.753.465 52.553 52.553 1.27.5% 3.50.46 52.77 Entrops School 0.5566.400% 2.27.5% 3.50.44 2.27.5% 3.50.45 1.27.5% 3.50.46 52.77 Ellerdial School 0.5566.400% 2.28.3485 1.27.1% 1.56.20 1.27.5% 1.45.50.00 1.57.5% 1.44.44 1.14.20 1.27.5% 1.32.42 1.42.89 Ellerdial School 0.00772100% 3.85.602 7.87.10 1.36.61.00 2.00.648 9.57.10 1.05.41.2 1.27.5% 1.32.42 1.42.89 Fammous School 0.1073200% 1.25.55.31 87.22.32.89 9.57.10 1.05.41.2 1.05.41.2 1.27.5% 1.32.42 1.42.89 Fammous School 0.1073200% 1.25.89 2.00.44.80 1.97.61 1.27.5% 1 | | | 1 080 368 | | 9,565,200 | 1 080 368 | 728 677 | 78 764 | | ·· | 12.75% | | (77 953) | <u>647,328</u> 12,151 |
| Edgelsy School 0.1900% 2.255.229 1.444.494 3.517.221 2.255.229 1.703.868 194.174 14.174 - 12.75% 210.089 (51.754) Edgelsy School 0.0795000% 111576 0.7744 1.5532 1.176, 772.401 0.1332 1.133 - 1.1338 - 1.1338 - 1.277% 91.010.90 (51.754) Eggelsy School 0.19889400% 2.223.358 1.274.747 3.103.864 2.223.358 1.503.657 2.65.30 2.05.653 - 12.75% 91.533.67 (11.444.494 (11.444) Eggelsy School 0.2002100% 2.234.985 1.627.4707 2.243.985 1.91.15 2.05.83 2.05.653 - 20.653 2.05.653 - 12.75% 91.533.67 (11.444.494 1.447.447.4 1.4 | | | | | | | | | | - | | | | 1,724 |
| Eight Mic School 0.2886 160% 3.569.762 2.62.789 2.62.789 2.62.439 - 12.7% 50.02.23 51.149 Eight Mic School 0.00072000% 2.348.08 1.1400 2.427.855 12.7% 12.7% 13.64.00 11.400 Emeration School 0.00072000% 1.385.002 700.510 1.300.467 2.93.543 2.91.168 - 1.2.7% 13.84.2 11.84.00 Emeration Avera School 0.10032400% 1.445.889 2.01.108 1.446.889 97.5.10 1.05.412 1.05.412 1.2.7% 12.5.88 (85.535) Fairmount School 0.10032400% 1.445.889 2.07.140 1.445.889 97.5.10 1.05.412 1.05.412 1.2.7% 12.5.88 (85.535) Fairmount School 0.10032400% 1.45.889 2.07.140 1.445.889 97.5.10 1.05.412 1.2.7% 12.5.88 (85.535) Fairmount School 0.1032400% 1.85.243 1.606.5533 1.446.98 1.047.71 1.05.412 1.2.7% 12.5.7% 20.5.7% | | | 2,526,229 | 1,444,494 | 3,517,221 | 2,526,229 | 1,703,868 | 184,174 | 184,174 | - | 12.75% | 210,690 | (31,654) | 179,036 |
| Eign-Rev 0.15886400% 2.223,588 1.274,747 3.103,884 2.223,588 1.503,537 120,500 - 12.75% 156,400 (23,530) Elendals School 0.2002/00% 2.84.466 1.200,077 2.84.466 1.200,077 2.84.466 1.200,077 2.84.466 1.200,077 2.84.466 1.200,078 1.18.407 Elendals School 0.0000,00% 1.44.688 1.200,078 1.200,078 1.200,078 1.200,078 1.200,078 1.200,078 1.200,078 1.200,078 1.200,078 1.275% 1.200,078 1.400,078 <t< td=""><td>Edmore School</td><td></td><td>1,115,675</td><td></td><td>1,553,334</td><td>1,115,675</td><td>752,491</td><td>81,338</td><td>81,338</td><td></td><td></td><td>93,048</td><td></td><td>36,324</td></t<> | Edmore School | | 1,115,675 | | 1,553,334 | 1,115,675 | 752,491 | 81,338 | 81,338 | | | 93,048 | | 36,324 |
| Elementa School 0.0072700%, 138.002 780.510 1.000.467 1.284.885 1.912.115 206.83 206.83 - 12.75% 12.84.0 (111.44) 29 Emetancia Elementary School 0.0072700%, 138.002 780.510 1.000.467 1.286.002 60.045 90.515 90.515 - 12.75% 12.84.0 (111.44) 29 Emetancia Elementary School 0.0072700%, 1386.027 780.510 1.286.589 33.902.671 2.683.143 2211.106 2.211.66 - 12.75% 12.24.06 (45.77) Emetancia Elementary School 0.0072700%, 1386.027 780.289 2.240.722 1.257.531 102.855.41 102.116 - 12.75% 12.24.04 (45.77) Fease Part School 0.10752500% 1.257.531 872.049 2.201.109 1.285.589 2.2401.72 1.257.55 1.102.144 1.102.116 - 12.75% 12.24.04 (45.77) Fease Part School 0.10590500% 1.257.249 1.285.583 1.306.544 2.201.109 1.245.548 1.100.471 1.102.116 - 12.75% 12.24.04 (45.77) Fease Part School 0.10590500% 1.245.533 1.322.653 3.330.047 1.145.124 1.145.124 1.100.471 - 12.75% 12.24.04 (45.73) Fease Part School 0.0022700% 1.156.422 5.553 1.132.653 3.330.047 1.245.548 1.413.157.68 - 12.75% 154.553 1.463.04 (45.42) Ferri Fease Part School 0.0022700% 1.156.424 2.257.440 1.086.741 2.456.543 1.642.648 1.77.561 1.77.661 - 12.75% 154.356 1.663.109 Ferri Fease Part School 0.0022700% 1.156.424 2.173 2.326.853 1.300.571 1.152.66 1.152.66 1.775.561 1.77.661 - 12.75% 10.275% 14.432 1.442.247 1.150.442 1.150.442 1.150.442 1.150.442 1.150.442 1.150.442 1.150.442 1.150.442 1.150.442 1.150.442 1.150.442 1.150.442 1.150.442 1.150.442 1.150.442 1.150.444 1.140.753 1.2479 1.2475.45 1.1275% 1.1275% 1.440.444 1.432.150.444 1.140.753 1.2479 1.2475% 1.1275% 1.1275% 1.1275% 1.440.444 1.434.140 1.140.753 1.2479 1.2475% 1.1275% 1.1 | | | | | | 3,599,762 | 2,427,935 | 262,439 | 262,439 | - | | 300,223 | | 334,420 |
| Ennerato Elementary School 0.00727000% 1.365,002 720,510 1.005,047 1.065,002 200,864 99,515 - 1.275% 113,842 18,289 Fairmount School 0.10303400% 1.445,589 223,130 250,5731 872,220 221,109 1.22,578 120,5412 12,75% 120,588 (85,135) Fairmount School 0.10303400% 1.445,289 201,026 242,027,331 102,220,88 (81,11) 11,122,118 1.27,75% 120,357 (46,137) Fessenteshowdcs School 0.11265500% 2.231,109 1.248,881 104,0471 102,471 127,75% 103,512 (46,11) Ford Nation Elementary School 0.1126500% 2.235,123 1.000,711 1.144,248 1142,216 177,561 127,75% 92,248 (44,22) Ford Nation Elementary School 0.0272,5000% 3.360,047 2.435,533 1.042,764 177,561 127,75% 92,244 (44,22) Ford Nation School 0.02625000% 3.360,207 1.245,533 1.046,774 1.142,279 124,279 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td>(29,529)</td> <td>156,401 124,800</td> | | | | | | | | | | - | | | (29,529) | 156,401 124,800 |
| Enderlin Ana School Diariot 0.2845300/% 145.289 (9 5.595,33) 3.942,271 (2.69,116) 2.91,106 (2.75% 12.27% (3.30,177 (46,15.137)) Fargo-Public School 0.1033040/% 1.45.289 (2.20,109 (2.25,731 (2.26, | | | | | | | | | | | | | (111,640) | 124,800 |
| Fairmouti School 0.10303400% 1.445.889 20.13.044 1.445.889 075.210 105.412 - 12.75% 120.588 (85.535) Frage Public Schools 0.15965100% 2.201.09 1.286.563 102.856.431 11.22.118 - 12.75% <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>··-··</td> <td></td> <td></td> <td></td> <td>284,880</td> | | | | | | | | | | ··-·· | | | | 284,880 |
| Fressender-Bowdon School 0.15685100% 2.201,109 1.484,584 160,471 1.275% 183,574 (4.601) Fries/Sharon School 0.1512000% 1.351200% 2.357,460 1.851249 1.248,614 151,965 - 1.275% 163,356 1.515,249 1.248,614 151,965 - 1.275% 203,152 1.661,3 FortWill Lankn School 0.02734500% 3.3741 2.2177 2.2177 2.277 2.277 2.275% 3.05,14 4.522 FortTotins School 0.027743000% 3.368,235 2.083,25 2.86,827 2.86,827 2.26,827 2.277 2.277% 3.05,11 4.40,82 FortTotins School 0.027743000% 1.704,674 0.74,729 2.33,85 1.704,674 1.487,531 2.32,70 2.277 2.277 2.275% 3.05,11 4.40,82 Garaton School 0.0274700% 1.704,674 0.73,328 1.704,674 1.487,531 1.902,531 2.30,361 3.908,394 2.275% 1.275% 2.66,747 (1.64,821) Garato | | 0.10303400% | 1,445,889 | 826,758 | 2,013,084 | 1,445,889 | 975,210 | 105,412 | 105,412 | - | 12.75% | 120,588 | (85,935) | 34,653 |
| Princy-Sharon Sochool 0.13162200% 1.551249 1.0561249 1.242.694 1.344.655 1.34.965 1.275% 1.542.29% Prasher School 0.17355000% 1.454.042 6559.883 1.600.751 1.154.042 675.33 1.642.066 1.77.561 -12.75% 92.248 (14.324) Fort Ranson Ellems School 0.02623700% 3.87.661 22.107 28.277 22.277 -12.75% 32.348 4.522 Fort Toler School 0.026067100% 3.660.635 2.095.738 5.161.602 28.691 22.779 1.22.75% 302.344 4.522 Fort Toler School 0.026067100% 3.766.044 1.690.205 1.215.266 614.904 1.690.205 1.215.266 1.104.674 1.144.705 124.279 -12.75% 302.174 4.4002 Garden School 0.3147100% 1.204.674 974.729 2.373.365 1.746.74 1.149.753 124.279 -12.75% 302.174 (10.387) Genrum School 0.216971000% 2.046.092 1.419.02 1.52.611 152.261 | | | | | | | | | | - | | | | 13,120,509 |
| Flasher 0.17355000% 2,435,533 1,382,633 1,380,647 2,435,533 1,642,686 177,661 177,561 - 12,75% 200,125 16,613 Fort Ramom Elem School 0.02273300% 387,861 221,778 540,012 387,861 226,1601 28,277 28,277 - 12,75% 503,517 44,082 Fort Totes School 0.02660200% 1,215,286 694,904 1,082,035 1,215,286 819,682 88,601 88,601 - 12,75% 101,357 (163,048) Gardiso School 0.20147500% 1,215,286 694,904 1,492,035 1,215,286 819,882 88,601 88,601 - 12,75% 101,357 (163,048) Gardiso School 0.20147500% 4,230,102 2,483,035 3,198,373 1,282,621 4,430,355 2,984,943 302,394 308,394 - 12,75% 367,474 (165,442) Gentiom School 0.00004400% 617 30 80 617 416 45 45 12,866 | | | 2,201,109 | 1,258,589 | 3,064,563 | 2,201,109 | 1,484,584 | 160,471 | | | | 183,574 | (4,801) | 178,773 |
| FordWill 0.08223700% 1.154.042 669.883 1.164.042 778.380 84.135 41.35 - 12.75% 96.248 (14.324) Fort Teams School 0.02076300% 3.87.661 22.77 2.61.601 28.77 7.27.75% 32.344 4.522 Fort Toten School 0.0806020% 1.215.296 694.904 1.902.55 1.215.296 819.602 28.601 88.601 - 1.275% 101.357 (46.08) Gardie-School 0.3143700% 1.745.74 9.74.272 2.373.385 1.704.674 1.145,753 124.279 - 1.275% 432.171 2.184 Garareon School 0.2144700% 1.196.691 2.291.135 2.096.092 1.415,102 152.961 - 1.275% 142.77 16.4451 1.275% 14.983 (4.431) Gendum School 0.2721100% 3.198.71 1.822.941 1.98.6241 1.99.691 2.17.710 2.17.716 2.12.75% 18.749 1.275% 18.749 1.275% 12.75% 14.94.171 1.2 | Finley-Sharon School | | | | | 1,851,249 | 1,248,614 | | | - | | | (33,542) | 120,854 219,738 |
| Fort Ransom Elem School 0.02763900% 387,861 221,778 540,012 387,861 261,601 28,277 28,277 28,277 1275% 32,248 4,522 Fort Tottes School 0.206097100% 1,215,296 694,904 1,692,035 1,215,296 89,601 88,601 - 1,275% 305,317 44,002 Gardes-Steet Pub Sch 0.30143700% 4,201,102 2,418,773 1,242,79 1,242,79 - 1,275% 142,171 2,184 Gardes-Steet Pub Sch 0.30143700% 4,200,102 2,418,773 5,889,493 4,201,102 1,25,961 152,961 - 1,275% 174,483 (64,491) Glen Ullin School 0.2004000% 617 30 80 617 416 45 45 - 12,75% 174,483 (64,491) Graftin School 0.0000400% 617 30 80 617 416 45 45 - 12,75% 756,45 (77,742) Graftin School 0.00000000% 702,144 | | | 2,435,533 | | | | | | | - | | | | 219,738 81,924 |
| Fort Totlers School 0.26067100% 3.660.835 2.093.256 5.096.912 3.660.335 2.469.127 226.892 - 12.75% 305.317 44.082 Carable-Streeter Pub Schol 0.0266602.00% 1.215.296 684.904 1.622.35% 1.215.296 819.662 88.601 88.601 - 12.75% 101.337 (183.048) Carable-Streeter Pub Sch 0.12147500% 1.704.674 974.729 2.853.061 303.394 306.394 - 12.75% 352.794 (92.138) Glenbum School 0.22971600% 3.198.673 1.828.433.055 3.198.373 2.157.210 233.176 12.75% 266.747 (105.482) Conditio School 0.00004000% 617 416 45 45 - 12.75% 660.704 (15.491) (105.482) Cardfords School 0.00004000% 617 416 45 45 - 12.75% 766.747 (105.482) Cardfords School 0.57221100% 8.629.907 5.415.939 5.85.417 585.417 - | Fort Ransom Flem School | | 387.861 | | | 387.861 | 261.601 | | | | | 32,348 | (14,324) 4.522 | 36,870 |
| Fort Yates School 0.08660200% 1,215,296 694,904 1,602,035 1,215,296 819,682 88,601 86,601 - 1,275% 101,357 (163,048) Gardies-Stead Pub Sch 0.12147500% 4,230,102 2,418,773 5,889,493 4,230,102 2,853,081 308,394 308,394 - 12,75% 352,794 (02,136) Gen Ulin School 0.14961000% 2,989,092 1,199,691 2,291,135 2,088,092 1,141,72 12,376 233,176 - 12,75% 366,474 (105,482) Goadrich School 0.00004000% 617 350 860 16,75,210 233,176 233,176 - 12,75% 666,704 (105,482) Goadrich School 0.00004000% - - - - - 0,05% 170,45% 67,704,20% 67,714,94 14,92,94 177,94,45 9,025,907 54,177 585,417 2,175% 7,831,20 (979,415) 67,714,16% 12,75% 7,831,20 (979,415) 12,75% 7,831,20 (979 | | 0.26087100% | | | 5,096,912 | 3,660,835 | 2,469,127 | 266,892 | 266,892 | ··· | 12.75% | 305,317 | 44.082 | 349,399 |
| Gacke-Streeter Pub Sch 0.12147500% 1.704,674 974,723 2.373,385 1.704,674 1.149,753 124,279 124,279 - 12.75% 142,171 2.184 Garnison School 0.30143700% 4.200102 2.418,773 5.589,493 4.230,102 2.853,081 306,394 - 12.75% 174,983 (64,491) Glen burn School 0.22291600% 3.98,392 1.98,691 2.921,135 2.098,092 1.415,102 152,961 152,961 - 12.75% 26,6747 (105,482) Goodich School 0.00000000% 617 300 860 617 416 45 45 - 12.85% 66,747 (105,482) Grand Forks School 6.52033400% 9.500,643 617,14,525 6.670,816 6.703,16 - 12.75% 7.631,230 979,445 - 1.75% 7.631,230 979,445 - 1.75% 7.631,230 979,445 - 1.75% 7.65,173 1.642,074 1.473,2578 51,190 51,190 51,190 < | Fort Yates School | | 1,215,296 | 694,904 | 1,692,035 | 1,215,296 | 819,682 | 88,601 | 88,601 | - | 12.75% | 101,357 | (163,048) | (61,691) |
| Glen Ullin School 0.14951000% 2.098,092 1.199,691 2.921,135 2.098,092 1.415,102 152,961 152,961 1.275% 774,983 (64,491) Glenburs School 0.00004400% 617 3.1828,825 4.453,035 3.198,373 2.157,210 233,176 233,176 1.275% 266,747 (105,442) Grathor School 0.00000000% - - - 0.00% (11,494)12) (f Grath Or School District 0.57221100% 8.029,307 4.591,491 11,179,890 8.029,907 5,415,939 585,417 585,417 12,75% 668,701 975,645 Grath McH West Cooperative 0.5000300% 702,147 401,490 977,557 702,147 473,578 51,190 51,190 51,190 51,190 51,275% 768,420 (275,484 (27,044) (35,927) 616,37,0310 12,75% 858,640 (35,927) 613,922,010 12,75% 51,190 51,190 51,190 51,190 51,190 51,190 51,275% 24,944,020,444 (35,9 | | | | | | | | | | - | | 142,171 | 2,184 | 144,355 |
| Glenburn School 0.22791600% 3,198,373 1,282,8 4,483,035 3,198,373 2,157,10 233,176 - 1,275% 266,747 (105,482) Gordink School 0.00004000% - - - - - 0.0006 - (11,44,912)< | | | | | 5,889,493 | 4,230,102 | 2,853,081 | 308,394 | | | 12.75% | 352,794 | (92,136) | 260,658 120,492 |
| Goodink School 0.00004400% 617 350 860 617 416 45 45 1 2.86% 51 (77.042) Grafton School 0.0000000% - - - 0.00% - 0.00% - 1.1484912 (f Grafton School 0.5223100% 8.028.307 4.561.4341 11.779.800 8.022.907 5.415.938 585.417 585.417 - 1.275% 7631.230 (979.415) Grafton School 0.52033400% 91.500.643 52.179.77 772.147 473.575 51.190 51.190 51.120 - 1.275% 58.540 38.919 Grafton School 0.187972000 2.637.834 1.567.312.417 199.89 (99.487) Grafton School - 1.275% 199.98 (99.487) Grafton School 0.187972000 2.637.834 1.779.142 192.310 - 1.275% 266.484 (27.044) Hallday School 0.02754900% 3.195.216 1.275.082 2.29.67.37 1.960.509 2.11.914 | | | | | | | | | | - | | | | 120,492 161,265 |
| Graften School 0.0000000% | | | 3, 190, 373 | 1,020,025 | 4,455,055 | 3, 190, 37 3 | 2,157,210 | 233,176 | 233,176 | | | 200,747 | (105,462) (77,042) | (76,991) |
| Graden School District 0.57221100% 8.029,907 4,591,493 11,179,890 8,029,907 5,415,939 585,417 585,417 - 12,75% 668,701 975,045 Grand Forks School 6,52033400% 91,500,643 52,319,987 127,394,645 91,500,643 61,714,525 6,670,816 6,70,816 - 12,75% 7,581,230 (979,415) Great North West Cooperative 0.05500100% 2,175,148 1,275,148 1,467,074 156,578 - 12,75% 7,581,230 (979,415) Great School 0.15500100% 2,175,148 1,467,074 156,578 - 12,75% 7,812,30 (99,487) Gest Educational Services 0.22769100% 3,195,216 1,827,019 4,448,639 3,195,216 2,155,080 232,946 - 12,75% 6,429 (109,324) Hankings School 0.00549300% 77,084 4,447,052 2,966,737 1,960,509 211,914 -12,75% 6,424 (103,983) Hankings School 0.302520000% 2,424,0502 2,466,771 </td <td></td> <td></td> <td>-</td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td>-</td> <td>-</td> <td></td> <td>-</td> <td>(1.184.912)</td> <td>(1,184,912)</td> | | | - | | - | - | - | | - | - | | - | (1.184.912) | (1,184,912) |
| Great North West Cooperative 0.05003500% 702,147 401,90 977,587 702,147 473,578 51,190 51,190 - 12,75% 58,660 38,919 Gringin School 0.155001000% 2,157,148 1,243,748 3,028,418 2,175,148 1,477,142 192,310 192,310 - 12,75% 219,998 (99,487) Griggs County Central Sch 0.22769100% 3,195,216 1,227,019 444,8539 3,195,216 2,155,080 232,946 - 2,75% 264,944 (27,044) Haliday School 0.00543900% 77,084 44,077 107,323 77,084 51,991 5,620 5,620 - 12,75% 242,424 (26,847) Harvey School 0.3025000% 4,245,062 2,965,737 1,960,509 211,914 -11,275% 242,424 (26,847) Harvey School 0.3025000% 4,245,062 2,965,171 309,484 - 12,75% 244,424 (26,847) Harvey School 0.13942500% 1,965,658 1,118,761 | Grafton School District | | 8,029,907 | 4,591,491 | 11,179,890 | 8,029,907 | 5,415,939 | 585,417 | 585,417 | - | 12.75% | 669,701 | | 1,644,746 |
| Gremors School 0.15500100% 2.175.148 1.243.748 3.028.418 2.175.148 1.467.074 158.578 158.578 - 1.275% 181.409 (35.927) Grigps County Central Sch 0.18797200% 2.637.834 1.508.311 3.672.607 2.637.834 1.779.142 192.310 192.210 12.275% 228.989 (99.487) Gst Educational Services 0.22769100% 3.195.216 1.827.071 4.448.639 3.195.216 2.157.56 2.22.946 2.22.946 12.75% 2.64.844 (27.044) Halliday School 0.00543900% 77.084 4.0077 107.332 77.084 51.991 5.520 5.620 12.75% 2.42.24 (26.847) Harkinson School 0.30250300% 4.245,062 2.463.790 1.655.010 17.830 17.843 3.98.444 3.09.484 309.484 309.484 309.484 309.484 309.484 309.484 309.484 309.484 309.445 64.22 12.75% 2.42.42 (26.847) 1.482.050 12.75% 2.42.44 | | | | | | | | | | - | 12.75% | | | 6,651,815 |
| Griggs County Central Sch 0.18797200% 2.637.834 1.508.311 3.672.607 2.637.834 1.779,142 192.310 192.310 12.75% 2.19.998 (199.487) Gst Educational Services 0.22769100% 3.195.216 1.827.019 4.448.639 3.195.216 2.155.080 232.946 232.946 1.275% 2.66,484 (27.044) Halidary School 0.00549300% 77.084 4.4077 107.232 77.084 51.991 5,620 5,620 1.2.75% 2.42,642 (26,647) Harvey School 0.30250300% 4.245,052 2.426,052 2.468,171 309,484 12.75% 242,424 (26,647) Harvey School 0.30250300% 4.245,052 2.466,171 309,484 12.75% 242,424 (26,847) Harvey School 0.30250300% 2.453,790 1.403,078 3.416,366 2.463,171 309,484 12.75% 204,648 842 Harvein School 0.13942500% 1.986,568 1.118,761 2.725% 2.066,161 1.318,821 149,904 1 | | | 702,147 | 401,490 | | 702,147 | 473,578 | | | - | | 58,560 | | 97,479 |
| Cast Educational Services 0.22769100% 3,195,216 1.27,191 4.44,839 3,195,216 2,155,180 232,246 2.22,246 -12,75% 266,484 (27,044) Halliday School 0.00543900% 77,084 44,077 107,333 77,084 51,991 5,620 5,620 -12,75% 6,429 (109,324) Hankinson School 0.3025000% 4,245,062 2,427,325 5,910,320 4,245,062 2,863,171 308,484 309,484 -12,75% 242,424 (26,847) Hator Eliston Pad 0.17485700% 2,427,325 5,910,320 4,245,062 2,863,171 308,484 309,483 -12,75% 242,642 (26,847) Hator Eliston Pad 0.17485700% 2,433,790 1,405,076 3,416,366 2,453,790 1,555,010 176,893 -12,75% 246,446 642 Hazen School 0.40716400% 5,712,440 3,256,568 1,318,648 142,643 -12,75% 163,179 16,440 (69,554) Hazen School 0.40716400% 5,712,440 3,455, | | | | | | | | | | | | | | 145,482 |
| Hallday School 0.00549300% 77.084 4.07 107.323 77.084 51.991 5.620 5.620 - 12.75% 6.429 (109.324) Hankinson School 0.20713400% 2.906,737 1.960,502 2.1914 2.11914 - 12.75% 242.424 (26.847) Harvey School 0.30250300% 4.245,062 2.427,325 5.910.320 4.245,062 2.863,171 309,484 - 12.75% 254,042 (103.983) Hatton Eleison Psd 0.17485700% 2.453,790 1.403,078 3.416,366 2.455,062 2.865,171 309,484 - 12.75% 204,648 842 Hazeton - Moffit School 0.13942500% 1.986,568 1.718,693 178,893 - 12.75% 204,648 842 Hazeton - Moffit School 0.4071400% 5.712,940 3.265,658 1.318,648 142,643 - 12.75% 476,464 (69,554) Hazeton - Moffit School 0.41465200% 2.966,161 1.388,272 149,904 149,5904 - | | | | 1,508,311 | | 2,037,834 | 1,779,142 | 192,310 | 192,310 | | | | (99,487) | 120,511 239,440 |
| Hankinson School 0.20713400% 2.906,737 1.662,070 4.046,996 2.906,737 1.960,509 211,914 211,914 - 1.275% 242,424 (26,847) Hanvey School 0.3025000% 4.245,062 2.427,325 5.910,320 4.245,062 2.883,171 309,484 - 1.275% 204,648 842 Hatton Eleison Pad 0.13425000% 1.986,568 1.118,761 2.724,003 1.986,568 1.318,646 142,643 12,75% 204,648 842 Hazen School 0.40710400% 5.712,940 3.286,653 7.954,020 5.712,940 3.853,212 416,500 1.275% 476,464 (69,554) Hetron School 0.19745200% 2.056,161 1.78,711 2.862,755 2.056,161 1.368,821 149,904 149,904 12,75% 176,464 (69,554) Hetron School 0.19745200% 2.706,861 1.78,711 2.862,755 2.056,161 1.368,821 149,904 149,904 12,75% 176,464 (69,553) (55,382) 170,688 | Halliday School | | 77,084 | 44,077 | 107.323 | 77 084 | 2,133,080 | 232,940 | 232,940 | - | | 6,429 | (109.324) | (102,895) |
| Harvey School 0.30250300% 4/245,062 2.423,25 5.910,320 4.245,062 2.865,171 309,484 309,484 309,484 - 1.275% 354,042 (103,983) Hattorn Elesion Pad 0.17445700% 2.453,790 1.403,078 3.416,366 2.453,790 1.655,010 178,893 - 1.275% 204,648 842 Hazelton - Moffit School 0.30942500% 1.956,568 1.118,761 2.724,093 1.956,568 1.319,648 142,643 142,643 12,75% 163,179 18,746 Hazen School 0.40710400% 5.712,940 3.266,6161 1.368,621 149,904 - 12,75% 163,179 18,746 Hetring School 0.14652200% 2.056,6161 1.368,621 149,904 - 12,75% 171,486 (55,383) Hettinger School 0.19745200% 2.770,868 1.586,762 2.06,6161 1.368,627 202,009 202,009 2.175% 231,093 (41,365) Hitsbors Ochool 0.38183000% 5.358,267 3,063,847 | | | | | | | | | | - | 12.75% | | | 215,577 |
| Hazelton - Moffit School 0.13942500% 1.966,568 1.118,711 2.724,093 1.956,568 1.12,643 1.42,643 1.42,643 - 1.2.75% 163,179 18,746 Hazen School 0.40710400% 5,712,940 3.266,653 7,954,020 5,712,940 3.853,212 416,500 - 1.2.75% 476,464 (69,554) Hebron School 0.144652000% 2,056,161 1.386,827 1.49,904 - 12.75% 171,486 (65,538) Hettinger School 0.197452000% 2,770,868 1,586,275 2,066,161 1.386,827 202,009 202,009 - 12.75% 231,093 (41,365) Hilbsbor School 0.38183000% 5,358,267 3,063,449 7.406,216 5,358,267 390,642 - 12.75% 246,684 2,009 Hope School 0.00000000% - - - 0.000% - 182,209 Hope Page Public School District 0.20193700% 2,83,807 1,62,368 58,527 142,515 2,83,807 1,91,320 | Harvey School | | 4,245,062 | 2,427,325 | 5,910,320 | 4,245,062 | 2,863,171 | 309,484 | 309,484 | - | | 354,042 | (103,983) | 250,059 |
| Hazen School 0.40710400% 5.712.940 3.286.633 7.954.020 5.712.940 3.852.212 416.500 416.500 - 12.75% 476.464 (69.554) Hebron School 0.14652200% 2.066.161 1.328.827 149.904 149.904 - 12.75% 171.466 (55.333) Hettinger School 0.14652200% 2.070.868 1.584.378 3.857.828 2.770.868 1.868.870 202.009 202.009 12.75% 231.093 (41.365) Hillsboro School 0.38183000% 5.358.267 3.063.849 7.402.16 5.358.267 3.61.995 390.642 390.642 12.75% 446.864 2.809 Hoge School 0.00000000% | | | | | | 2,453,790 | 1,655,010 | 178,893 | | - | | | 842 | 205,490 |
| Hebrol 0.14652200% 2.056,161 1.176,711 2.862,755 2.066,161 1.386,821 149,904 149,904 12,75% 171,486 (55,383) Hetinger School 0.19745200% 2.770,868 1,584,378 3.857,828 2,770,868 1,868,870 202,009 - 12,75% 231,093 (41,365) Hillsboro School 0.38183000% 5,382,67 3,063,849 7,460,216 5,358,267 3,613,995 390,642 90,642 - 12,75% 246,884 2,809 Hope-School 0.0000000% - - - 0,00% - (182,209) Hope-Page Public School District 0.20193700% 2,833,807 1,620,368 3,945,456 2,833,807 1,91,320 206,597 - 12,75% 236,342 361,170 Hope-Page Public School 0.000729400% 102,358 58,527 142,511 102,358 69,037 7,462 - 12,75% 8,537 5,335 | | | | | | 1,956,568 | 1,319,648 | | | - | | | | 181,925 |
| Hettinger School 0.19745200% 2.770,868 1.583,378 3.857,828 2.770,868 1.868,870 202,009 2.02,009 - 1.275% 231,003 (41,365) Hillsboro School 0.39183000% 5,358,267 3,063,849 7,460,216 5,358,267 3,613,995 390,642 390,642 - 1.275% 446,884 2.809 Hoge-School 0.0000000% - - 0.00% - 1.82,209 Hope-Fage Public School District 0.20193700% 2.833,807 1.62,358 2,833,807 1.911,320 206,597 - 1.275% 236,342 361,170 Horse Creek Elem. School 0.00723400% 102,358 58,527 142,515 102,358 69,037 7,462 - 1.275% 8,537 5,335 | | | 5,712,940 | | 7,954,020 | 5,712,940 | | 416,500 | 416,500 | | 12.75% | 476,464 | (69,554) | 406,910 |
| Hillsboro School 0.38183000% 5,358,267 3,063,849 7,460,216 5,358,267 3,613,995 390,642 390,642 - 12.75% 446,884 2,809 Hope School 0.0000000 - - 0.00% - (182,209) Hope-Page Public School 0.20193700% 2,833,807 1,620,368 3,945,456 2,833,807 1,911,320 206,597 206,597 12.75% 236,342 361,170 Horse Creek Elem. School 0.007294000% 102,358 58,527 142,511 102,358 69,037 7,462 - 12.75% 8,537 5,335 | | | 2,056,161 | 1,175,711 | 2,862,755 | 2,056,161 | 1,386,821 | 149,904 | 149,904 | - | | 171,486 | (55,383) | 116,103 189,728 |
| Hope School 0.00000000% | | | | | | | | | | - | | | | 449.693 |
| Hope-Page Public School District 0.20193700% 2.833,807 1,620,368 3,945,456 2,833,807 1,911,320 206,597 - 12,75% 236,342 361,170 Horse Creek Elem. School 0.00729400% 102,358 58,527 142,511 102,358 69,037 7,462 7,462 - 12.75% 8,537 5,335 | | | | | - | - | - | - | - | | 0.00% | - | (182.209) | (182,209) |
| | Hope-Page Public School District | 0.20193700% | | | | | | 206,597 | | | 12.75% | | 361,170 | 597,512 |
| James River Multidistrict Spec Ed Unit 0.16507000% 2.320.077 1.331.768 3.242.731 2.320.077 1.570.905 160.900 160.900 10.75% 404.347 (73.073) | | | | | | | | | | - | | | | 13,872 |
| James fiver Multidistrict spec Eg Unit 0. 1699/00/% 2.329/0/1 1,331,068 3.242/31 2.329/0/1 1,371,089 169,000 - 12.75% 194,447 (7.30/3) Jamestvan School 1.52125100% 21,347,001 1.2.206,707 29,722,266 21,347,001 1.4.398,539 1.556,340 - 12.75% 1.780,433 (855,613) | James River Multidistrict Spec Ed Unit | 0.16597000% | 2,329,077 | 1,331,768 | 3,242,731 | 2,329,077 | | 169,800 | 169,800 | - | 12.75% | 194,247 | (73,073) | 121,174 924,820 |



| | | | Dis | count Rate Sensitiv | vity | | Schedule of Con | tributions | Pension Expense Net Amortization of Deferred Amounts from | | | | |
|--|---|-------------------------|-----------------------------|--------------------------------|-------------------------------------|-----------------------------|------------------------------------|---|--|--|---|---|-----------------------------------|
| Employer Name | Employer's Proportionate Share Allocation Net P | ension Liability | Covered Payroll | 1% Decrease (6.25%) | Current Discount Rate (7.25%) | 1% Increase (8.25%) | Statutory Required Contribution | Contributions In Relation to the Statutory Required Contribution | Contribution Deficiency/ (Excess) | Contributions as a Percentage of Covered Payroll | Proportionate Share of Plan Pension Expense | Changes in Proportion and Differences Between Employer Contributions and Proportionate | Total Employer Pension Expense |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| Kenmare School | 0.24684900% \$ | 3,464,062 | | | \$ 3,464,062 | | \$ 252,546 | | \$- | 12.75% | | | |
| Kensal School | 0.03650600% 0.28946000% | 512,293 | 292,930 | 713,256 | 512,293 | 345,527 | 37,349 | 37,349 | - | 12.75% 12.75% | 42,726 | (58,064) | (15,338) 254,090 |
| Kidder County School District Killdeer School | 0.48874900% | 4,062,028 6,858,674 | 2,322,660 3,921,785 | 5,655,485 9,549,205 | 4,062,028 6,858,674 | | 296,140 500,029 | 296,140 500,029 | | 12.75% | 338,776 572,019 | (84,686) 164,320 | 736,339 |
| Kindred School | 0.56428600% | 7,918,694 | 4,527,902 | 11,025,051 | 7,918,694 | 5,340,929 | 577,309 | 577,309 | | 12.75% | 660,426 | 150,860 | 811,286 |
| Kulm School | 0.12960300% | 1,818,735 | 1,039,951 | 2,532,191 | 1,818,735 | 1,226,684 | 132,594 | 132,594 | - | 12.75% | 151,684 | (60,512) | 91,172 |
| Lake Region Spec Ed | 0.24827100% 0.14410100% | 3,484,017 2,022,187 | 1,992,157 1,156,282 | 4,850,732 2,815,453 | 3,484,017 2,022,187 | 2,349,868 1,363,906 | 254,001 147,427 | 254,001 147,427 | - | 12.75% 12.75% | 290,570 168,652 | (12,620) (59,834) | 277,950 108,818 |
| Lakota School Lamoure School | 0.20939500% | 2,938,466 | 1,156,262 | 4,091,171 | 2,022,107 | | 214.228 | 214.228 | | 12.75% | 245.070 | (59,834) | 188,568 |
| Langdon Area School | 0.30929700% | 4,340,403 | 2,481,840 | 6,043,062 | 4,340,403 | | 316,435 | 316,435 | - | 12.75% | 361,993 | 70,969 | 432,962 |
| Larimore School | 0.26414600% | 3,706,793 | 2,119,541 | 5,160,899 | 3,706,793 | 2,500,124 | 270,242 | 270,242 | - | 12.75% | 309,150 | (107,917) | 201,233 |
| Leeds School | 0.12600700% | 1,768,272 | 1,011,095 | 2,461,932 | 1,768,272 | | 128,915 | 128,915 | | 12.75% | 147,475 | (67,458) | 80,017 |
| Lewis And Clark School Lidgerwood School | 0.35397500% 0.14837400% | 4,967,374 2,082,150 | 2,840,342 1,190,572 | 6,915,983 2,898,939 | 4,967,374 2,082,150 | 3,350,350 1,404,350 | 362,144 151,798 | 362,144 151,798 | - | 12.75% | 414,283 173,653 | (97,364) (55,711) | 316,919 117,942 |
| Linton School | 0.19492900% | 2,735,462 | 1,564,137 | 3,808,534 | 2,735,462 | | 199,428 | 199,428 | - | 12.75% | 228,140 | (106,473) | 121,667 |
| Lisbon School | 0.52745100% | 7,401,784 | 4,232,337 | 10,305,367 | 7,401,784 | 4,992,288 | 539,624 124,107 | 539,624 | | 12.75% | 617,315 | (20,262) | 597,053 |
| Litchville-Marion School | 0.12130700% | 1,702,316 | 973,382 | 2,370,103 | 1,702,316 | | 124,107 | 124,107 | | 12.75% | 141,975 | (18,897) | 123,078 |
| Little Heart Elem. School | 0.02318500% | 325,358 | 186,040 | 452,990 | 325,358 | 219,444 | 23,720 | 23,720 | - | 12.75% 0.00% | 27,135 | 13,507 | 40,642 (1,166) |
| Logan County Lone Tree Elem. School | 0.03369400% | 472,832 | - 270,367 | - 658,315 | 472,832 | - 318,911 | - 34,472 | - 34,472 | - | 12.75% | - 39,435 | (1,166) (9,639) | (1,166) 29,796 |
| Lonetree Spec Ed Unit | 0.0000000% | - | | | - | - | | - | | 0.00% | - | (41,139) | (41,139) |
| Maddock School | 0.10263000% | 1,440,219 | 823,518 | 2,005,191 | 1,440,219 | 971,386 | 104,999 | 104,999 | - | 12.75% | 120,115 | (85,866) | 34,249 |
| Mandan Public Schools | 3.13087000% | 43,935,881 | 25,122,502 | 61,171,111 | 43,935,881 | 29,633,475 | 3,203,127 | 3,203,127 | - | 12.75% | 3,664,289 | 280,721 | 3,945,010 |
| Mandaree School Manning Elem School | 0.25089000% 0.01854000% | 3,520,770 260,174 | <u>2,013,174</u> 148,771 | <u>4,901,903</u> 362,236 | <u>3,520,770</u> 260,174 | <u>2,374,657</u> 175,480 | 256,680 | 256,680 | | 12.75% 12.75% | 293,635 21,699 | (8, <u>144)</u> 8,442 | <u>285,491</u> 30,141 |
| Manvel Elem. School | 0.01854000% | 1,888,227 | 1,079,684 | 2,628,943 | 1,888,227 | | 137,660 | 18,968 | - | 12.75% | 157,480 | 20,050 | 177,530 |
| Maple Valley School | 0.20813900% | 2,920,840 | 1,670,133 | 4,066,631 | 2,920,840 | 1,970,022 | 212,943 | 212,943 | - | 12.75% | 243,601 | (65,000) | 178,601 |
| Mapleton Elem. School | 0.20130600% | 2,824,952 | 1,615,308 | 3,933,128 | 2,824,952 | 1,905,348 | 205,952 | 205,952 | | 12.75% | 235,603 | 171,550 | 407,153 |
| Marmarth Elem. School | 0.02706500% | 379,806 | 217,175 | 528,797 | 379,806 | | 27,690 | 27,690 | - | 12.75% | 31,676 | (1,840) | 29,836 |
| Max School | 0.14885500% 0.36188000% | 2,088,900 | 1,194,435 | 2,908,337 | 2,088,900 | | 152,290 | 152,290 | - | 12.75% 12.75% | 174,216 | (60,607) | 113,609 |
| May-Port C-G School Mcclusky School | 0.36188000% | 5,078,306 1,603,354 | 2,903,770 916,794 | 7,070,431 2,232,320 | 5,078,306 1,603,354 | 3,425,170 1,081,416 | 370,232 116,892 | 370,232 116,892 | - | 12.75% | 423,535 133,721 | (112,345) (1,389) | 311,190 132,332 |
| Mckenzie County | 0.00943500% | 132,403 | 75.710 | 184,342 | 132,403 | | 9,653 | 9.653 | | 12.75% | 11,042 | 5.497 | 16.539 |
| Mckenzie County School | 1.43592800% | 20,150,553 | 11,522,071 | 28,055,240 | 20,150,553 | 13,590,962 | 1,469,068 | 1,469,068 | - | 12.75% | 1,680,573 | 803,328 | 2,483,901 |
| Medina School | 0.15478300% | 2,172,089 | 1,241,998 | 3,024,159 | 2,172,089 | | 158,355 | 158,355 | - | 12.75% | 181,154 | (9,930) | 171,224 |
| Menoken Elem School Midkota | 0.03160400% | 443,503 1,937,160 | <u>253,598</u> 1,107,670 | <u>617,481</u> 2,697,072 | 443,503 | 299,130 1,306,558 | 32,333 | 32,333 141,228 | | 12.75% 12.75% | 36,989 161,561 | <u>13,497</u> (16,959) | <u>50,486</u> 144,602 |
| Midway School | 0.18054400% | 2,533,596 | 1,448,706 | 3,527,479 | 2,533,596 | | 184,711 | 184,711 | | 12.75% | 211,304 | (83,882) | 127,422 |
| Milnor School | 0.18953000% | 2,659,698 | 1,520,812 | 3,703,048 | 2,659,698 | | 193,904 | 193,904 | - | 12.75% | 221,821 | (38,443) | 183,378 |
| Minnewaukan School | 0.25382000% | 3,561,887 | 2,036,683 | 4,959,149 | 3,561,887 | 2,402,389 | 259,678 | 259,678 | | 12.75% | 297,064 | (11,488) | 285,576 |
| Minot School | 6.33895600% | 88,955,344 | 50,864,587 | 123,850,872 | 88,955,344 | 59,997,794 | 6,485,252 | 6,485,252 | - | 12.75% | 7,418,950 | (664,125) | 6,754,825 |
| Minto School Mohall Lansford Sherwood | 0.19957400% | 2,800,646 3,434,494 | 1,601,409 1,963,843 | 3,899,288 4,781,783 | 2,800,646 3,434,494 | 1,888,955 2,316,467 | 204,180 250,390 | 204,180 250,390 | - | 12.75% 12.75% | 233,576 286,440 | 42,916 (157,651) | 276,492 128,789 |
| Montpelier School | 0.10987900% | 1,541,945 | 881,686 | 2,146,822 | 1,541,945 | | 112,415 | 112,415 | | 12.75% | 128,600 | (137,031) (14,131) | 114,469 |
| Morton County | 0.0000000% | - | - | | - | - | - | - | | 0.00% | | (8,508) | (8,508) |
| Mott-Regent School | 0.17640200% | 2,475,471 | 1,415,473 | 3,446,552 | 2,475,471 | 1,669,633 | 180,473 | 180,473 | - | 12.75% | 206,456 | (106,239) | 100,217 |
| Mt Pleasant School | 0.25117400% | 3,524,755 | 2,015,456 | 4,907,451 | 3,524,755 | | 256,971 | 256,971 | - | 12.75% | 293,968 | (1,401) (26,132) | 292,567 |
| Munich School N Central Area Career And Tech Center | 0.00000000% | 1,816,574 | 1,038,719 | 2,529,182 | 1,816,574 | 1,225,226 | 132,437 | 132,437 | | 12.75% 0.00% | 151,504 | (40,413) | 125,372 (40,413) |
| Napoleon School | 0.20508700% | 2,878,011 | 1,645,645 | 4,007,001 | 2,878,011 | - 1,941,135 | 209,820 | 209,820 | - | 12.75% | 240,029 | (40,413) (47,992) | (40,413) 192,037 |
| Naughton Rural School | 0.02206000% | 309.571 | 177,013 | 431,009 | 309,571 | 208,796 | 22,569 | 22,569 | - | 12.75% | 25,818 | 18,784 | 44,602 |
| Nd Center For Distance Education | 0.20855200% | 2,926,636 | 1,673,445 | 4,074,700 | 2,926,636 | 1,973,931 | 213,365 | 213,365 | | 12.75% | 244,084 | 14,260 | 258,344 |
| Nd Dept Of Public Instruction Nd School For Blind | 0.05562200% 0.08940600% | 780,550 1,254,645 | 446,321 717,404 | 1,086,746 1,746,819 | 780,550 1,254,645 | 526,459 846,222 | 56,906 91,469 | 56,906 91,469 | - | 12.75% 12.75% | 65,099 104,638 | 44,491 (36,557) | 109,590 68,081 |
| Nd School For Blind Nd School For Deaf | 0.10853800% | 1,254,645 | 870,924 | 2,120,621 | 1,254,645 | 1,027,305 | 91,469 111,043 | 91,469 111,043 | - | 12.75% | 104,638 | (36,557) (49,092) | 77,938 |
| Nd United | 0.0000000% | - | | - | - | | | | | 0.00% | - | (87,430) | (87,430) |
| Nd Youth Correctional Cnt | 0.02533100% | 355,473 | 203,258 | 494,918 | 355,473 | 239,756 | 25,916 | 25,916 | - | 12.75% | 29,647 | (292,007) | (262,360) |
| Nedrose School | 0.48983000% 0.00154300% | 6,873,844 | 3,930,457 | 9,570,326 | 6,873,844 | | 501,135 | 501,135 | - | 12.75% 12.75% | 573,284 | 198,748 | 772,032 |
| Nelson County Nesson School | 0.00154300% | 21,653 4,550,057 | 12,385 2,601,718 | 30,147 6,334,960 | 21,653 4,550,057 | 14,604 3,068,881 | 1,579 331,720 | 1,579 331,720 | - | 12.75% | 1,806 379,479 | (713) 132,950 | 1,093 512,429 |
| New England School | 0.23003300% | 3,228,081 | 1,845,810 | 4,494,397 | 3,228,081 | 2,177,247 | 235,342 | 235,342 | | 12.75% | 269,225 | 27,709 | 296,934 |
| New Rockford Sheyenne School | 0.22852300% | 3,206,891 | 1,833,696 | 4,464,895 | 3,206,891 | 2,162,955 | 233,797 | 233,797 | - | 12.75% | 267,457 | (59,622) | 207,835 |
| New Salem-Almont | 0.28164900% | 3,952,415 | 2,259,986 | 5,502,874 | 3,952,415 | 2,665,789 | 288,149 | 288,149 | - | 12.75% | 329,635 | 35,748 | 365,383 |
| New Town School Newburg United District | 0.81714300% | 11,467,068 1,488,030 | <u>6,556,859</u> 850,858 | <u>15,965,385</u> 2,071,757 | <u>11,467,068</u> 1,488,030 | 7,734,204 | <u>836,002</u> 108,484 | 836,002 108,484 | ·· | 12.75% 12.75% | 956,363 124,103 | <u>296,967</u> 8,549 | <u>1,253,330</u> 132,652 |
| Newburg United District North Border School | 0.32473600% | 1,488,030 4,557,060 | 2,605,720 | 2,071,757 | 1,488,030 4,557,060 | | 108,484 332,231 | 108,484 332,231 | - | 12.75% | 124,103 380,063 | 8,549 (213,449) | 132,652 166.614 |
| North Sargent School | 0.20341400% | 2,854,534 | 1,632,223 | 3,974,314 | 2,854,534 | 1,925,300 | 208,109 | 208,109 | - | 12.75% | 238,070 | (54,459) | 183,611 |
| North Star | 0.23317900% | 3,272,229 | 1,871,054 | 4,555,864 | 3,272,229 | 2,207,024 | 238,561 | 238,561 | | 12.75% | 272,907 | (46,506) | 226,401 |
| North Valley Area Career | 0.11970500% | 1,679,835 | 960,530 | 2,338,803 | 1,679,835 | | 122,468 | 122,468 | - | 12.75% | 140,100 | 73,016 | 213,116 |
| Northern Cass School Dist Northern Plains Spec Ed | 0.48265900% 0.05683300% | 6,773,213 797,544 | 3,872,921 456,039 | 9,430,218 1,110,406 | 6,773,213 797,544 | 4,568,335 537,921 | 493,798 58,145 | 493,798 58,145 | - | 12.75% 12.75% | 564,892 66,516 | 90,389 28,120 | 655,281 94,636 |
| Northern Plains Spec Ed Northwood School | 0.26897300% | 797,544 3,774,531 | 456,039 | 1,110,406 5,255,209 | 797,544 3,774,531 | 537,921 2,545,811 | 58,145 275,181 | 58,145 275,181 | - | 12.75% | 66,516 314,799 | 28,120 60,449 | 94,636 375,248 |
| Oakes School | 0.30795300% | 4,321,542 | 2,471,056 | 6,016,803 | 4,321,542 | | 315,060 | 315,060 | | 12.75% | 360,420 | 415 | 360,835 |
| Oberon Elem School | 0.06163400% | 864,917 | 494,557 | 1,204,208 | 864,917 | 583,362 | 63,056 | 63,056 | - | 12.75% | 72,135 | 28,635 | 100,770 |
| Oliver - Mercer Spec Ed | 0.13069900% | 1,834,115 | 1,048,747 | 2,553,604 | 1,834,115 | 1,237,057 | 133,715 | 133,715 | - | 12.75% | 152,967 | (41,557) | 111,410 |
| Page School | 0.0000000% | | | | | | | | | 0.00% | | (185,434) | (185,434) |



| | | | | Disc | count Rate Sensitiv | vity | | Schedule of Con | tributions | | | Pension Expense Net Amortization of Deferred Amounts from | |
|---|---|-----------------------------|------------------------------|-------------------------------|-------------------------------------|------------------------|------------------------------------|---|---|--|---|---|-----------------------------------|
| Employer Name | Employer's Proportionate Share Allocation Net | Pension Liability | Covered Payroll | 1% Decrease (6.25%) | Current Discount Rate (7.25%) | 1% Increase (8.25%) | Statutory Required Contribution | Contributions In Relation to the Statutory Required Contribution | Contribution Deficiency/ (Excess) | Contributions as a Percentage of Covered Payroll | Proportionate Share of Plan Pension Expense | Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of | Total Employer Pension Expense |
| * | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| Park River Area School District | 0.29668900% \$ | | | \$ 5,796,726 | | \$ 2,808,142 | | \$ 303,536 | \$ - | 12.75% | 347,237 | (33,382) | 313,855 |
| Parshall School | 0.24270100% | 3,405,853 | 1,947,464 | 4,741,906 | 3,405,853 | 2,297,149 | 248,302 | 248,302 | - | 12.75% | 284,051 | (32,600) | 251,451 |
| Peace Garden Spec Ed | 0.09229800% 0.01637700% | 1,295,229 | 740,609 | 1,803,323 | 1,295,229 | 873,594 | 94,428 | 94,428 | - | 12.75% | | 19,402 | 127,425 |
| Pembina Spec Ed Coop Pingree - Buchanan School | 0.12377400% | <u>229,820</u> 1,736,936 | <u>131,410</u> 993,182 | <u>319,975</u> 2,418,303 | 229,820 1,736,936 | 155,007 | <u>16,755</u> 126,631 | <u>16,755</u> 126,631 | | 12.75% | <u>19,167</u> 144,862 | <u>292</u> (4.994) | <u>19,459</u> 139,868 |
| Powers Lake School | 0.18344800% | 2,574,348 | 1,472,011 | 3,584,217 | 2,574,348 | 1,736,323 | 187,682 | 187,682 | | 12.75% | 214,703 | 19,748 | 234,451 |
| Richardton-Taylor | 0.22513700% | 3,159,375 | 1,806,527 | 4,398,739 | 3,159,375 | 2,130,907 | 230,333 | 230,333 | - | 12.75% | 263,495 | (65,646) | 197,849 |
| Richland School | 0.23342900% | 3,275,738 | 1,873,065 | 4,560,749 | 3,275,738 | 2,209,390 | 238,816 | 238,816 | | 12.75% | 273,199 | 16,440 | 289,639 |
| Robinson School Rolette School | 0.0000000% | 2,217,261 | - 1,267,826 | 3,087,052 | - 2,217,261 | - 1,495,478 | - 161,649 | - 161,649 | - | 0.00% | - 184,921 | (48,952) | - 135,969 |
| Roosevelt School | 0.04788800% | 672,018 | 384,260 | 935,638 | 672,018 | 453,257 | 48,993 | 48,993 | | 12.75% | | (48,952) (29,959) | |
| Roughrider Area Career And Tech Center | 0.03550400% | 498,232 | 284,886 | 693,679 | 498,232 | 336,043 | 36,323 | 36,323 | - | 12.75% | 41,553 | 37,535 | 79,088 |
| Roughrider Service Program | 0.02643700% | 370,994 | 212,137 | 516,528 | 370,994 | | 27,047 | 27,047 | - | 12.75% | 30,941 | (36,950) | (6,009) |
| Rugby School | 0.49291400% | 6,917,122 | 3,955,203 | 9,630,581 | 6,917,122 | | 504,290 | 504,290 | - | 12.75% | | 2,225 | 579,119 |
| Rural Cass Spec Ed Sargent Central School | 0.25192600% 0.20939600% | 3,535,308 2,938,480 | 2,021,487 1,680,217 | 4,922,144 4,091,191 | 3,535,308 2,938,480 | 2,384,463 1,981,919 | 257,740 214,229 | 257,740 214,229 | - | 12.75% 12.75% | 294,848 245,072 | 152,485 (17,051) | 447,333 228,021 |
| Sargent Central School | 0.09940300% | 1,394,934 | 797,626 | 1,942,141 | 1,394,934 | 940,843 | 101,697 | 101,697 | | 12.75% | 116,339 | (63,610) | 52,729 |
| Scranton School | 0.14676600% | 2,059,585 | 1,177,671 | 2,867,522 | 2,059,585 | 1,389,130 | 150,153 | 150,153 | - | 12.75% | 171,771 | (35,682) | 136,089 |
| Se Region Career And Tech | 0.25526100% | 3,582,109 | 2,048,250 | 4,987,304 | 3,582,109 | 2,416,028 | 261,152 | 261,152 | - | 12.75% | | 62,183 | 360,934 |
| Selfridge School | 0.07751400% | 1,087,763 | 621,980 | 1,514,473 | 1,087,763 | | 79,303 | 79,303 | | 12.75% | 90,720 | (99,230) | (8,510) |
| Sheyenne Valley Area Voc | 0.12677000% 0.19802100% | 1,778,979 2,778,853 | 1,017,223 1,588,948 | 2,476,839 3.868,945 | 1,778,979 | | 129,696 | 129,696 202,591 | - | 12.75% 12.75% | 148,368 231,759 | 23,808 (54,117) | 172,176 177,642 |
| Sheyenne Valley Spec Ed Slope County | 0.00352700% | 2,778,853 49,495 | 1,588,948 28,302 | 3,868,945 | 2,778,853 49,495 | 1,874,256 33,383 | 202,591 3,608 | 202,591 3,608 | | 12.75% | | (54,117) (476) | |
| Solen - Cannonball School | 0.23485800% | 3,295,791 | 1,884,533 | 4,588,669 | 3,295,791 | 2,222,915 | 240,278 | 240,278 | | 12.75% | | (13,355) | 261,517 |
| Souris Valley Spec Ed | 0.14110600% | 1,980,158 | 1,132,251 | 2,756,937 | 1,980,158 | 1,335,559 | 144,363 | 144,363 | | 12.75% | 165,147 | (153,089) | 12,058 |
| South Cent. Prairie Sp Ed | 0.04570200% | 641,342 | 366,716 | 892,928 | 641,342 | | 46,757 | 46,757 | - | 12.75% | | 59,049 | 112,537 |
| South East Education Cooperative | 0.09282000% 0.30489100% | 1,302,554 | 744,797 2.446,483 | 1,813,522 | 1,302,554 4,278,573 | 878,535 | 94,962 | 94,962 311,928 | - | 12.75% | | 158,761 | 267,395 |
| South Heart School South Prairie School District | 0.37130200% | 4,278,573 5,210,526 | 2,979,371 | <u>5,956,977</u> 7,254,519 | 4,278,573 | 2,885,773 3,514,349 | 311,928 379,871 | 379,871 | | 12.75% 12.75% | 356,837 434,562 | 126,370 115,027 | 483,207 549,589 |
| South Valley Spec Ed | 0.04920100% | 690,444 | 394,794 | 961,292 | 690,444 | | 50,337 | 50,337 | | 12.75% | | (30,830) | |
| Southwest Special Education Unit | 0.01329100% | 186,514 | 106,647 | 259,680 | 186,514 | | 13,598 | 13,598 | - | 12.75% | 15,555 | 6,040 | 21,595 |
| St. John's School | 0.45028600% | 6,318,918 | 3,613,153 | 8,797,713 | 6,318,918 | 4,261,927 | 460,678 | 460,678 | | 12.75% | 527,003 | 127,092 | 654,095 |
| St. Thomas School | 0.0000000% 0.43527900% | - | - | - 8,504,505 | - | - | - 445,325 | - 445,325 | - | 0.00% 12.75% | - | (171,909) | (171,909) |
| Stanley School Starkweather School | 0.07968300% | 6,108,323 1,118,201 | 3,492,736 639,383 | 8,504,505 | 6,108,323 1,118,201 | 4,119,887 754,194 | 445,325 81.522 | 445,325 81.522 | | 12.75% | | (116,143) (13,487) | |
| Sterling School | 0.02399000% | 336,655 | 192,500 | 468,718 | 336,655 | 227,064 | 24,544 | 24,544 | | 12.75% | | (28,771) | (694) |
| Strasburg School District | 0.13106700% | 1,839,279 | 1,051,697 | 2,560,794 | 1,839,279 | 1,240,540 | 134,092 | 134,092 | - | 12.75% | 153,397 | 6,929 | 160,326 |
| Surrey School | 0.32866300% | 4,612,168 | 2,637,232 | 6,421,436 | 4,612,168 | | 336,248 | 336,248 | - | 12.75% | 384,659 | (64,165) | 320,494 |
| Sweet Briar Elem School | 0.01864300% 0.31567100% | 261,619 | 149,595 2,532,988 | 364,248 6,167,597 | 261,619 | | 19,073 | 19,073 | - | 12.75% 12.75% | 21,819 369,453 | 9,868 | 31,687 191,885 |
| Tgu School District Thompson School | 0.38975100% | 4,429,850 | 3,127,412 | 7.614.977 | 4,429,850 5,469,423 | | 322,956 398,746 | 322,956 398,746 | | 12.75% | 456.154 | (177,568) 119,487 | 575,641 |
| Tioga School | 0.49889200% | 7,001,012 | 4,003,175 | 9,747,379 | 7,001,012 | | 510,406 | 510,406 | - | 12.75% | 583,890 | 54,765 | 638,655 |
| Turtle Lake-Mercer School | 0.17699200% | 2,483,750 | 1,420,203 | 3,458,079 | 2,483,750 | 1,675,217 | 181,077 | 181,077 | - | 12.75% | | 821 | 207,968 |
| Twin Buttes Elem. School | 0.06407500% | 899,172 | 514,144 | 1,251,901 | 899,172 | | <u>65,554</u> 191,137 | 65,554 | | 12.75% | 74,992 | 3,581 | 78,573 |
| Underwood School United School | 0.18682500% 0.46670500% | 2,621,738 6,549,328 | 1,499,105 3,744,901 | 3,650,197 9,118,508 | 2,621,738 6,549,328 | 1,768,286 4,417,332 | 191,137 477,476 | 191,137 477,476 | - | 12.75% 12.75% | 218,655 546,219 | (86,962) 22,780 | 131,693 568,999 |
| Upper Valley Spec Ed | 0.33938500% | 6,549,328 4,762,631 | 3,744,901 2,723,271 | 9,118,508 6,630,923 | 6,549,328 4,762,631 | 4,417,332 3,212,256 | 477,476 347,218 | 477,476 347,218 | - | 12.75% | | (59,508) | 568,999 337,699 |
| Valley - Edinburg School | 0.19934700% | 2,797,461 | 1,599,587 | 3,894,853 | 2,797,461 | 1,886,806 | 203,948 | 203,948 | - | 12.75% | 233,311 | (114,825) | 118,486 |
| Valley City School | 0.77335400% | 10,852,571 | 6,205,490 | 15,109,833 | 10,852,571 | 7,319,744 | 791,202 | 791,202 | | 12.75% | 905,114 | (275,469) | 629,645 |
| Velva School | 0.37016900% | 5,194,627 | 2,970,282 | 7,232,382 | 5,194,627 | 3,503,625 | 378,712 | 378,712 | - | 12.75% | | (19,077) | 414,159 |
| Wahpeton School Ward County | 0.89392500% 0.00413800% | 12,544,559 58,069 | 7,172,968 33,206 | 17,465,556 80,848 | 12,544,559 58,069 | | 914,556 4,234 | 914,556 4,234 | - | 12.75% 12.75% | 1,046,227 4,843 | (239,275) | 806,952 4,450 |
| Ward County Warwick School | 0.23357400% | 3,277,772 | 1,874,224 | 4,563,582 | 3,277,772 | | 238,965 | 238.965 | | 12.75% | 273,369 | (393) (50,566) | 222,803 |
| Washburn School | 0.27959000% | 3.923.521 | 2,243,465 | 5,462,645 | 3.923.521 | 2.646.301 | 286.043 | 286.043 | | 12.75% | 327.225 | 44.498 | 371.723 |
| West Fargo School | 9.70427400% | 136,181,262 | 77,868,330 | 189,602,641 | 136,181,262 | 91,850,304 | 9,928,238 | 9,928,238 | - | 12.75% | 11,357,631 | 2,582,761 | 13,940,392 |
| West River Student Services | 0.08701400% | 1,221,078 | 698,213 | 1,700,084 | 1,221,078 | | 89,022 | 89,022 | | 12.75% | 101,839 | (39,352) | 62,487 |
| Westhope School White Shield School | 0.16365300% 0.21038200% | 2,296,563 2,952,316 | 1,313,171 1.688.134 | 3,197,461 4,110,455 | 2,296,563 2,952,316 | | 167,430 215,237 | 167,430 215,237 | - | 12.75% 12.75% | 191,535 246,226 | (3,191) (5.097) | 188,344 241,129 |
| Williams Co School Dist #8 | 0.00000000% | 2,302,310 | 1,000,134 | 4,110,400 | 2,902,310 | 1,551,252 | 210,207 | 215,257 | - | 0.00% | | (5,097) | (517,968) |
| Williston Basin School Dist #7 | 3.67549800% | 51,578,712 | 29,492,663 | 71,812,083 | 51,578,712 | 34,788,342 | 3,760,324 | 3,760,324 | - | 12.75% | | 6,260,246 | 10,561,954 |
| Williston School | 0.0000000% | | - | | - | - | | - | | 0.00% | - | (4,731,199) | (4,731,199) |
| Wilmac Special Education | 0.69311100% | 9,726,511 | 5,561,608 | 13,542,041 | 9,726,511 | 6,560,249 | 709,107 | 709,107 | - | 12.75% | | 320,225 | 1,131,424 |
| Wilton School | 0.22217500% 0.09028800% | 3,117,809 | 1,782,761 | 4,340,867 1,764,052 | 3,117,809 1,267,023 | | 227,303 | 227,303 | - | 12.75% 12.75% | | 42,214 (22,747) | 302,242 |
| Wing School | 0.18384900% | 1,267,023 | 7 <u>24,479</u> 1,475,228 | 3,592,052 | 2,579,975 | 1,740,118 | <u></u> | <u>92,372</u> 188,092 | | 12.75% | 215,172 | (22,747) (9,614) | <u>82,924</u> 205,558 |
| Wolford School | 0.00000000% | | | - | 2,010,010 | - | - | - 100,092 | | 0.00% | | (154,382) | (154,382) |
| Wyndmere School | 0.19466500% | 2,731,758 | 1,562,020 | 3,803,376 | 2,731,758 | | 199,158 | 199,158 | - | 12.75% | 227,831 | (38,704) | 189,127 |
| Yellowstone Elem. School | 0.07830000% | 1,098,793 | 628,292 | 1,529,830 | 1,098,793 | | 80,107 | 80,107 | | 12.75% | 91,640 | 610 | 92,250 |
| Zeeland School | 0.05899500% | 827,884 | 473,382 | 1,152,648 | 827,884 | 558,384 | 60,357 | 60,357 | - | 12.75% | 69,046 | 2,623 | 71,669 |
| Grand Totals: | 100.00000% \$ | 1,403,312,212 | \$ 802,412,711 | \$ 1,953,805,517 | \$ 1,403,312,212 | \$ 946,493,303 | \$ 102,307,888 | \$ 102,307,888 | ş - | 12.75% | \$ 117,037,414 | ş - | \$ 117,037,414 |



| | | Defer | red Outflows of Re | sources Changes in | | | Deferred Infl | ows of Resources | | Deferred (Inflows)/Outflows Recognized In Future Pension Expense (Year Ended June 30): | | | | | |
|---|--|--|---------------------------|---|--------------------------------|--|-----------------|---|------------------------------|--|-------------------------------|----------------------------|------------------------------|------------------------------|-------------------------------|
| | Differences Between Expected and Actual | Net Difference Between Projected and Actual Investment Earnings on Pension Plan | Changes of | Proportion and Differences Between Employer Contributions and Proportionate Share of | Total Deferred Outflows of | Differences Between Expected and Actual | Changes of | Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of | Total Deferred Inflows of | | | | | | |
| Employer Name | Experience | Investments | Assumptions | Contributions | Resources | Experience | Assumptions | Contributions | Resources | 2024 | 2025 | 2026 | 2027 | 2028 | Thereafter |
| | (14) | (15) | (16) | (17) | (18) | (19) | (20) | (21) | (22) | (23) | (24) | (25) | (26) | (27) | (28) |
| Alexander School Anamoose School | \$ 12,993 5,268 | \$ 212,824 86,282 | \$ 55,177 22,369 | \$ 678,765 107,151 | \$ 959,759 221,070 | \$ 185,089 75,037 | \$- | \$ 79,840 111,151 | \$ 264,929 \$ 186,188 | 126,166 \$ (23,981) | 74,636 \$ (43,824) | 287,705 \$ 87,018 | 5 50,449 \$ 8,603 | 50,768 8,731 | \$ 105,106 (1,665) |
| Anamoose School Apple Creek Elem School | 2.737 | 44.835 | 22,369 | 96,757 | 155.953 | 38,992 | - | 22.315 | 61.307 | (23,981) | (43,624) 4.058 | 61.397 | 12,562 | 12.630 | (1,005) |
| Ashley School | 7,450 | 122,035 | 31,639 | 138,565 | 299,689 | 106,132 | | 77,911 | 184,043 | <u>3,794</u> 2,454 | (20,811) | 126,951 | 2,658 | 2,834 | <u>220</u> (784) |
| Bakker Elem School | 362 | 5,932 | 1,538 | 13,407 | 21,239 | 5,159 | - | 6,048 | 11,207 | | 419 | 7,169 | 384 | 390 | (784) |
| Barnes County North Beach School | 11,662 14,580 | 191,025 238,813 | 49,525 61,915 | 38,804 125,592 | 291,016 440,900 | 166,131 207.690 | | 108,557 383,217 | 274,688 590,907 | (27,842) (52,846) | (50,438) (97,911) | 184,195 184,380 | (28,735) (58,941) | (28,442) (58,580) | (32,410) (66,109) |
| Belcourt School | 67,631 | 1,107,783 | 287,204 | 1,128,490 | 2,591,108 | 963,415 | - | 566,700 | 1,530,115 | 88,673 | (188,277) | 1,192,366 | (19,735) | (18,078) | 6,044 |
| Belfield Public School | 10,468 | 171,463 | 44,454 | 195,180 | 421,565 | 149,118 | - | 390,257 | 539,375 | (36,825) | (88,287) | 106,923 | (42,769) | (42,510) | (14,342) |
| Beulah School Billings Co. School Diet | 24,952 | 408,714 109,856 | 105,963 28,481 | 87,369 80.222 | 626,998 | 355,450 95,539 | - | 507,940 | 863,390 157,192 | (47,448) 11,651 | (177,650) (16,432) | 354,076 122,859 | (97,784) (16,627) | (97,173) (16,463) | (170,413) |
| Billings Co. School Dist. Bismarck Public Schools | 6,707 575,356 | 9,424,274 | 28,481 2,443,342 | 5,921,098 | 225,266 18,364,070 | 95,539 8,196,094 | | 61,653 1,306,814 | 9,502,908 | 422,054 | (1,506,672) | 9,954,610 | (16,627) 136,086 | (16,463) 150,185 | (16,914) (295,101) |
| Blessed John Paul II Catholic Sch Network | | - | - | - | | - | | | - | - | - | - | - | | - |
| Bottineau School | 26,598 | 435,665 | 112,951 | 140,439 | 715,653 | 378,889 | - | 444,524 | 823,413 | (52,229) | (180,441) | 353,833 | (48,523) | (47,873) | (132,527) |
| Bowbells School | 5,257 21.857 | 86,116 358,011 | 22,326 92,818 | 174,554 149,288 | 288,253 621,974 | 74,893 311,355 | - | 29,359 284,632 | 104,252 595,987 | 12,924 | 652 (81,015) | 106,888 354,902 | 18,702 (73,974) | 18,823 (73,433) | 26,012 (105,744) |
| Bowman School Burke Central School | 5,907 | 96,757 | 25,085 | 73,450 | 201,199 | 84,147 | | 282,397 | 366,544 | <u>5,251</u> (48,554) | (96,150) | 38,101 | (13,195) | (13,051) | (32,496) |
| Burleigh County Spec. Ed. | 849 | 13,898 | 3,603 | 14,811 | 33,161 | 12,087 | - | 7,840 | 19,927 | 3,788 | (1,182) | 12,590 | (793) | (766) | (403) |
| Carrington School | 19,417 17,352 | 318,043 | 82,456 | 15,896 246,994 | 435,812 | 276,595 247,188 | - | 430,761 161,244 | 707,356 | (98,669) | (177,640) | 231,029 | (72,524) | (72,043) | (81,697) (16,980) |
| Cavalier School Center Stanton School | 11,352 | 284,228 192,931 | 73,689 | 149.740 | 622,263 404,469 | 167,788 | | 143,626 | 408,432 | (2,805) 7,323 | (54,136) (51,437) | 282,004 187,970 | 2,662 (12,490) | (12.208) | (16,980) (26,103) |
| Central Cass School | 32,304 | 529,137 | 137,184 | 646,165 | 1,344,790 | 460,179 | - | 94,723 | 554,902 | 151,917 | 35,013 | 624,935 | (10,158) | (9,360) | (2,459) |
| Central Elementary School | | | | 517 | 517 | | - | 34,840 | 34,840 | (16,904) | (17,417) | (1) | (1) | | |
| Central Regional Education Association Central Valley School | 11,237 | <u>184,058</u> 147,341 | <u>47,719</u> 38,200 | <u>1,833,758</u> 4,324 | 2,076,772 198,860 | 160,071 128,140 | | <u>1,729</u> 175,113 | <u>161,800</u> 303,253 | 391,725 (26,715) | <u>351,074</u> (63,576) | <u>570,563</u> 112,517 | <u>173,571</u> (37,434) | (37,213) | 254,192 (51,972) |
| Dakota Prairie School | 14.386 | 235 638 | 61.092 | 132.332 | 443.448 | 204,929 | | 368,988 | 573.917 | (558) | (85,610) | 210,075 | (74,434) | (74,072) | (105,874) |
| Devils Lake School | 77,181 | 1,264,222 | 327,763 | 214,331 | 1,883,497 | 1,099,467 | - | 852,805 | 1,952,272 | (97,494) | (303,197) | 1,131,468 | (240,148) | (238,252) | (321,152) |
| Dickinson School | 160,557 | 2,629,916 | 681,833 | 2,153,594 | 5,625,900 | 2,287,182 | | 2,373,420 | 4,660,602 | 431,944 | (315,607) | 2,430,109 | (287,822) | (283,888) | (1,009,438) |
| Divide School Drake School | 19,305 3.649 | 316,221 59,774 | 81,984 15,497 | 223,538 48,200 | 641,048 127,120 | 275,011 51,984 | | 302,641 25,678 | 577,652 77,662 | 9,831 5.406 | (72,317) (10,827) | 337,512 59.648 | (52,731) 384 | (52,254) 478 | (106,645) (5,631) |
| Drayton School | 10,152 | | 43,113 | 270,842 | 490,398 | 144 619 | - | 319,429 | 464,048 | (16,005) | (43,635) | 149,613 | (14,311) | (14,069) | (35,243) |
| Dunseith School | 25,648 | 420,105 | 108,917 | 375,986 | 930,656 | 365,356 57,346 | | 320,400 | 685,756 | 35,333 | (74,563) | 438,586 | (21,394) | (20,768) | (112,294) |
| E Central Ctr Exc Childn Earl Elem, School | 4,026 185 | 65,939 3,031 | 17,095 786 | 122,268 472 | 209,328 4,474 | 57,346 2,636 | | 421,697 5.912 | 479,043 8,548 | (76,289) (2,168) | (88,321) (3,202) | (2,513) 2,678 | (33,214) (440) | (33,110) (436) | (36,268) |
| Edgeley School | 9,413 | | 39,974 | 92,052 | 295,625 | 134,092 | | 169,861 | 303,953 | (24,914) | (34,480) | 121,263 | (19,602) | (19,369) | (506) (31,226) |
| Edmore School | 4,157 | 68,094 | 17,654 | 16,277 | 106,182 | 59,220 | - | 283,673 | 342,893 | (42,648) | (66,954) | 10,744 | (53,888) | (53,780) | (30,185) |
| Eight Mile School | 13,413 | 219,708 | 56,962 | 276,940 | 567,023 | 191,075 | - | 116,968 | 308,043 | 54,747 | (34,230) | 250,006 | 8,672 | 8,994 | (29,209) |
| Elgin-New Leipzig School Ellendale School | 8,307 10,564 | 136,067 173,030 | 35,277 44,860 | 92,851 29,337 | 272,502 257,791 | 118,334 150,481 | - | 188,099 487,295 | 306,433 637,776 | (32,467) (86,963) | (60,277) (95,726) | 109,831 95,945 | (11,425) (82,782) | (11,216) (82,519) | (28,377) (127,940) |
| Emerado Elementary School | 5,086 | 83,311 | 21,599 | 76,711 | 186,707 | 72,454 | | 30,712 | 103,166 | 15,899 | (7,240) | 95,696 | (4,062) | (3,937) | (12,840) |
| Enderlin Area School District | 14,878 | 243,707 | 63,184 | 34,692 | 356,461 | 211,947 | - | 89,373 | 301,320 | (49,843) | (75,360) | 245,788 | (15,063) | (14,699) | (35,682) |
| Fairmount School | 5,388 568,455 | | 22,879 | 18,922 | 135,437 | 76,748 | | 365,561 2 541 408 | 442,309 | (84,295) | (108,102) | 3,532 | (50,506) (72,864) | (50,371) | (17,130) |
| Fargo Public Schools Fessenden-Bowdon School | 568,455 8.202 | 9,311,182 134,342 | 2,414,023 34,830 | 7,813,906 137,022 | 20,107,566 314,396 | 8,097,740 116,835 | | 2,541,408 145,917 | 10,639,148 262,752 | 891,079 (3,747) | (1,181,996) (30,332) | 10,029,133 128,353 | (72,864) (22,092) | (59,045) (21,885) | (137,889) 1,347 |
| Finley-Sharon School | 6,898 | 112,989 | 29,294 | 23,817 | 172,998 | 98,264 | | 259,778 | 358,042 | (26,306) | (54,704) | 69,849 | (45,175) | (45,006) | (83,702) |
| Flasher School | 9,075 | 148,650 | 38,539 | 104,645 | 300,909 | 129,278 | - | 141,485 | 270,763 | 4,433 | (26,885) | 150,998 | (21,365) | (21,146) | (55,889) |
| Fordville Lankin School Fort Ransom Elem School | 4,300 1,445 | | 18,261 6,137 | 258,515 57,947 | 351,512 89,202 | 61,256 20,588 | - | 270,190 6,862 | 331,446 27,450 | (9,145) 5,504 | (20,512) 1,445 | 55,305 31,888 | (15,364) 7,054 | (15,256) 7,083 | 25,038 8,778 |
| Fort Totten School | 13.641 | 223,435 | 57,928 | 454.672 | 749.676 | 194.317 | | 47.746 | 242.063 | 55.860 | 54,259 | 292,154 | 49,275 | 49.606 | 6,459 |
| Fort Yates School | 4,528 | 74,174 | 19,230 | 13,966 | 111,898 | 64,508 | - | 818,383 | 882,891 | (193,886) | (147,487) | (66,013) | (101,289) | (101,175) | (161,143) |
| Gackle-Streeter Pub Sch | 6,352 15,762 | 104,043 258,180 | 26,974 | 80,643 7,791 | 218,012 348,669 | 90,484 | - | 17,622 397,782 | 108,106 622,316 | 7,092 (76,035) | (16,602) | 109,941 201,108 | 3,163 (68,984) | 3,317 (68,601) | 2,995 |
| Garrison School Glen Ullin School | 7.818 | 128,055 | <u>66,936</u> 33,200 | 156,716 | 348,669 | 224,534 | | 250.111 | 361 478 | (45,902) | (133,529) (58,762) | 122.327 | (14,996) | (14,811) | (127,606) (23,545) |
| Glenburn School | 11,918 | 195,209 | 50,610 | 46,355 | 304,092 | 169,769 | - | 408,268 | 578,037 | (85,102) | (91,156) | 118,461 | (65,936) | (65,638) | (84,574) |
| Goodrich School | 2 | 38 | 10 | 7,445 | 7,495 | 33 | - | 463,826 | 463,859 | (74,051) | (77,092) | (76,212) | (74,462) | (74,457) | (80,090) |
| Grafton School Grafton School District | - 29,921 | 490,097 | 127,063 | <u> </u> | 86,533 6,821,584 | 426,227 | · _ · · _ · _ · | <u>6,441,811</u> 378,268 | <u>6,441,811</u> 804,495 | (1,145,245) 981,232 | (1,073,092) 872,990 | (1,070,099) 1,457,431 | (1,016,512) 934,550 | (1,016,514) 935,284 | (1,033,816) 835,602 |
| Grand Forks School | 340,945 | | 1,447,878 | 531,237 | 7,904,706 | 4,856,849 | | 3,917,737 | 8,774,586 | (903,910) | (1,920,943) | 4,878,704 | (906,621) | (898,265) | (1,118,845) |
| Great North West Cooperative | 2,616 | 42,855 | 11,111 | 435,917 | 492,499 | 37,270 | - | 118,674 | 155,944 | 51,631 | 49,048 | 84,933 | 28,613 | 28,677 | 93,653 |
| Grenora School | 8,105 | <u>132,758</u> 160,997 | 34,419 | 318,103 | 493,385 212,566 | 115,457 140,016 | ·_··-· | <u>583,202</u> 524,412 | <u>698,659</u> 664,428 | (30,212) (99,566) | (62,394) (133,278) | 72,376 61,625 | (33,919) (90,233) | (33,728) | (117,397) (100,424) |
| Griggs County Central Sch Gst Educational Services | 9,829 | | 50,560 | - 97.610 | 355,093 | 169,602 | | 450,086 | 619.688 | (34,137) | (91,829) | 149,850 | (85.871) | (89,986) (85,575) | (117,033) |
| Halliday School | 287 | 4,705 | 1,220 | 6,546 | 12,758 | 4,092 | - | 442,581 | 446,673 | (91,195) | (57,172) | (53,439) | (59,215) | (59,210) | (113,684) |
| Hankinson School | 10,831 | 177,410 | 45,995 | 10,268 | 244,504 | 154,289 | | 133,032 | 287,321 | (18,274) | (67,722) | 146,944 | (29,829) | (29,560) | (44,376) |
| Harvey School Hatton Fielson Psd | 15,818 9 143 | 259,093 149 764 | 67,173 38,828 | 62,720 143,939 | 404,804 341,674 | 225,328 130,247 | - | 287,414 76,538 | 512,742 206,785 | (78,310) | (120,651) (14,510) | 221,041 152 409 | (43,322) (1.630) | (42,927) (1,410) | (43,769) (7,604) |
| Hazelton - Moffit School | 7,290 | | 30,960 | 261,499 | 419,166 | 103,855 | - | 84,409 | 188,264 | 20,579 | 10,682 | 133,234 | 15,856 | 16,036 | (7,604) 34,515 |
| Hazen School | 21,287 | 348,683 | 90,400 | 241,387 | 701,757 | 303,243 | | 259,597 | 562,840 | (46,584) | (138,020) | 362,348 | 1,433 | 1,953 | (42,213) |
| Hebron School | 7,662 | 125,496 | 32,536 | 12,068 | 177,762 | 109,141 | | 218,375 | 327,516 | (57,472) | (78,963) | 100,773 | (37,139) | (36,947) | (40,006) |
| Hettinger School Hillsboro School | 10,325 19,966 | 169,117 327,036 | 43,845 84,788 | 44,496 189,391 | 267,783 621,181 | 147,078 284,417 | | 72,564 119,246 | 219,642 403,663 | (19,110) (1,172) | (46,838) (84,612) | 168,108 327,048 | (15,551) 3,437 | (15,296) 3,923 | (23,172) (31,106) |
| | | | | 64,472 | 64,472 | - | - | 1,001,037 | 1,001,037 | (164,205) | (182,321) | (189,629) | (200,208) | (200,202) | |
| Hope School | | | | | | | | | | | | | | | (65,725) |
| Hope School Hope-Page Public School District | 10,559 | 172,958 | 44,841 | 1,998,465 | 2,226,823 | 150,418 | | 228,202 | 378,620 | 363,353 | 325,154 | 531,407 | 346,879 | 347,135 | |
| Hope School Hope-Page Public School District Horse Creek Elem. School James River Multidistrict Spec Ed Unit | 10,559 381 8,678 | 6,247 | 44,841 1,620 36,855 | 1,998,465 24,958 200,310 | 2,226,823 33,206 387,996 | 150,418 5,433 123.627 | | 228,202 13,487 479,481 | 378,620 18,920 603,108 | 363,353 (4,638) (84,050) | 325,154 1,444 (124,297) | 531,407 8,829 96,461 | 346,879 2,191 (40,939) | 347,135 2,193 (40,721) | (65,725) 4,267 (21,566) |



| | | Defer | red Outflows of Re | | | Deferred Inflows of Resources Deferred (Inflows)/Outflows Recognized In Future Pension Expense (Ye | | | | | | | | e (Year Ended J | une 30): |
|---|------------------------|---|---------------------------|--|------------------------|--|---------------------|--|----------------------|---------------------------|------------------------|---------------------------|---------------------------|---------------------------|--------------------------------|
| | Differences Between | Net Difference Between Projected and Actual Investment | | Changes in Proportion and Differences Between Employer Contributions and | | Differences Between | | Changes in Proportion and Differences Between Employer Contributions and | | | | | · | | |
| | Expected and | Earnings on | | Proportionate | Total Deferred | Expected and | | Proportionate | Total Deferred | | | | | | |
| Freedow Name | Actual | Pension Plan | Changes of | Share of Contributions | Outflows of | Actual | Changes of | Share of Contributions | Inflows of | 2024 | 2025 | 2026 | 2027 | 2028 | Thereafter |
| Employer Name | Experience (14) | Investments (15) | Assumptions (16) | (17) | Resources (18) | Experience (19) | Assumptions (20) | (21) | Resources (22) | (23) | (24) | (25) | (26) | (27) | (28) |
| Kenmare School | \$ 12,908 | () | \$ 54,814 | \$ 172,807 | () | \$ 183,872 | . , | \$ 289,552 | . , | (37,024) \$ | (77,134) \$ | 205,268 | . , | (32,352) | (==) |
| Kensal School | 1,909 | 31,267 | 8,106 | 33,678 | 74,960 | 27,192 | - | 66,572 | 93,764 | (11,980) | (18,643) | 23,320 | 25 | 69 | (11,595) |
| Kidder County School District | 15,136 | 247,922 | 64,276 | 206,170 | 533,504 | 215,612 | | 329,810 | 545,422 | (36,464) | (108,761) | 169,062 | (17,205) | (16,829) | (1,721) |
| Killdeer School Kindred School | 25,556 | 418,612 483,309 | <u>108,530</u> 125,303 | <u>631,530</u> 582,201 | 1,184,228 | 364,058 420,324 | ··· | 411,402 | 775,460 | <u>171,654</u> 146,113 | 43,969 | <u>519,425</u> 582,088 | <u>(71,931)</u> 44 464 | (71,307) 45,182 | (<u>183,042</u>) (33,257) |
| Kulm School | 6,777 | 111,005 | 28,779 | 10,100 | 156,661 | 96,538 | - | 185,126 | 281,664 | (32,494) | (66,165) | 85,859 | (32,883) | (32,710) | (46,610) |
| _ake Region Spec Ed _akota School | 12,982 7,535 | | 55,130 31,998 | 114,148 59,336 | 394,903 222,291 | 184,931 107,338 | - | 364,409 358,317 | 549,340 465,655 | (5,120) (55,618) | (74,154) (103,719) | 169,101 71,163 | (81,578) (46,831) | (81,259) (46,643) | (81,427) (61,716) |
| Lamoure School | 10.949 | 179.346 | 46.497 | 99.000 | 335.792 | 155.974 | | 139.318 | 295.292 | (41.876) | (65,580) | 168.681 | (6,184) | (5.918) | (8.623) |
| angdon Area School | 16,173 | | 68,681 | 93,685 | 443,451 | 230,388 | | 537,609 | 767,997 | (43,824) | (114,868) | 166,432 | (119,560) | (119,156) | (93,570) |
| _arimore School eeds School | 13,812 6,589 | 226,240 107,925 | 58,655 27,981 | 16,043 25,260 | 314,750 167,755 | 196,756 93,860 | | 460,504 274,235 | 657,260 368,095 | (96,395) (58,979) | (162,403) (76,836) | 152,334 64,309 | (73,212) (47,594) | (72,872) (47,427) | (89,962) (33,813) |
| ewis And Clark School | 18,509 | 303,178 | 78,602 | 334,841 | 735,130 | 263,668 | | 418,388 | 682,056 | (102,278) | (121,707) | 284,755 | (5,796) | (5,350) | 3,450 |
| Lidgerwood School | 7,758 | | 32,947 | 57,765 | 225,552 | 110,520 | | 247,978 | 358,498 | (51,148) | (56,168) | 98,926 | (37,842) | (37,646) | (49,068) |
| Linton School Lisbon School | 10,193 27.580 | 166,956 451,760 | 43,285 117,124 | 2,108 426,856 | 222,542 1,023,320 | 145,198 392,886 | | 404,122 189,816 | 549,320 582,702 | (82,549) 10,818 | (121,531) (100,422) | 83,603 481,289 | (55,440) 33,924 | (55,190) 34,599 | (95,671) (19,590) |
| itchville-Marion School | 6,343 | 103,899 | 26,937 | 68,446 | 205,625 | 90,359 | - | 54,925 | 145,284 | (17,536) | (12,751) | 103,836 | (3,907) | (3,745) | (5,556) |
| ittle Heart Elem. School | 1,212 | 19,858 | 5,148 | 40,831 | 67,049 | 17,270 | | 7,643 | 24,913 | 9,482 | 2,438 | 25,514 | 3,172 | 3,201 | (1,671) |
| ogan County one Tree Elem, School | - 1,762 | - 28,859 | 7,482 | 20,436 | - 58,539 | - 25,098 | - | 4,372 46,365 | 4,372 71,463 | (1,123) 625 | (1,113) (7,916) | (1,081) 24,466 | (530) (6,674) | (524) (6,631) | (1) (16,794) |
| onetree Spec Ed Unit | - | - 20,039 | | 53.556 | 53,556 | | | 327.679 | 327.679 | (40,103) | (54.218) | (41.178) | (54.323) | (54.318) | (29,983) |
| Maddock School | 5,366 | | 22,790 | 2,680 | 118,738 | 76,447 | - | 326,526 | 402,973 | (69,792) | (73,856) | 29,633 | (59,044) | (58,908) | (52,268) |
| Mandan Public Schools Mandaree School | 163,712 13,119 | | 695,228 | 1,500,948 758,285 | 5,041,468 1,042,003 | 2,332,114 | - | 45,790 463,308 | 2,377,904 650,190 | 292,995 61,119 | (281,907) | 2,869,290 237,367 | (47,520) | (43,508) | (125,786) |
| Manualee School Manning Elem School | 969 | 214,007 15,879 | <u>55,712</u> 4,117 | 110,259 | 131,224 | 186,882 | | 45,052 | 58,862 | 6,101 | 24,263 | 22,908 | <u>(9,612)</u> 16,996 | (9,286) | <u>87,962</u> 8,226 |
| Manvel Elem. School | 7,036 | | 29,879 | 86,470 | 238,631 | 100,227 | - | 73,228 | 173,455 | 19,316 | (4,210) | 102,544 | (12,772) | (12,594) | (27,108) |
| Maple Valley School Mapleton Elem, School | 10,883 10,526 | 178,270 172 418 | 46,218 44,701 | - 832.072 | 235,371 1,059,717 | 155,038 149,948 | | 310,341 | 465,379 149,948 | (68,986) 156,395 | (106,132) 110,945 | 114,998 313,759 | (47,988) 90.567 | (47,717) 90.825 | (74,183) 147,278 |
| Marmarth Elem. School | 1,415 | | 6,010 | 126,281 | 156,887 | 20,160 | | 21,782 | 41.942 | 8,045 | 14,916 | 37,577 | 16,109 | 16,138 | 22,160 |
| Max School | 7,784 | 127,494 | 33,054 | 63,651 | 231,983 | 110,879 | - | 251,013 | 361,892 | (55,180) | (68,717) | 96,915 | (19,399) | (19,213) | (64,315) |
| May-Port C-G School Mcclusky School | 18,923 5,974 | | 80,358 25,371 | 121,902 326,044 | 531,132 455,248 | 269,556 | | 414,530 83,512 | 684,086 168,618 | (96,540) 29,222 | (146,560) 34,515 | 248,771 120,456 | (56,566) 32,562 | (56,101) 32,707 | (45,958) 37,168 |
| Mckenzie County | 493 | 8,081 | 2,095 | 326,044 38,074 | 455,246 | 85,106 7,028 | | 2,603 | 9,631 | 5,124 | 3,311 | 13,191 | 4,205 | 4,224 | 9,057 |
| Mckenzie County School | 75,084 | | 318,856 | 2,437,472 | 4,061,280 | 1,069,590 | | 899,263 | 1,968,853 | 755,645 | 356,819 | 1,543,565 | (76,469) | (74,635) | (412,498) |
| Medina School Menoken Elem School | 8,094 1,653 | 132,571 27,069 | 34,370 7,018 | 136,293 51,241 | 311,328 86,981 | 115,294 23,541 | - | 97,507 28,902 | 212,801 52,443 | (13,872) 7,881 | (32,750) | 141,699 30,684 | (2,740) 818 | (2,535) 852 | 8,725 (5,348) |
| Midkota | 7,218 | 118,233 | 30,653 | 400,181 | 556,285 | 102,824 | | 687,745 | 790,569 | (16,740) | (349) (52,273) | 98,351 | (49,798) | (49,623) | (164,201) |
| Midway School | 9,441 | 154,635 | 40,091 | 113,494 | 317,661 | 134,483 | | 144,305 | 278,788 | (62,830) | (50,245) | 151,393 | 7,446 | 7,677 | (14,568) |
| Milnor School Minnewaukan School | 9,910 13,272 | | 42,086 56,362 | 64,492 267,760 | 278,820 554,790 | 141,177 189,065 | | 252,184 278,182 | 393,361 467,247 | (20,697) 40,244 | (82,523) (48,252) | 129,474 235,896 | (35,771) (26,726) | (35,530) (26,404) | (69,494) (87,215) |
| Vinot School | 331,461 | 5,429,296 | 1,407,602 | 1,129,169 | 8,297,528 | 4,721,745 | | 2,278,868 | 7,000,613 | (508,937) | (1,510,318) | 5,303,782 | (412,998) | (404,881) | (1,169,733) |
| Minto School | 10,436 | | 44,317 | 342,385 | 568,073 | 148,658 | - | 435,913 | 584,571 | 19,753 | (9,555) | 180,090 | (58,471) | (58,211) | (90,104) |
| Mohall Lansford Sherwood Montpelier School | 12,797 5,746 | 209,621 94,111 | 54,346 24,399 | - 69,127 | 276,764 193,383 | 182,303 81,846 | | 569,604 93,688 | 751,907 175,534 | (132,847) (9,422) | (160,413) (29,333) | 106,592 82,245 | (80,309) (11,158) | (79,988) (11,017) | (128,178) (3,466) |
| Morton County | - | - | | | - | - | · | 15,530 | 15,530 | (8,381) | (2,719) | (1,517) | (1,457) | (1,456) | |
| Mott-Regent School | 9,224 | | 39,171 | 119,122 | 318,605 | 131,398 | | 400,200 | 531,598 | (73,610) | (85,537) | 124,076 | (65,412) | (65,184) | (47,326) |
| Mt Pleasant School Munich School | 13,134 6,769 | | 55,775 28,745 | 211,057 28,053 | 495,096 174,440 | 187,094 96,424 | | 189,768 215,381 | 376,862 311,805 | 15,749 (23,223) | (16,669) (59,874) | 225,650 64,398 | (19,528) (36,317) | (19,207) (36,144) | (67,761) (46,205) |
| N Central Area Career And Tech Center | - | - | - | - | - | - | - | 38,836 | 38,836 | (38,836) | - | - | - | | - |
| Napoleon School | 10,724 | | 45,541 | 312,695 | 544,616 | 152,765 | | 331,154 | 483,919 | (35,998) | (85,678) | 148,091 | 35,670 | 35,932 | (37,320) |
| Naughton Rural School Nd Center For Distance Education | 1,154 10,905 | 18,894 178,624 | 4,899 46,310 | 75,755 557,316 | 100,702 793,155 | 16,432 155,346 | - | 896 609,162 | 17,328 764,508 | 16,487 26,871 | 10,369 (20,698) | 30,952 194,694 | 11,092 9,741 | 11,117 10,002 | 3,357 (191,963) |
| Nd Dept Of Public Instruction | 2,908 | | 12,351 | 328,882 | 391,781 | 41,432 | | 51,331 | 92,763 | 26,437 | 16,428 | 96,607 | 47,141 | 47,207 | 65,198 |
| Nd School For Blind | 4,675 | | 19,853 | 11,328 | 112,432 | 66,597 | - | 104,756 | 171,353 | (21,967) | (45,694) | 60,727 | (19,999) | (19,883) | (12,105) |
| Nd School For Deaf Nd United | 5,675 | 92,962 | 24,101 | - 1,310 | 122,738 1,310 | 80,847 | - | 257,821 290,470 | 338,668 290,470 | (56,471) (85,737) | (75,329) (87,045) | 44,928 (39,455) | (41,028) (24,651) | (40,885) (24,651) | (47,145) (27,621) |
| Nd Youth Correctional Cnt | 1,325 | 21,696 | 5,625 | 10,466 | 39,112 | 18,868 | | 1,312,070 | 1,330,938 | (265,168) | (280,424) | (232,374) | (209,977) | (209,937) | (93,946) |
| Nedrose School | 25,613 | | 108,770 | 729,041 | 1,282,962 | 364,863 | | 23,718 | 388,581 | 196,178 | 61,873 | 501,884 | 62,184 | 62,812 | 9,450 |
| Nelson County Nesson School | 81 16,954 | 1,322 277,708 | 343 71,999 | 2,334 585,537 | 4,080 952,198 | 1,149 241,517 | - | 3,407 10,722 | 4,556 252,239 | (709) 153,636 | (1,072) 48,590 | 510 385,111 | 231 54,530 | 231 54,946 | 333 3,146 |
| New England School | 12,028 | 197,023 | 51,080 | 394,435 | 654,566 | 171,346 | | 114,864 | 286,210 | 29,663 | (11,293) | 220,697 | 47,927 | 48,221 | 33,141 |
| New Rockford Sheyenne School | 11,949 | | 50,745 | 24,740 | 283,163 | 170,222 | - | 257,733 | 427,955 | (25,827) | (87,274) | 142,874 | (52,931) | (52,635) | (68,999) |
| New Salem-Almont New Town School | 14,727 42,728 | 241,231 699 880 | 62,542 181,451 | 84,283 1,162,830 | 402,783 2,086,889 | 209,794 | - | 166,573 982,998 | 376,367 1,591,669 | (828) | (57,990) 29,918 | 215,978 791,949 | (39,638) (132,646) | (39,271) (131,598) | (51,835) (317,157) |
| New Town School Newburg United District | 42,728 | 90,820 | 23,546 | 1,162,830 | 2,086,889 | 608,671 78,985 | | 133,688 | 212,673 | <u>254,754</u> 7,283 | (30,427) | 66,162 | (24,571) | (24,431) | (8,310) |
| North Border School | 16,980 | 278,135 | 72,110 | | 367,225 | 241,888 | - | 685,651 | 927,539 | (165,104) | (194,631) | 149,792 | (123,167) | (122,749) | (104,455) |
| North Sargent School North Star | 10,636 12,193 | | 45,169 51,779 | 176,998 116,899 | 407,026 380,588 | 151,518 173,690 | | 353,970 172,708 | 505,488 346,398 | (39,741) (21,241) | (96,272) (75,285) | 129,700 182,391 | (29,090) (22,734) | (28,833) (22,432) | (34,226) (6,509) |
| North Star North Valley Area Career | 6,259 | 199,717 | 26,581 | 316,899 | 452,257 | 89,166 | | 6,536 | 95,702 | 60,962 | 44,855 | 166,319 | 30,459 | <u>(22,432)</u> 30,612 | 23,348 |
| Northern Cass School Dist | 25,238 | 413,396 | 107,177 | 426,472 | 972,283 | 359,522 | - | 225,648 | 585,170 | 20,615 | (71,381) | 413,340 | 3,760 | 4,375 | 16,404 |
| Northern Plains Spec Ed Northwood School | 2,972 14.064 | 48,677 230,375 | 12,620 59,727 | 190,813 172,192 | 255,082 476,358 | 42,334 200,352 | | 101,225 11,890 | 143,559 212,242 | 19,227 51,487 | 7,982 3,334 | 68,808 262,256 | 19,484 (5,530) | 19,550 (5,189) | (23,528) (42,242) |
| Jakes School | 14,064 | | 68,383 | 300,333 | 648,580 | 229,387 | ··-·· | 293,575 | 522,962 | 22,435 | (55,955) | 309,041 | (26,479) | (26,085) | (97,339) |
| Oberon Elem School | 3,223 | 52,789 | 13,686 | 307,646 | 377,344 | 45,910 | | 208,007 | 253,917 | 11,600 | 1,876 | 36,130 | 32,285 | 32,364 | 9,172 |
| Oliver - Mercer Spec Ed | 6,834 | 111,943 | 29,022 | 226,899 44,859 | 374,698 | 97,355 | - | 231,206 | 328,561 964,348 | (16,448) | (43,158) | 119,069 | (12,725) | (12,557) | 11,956 |
| Page School | | | | 44,859 | 44,859 | | | 964,348 | 904,348 | (199,448) | (171,952) | (173,354) | (187,371) | (187,364) | |



| | | Defer | red Outflows of Re | | | | Deferred In | flows of Resources | | Deferred (Ir | nflows)/Outflows Re | ecognized In Fut | ture Pension Expens | e (Year Ended J | une 30): |
|---|-----------------------|-----------------------|------------------------|------------------------------|------------------------|-------------------------|-----------------------|------------------------------|---------------------------|-------------------------|-----------------------------|------------------------|---------------------------|------------------------|-------------------------|
| | | | | Changes in Proportion and | | | | Changes in Proportion and | | | | | | | |
| | | | | Differences | | | | Differences | | | | | | | |
| | | Net Difference | | Between | | | | Between | | | | | | | |
| | | Retween | | Employer | | | | Employer | | | | | | | |
| | Differences | Projected and | | Contributions | | Differences | | Contributions | | | | | | | |
| | Between | Actual Investment | | and | | Between | | and | | | | | | | |
| | Expected and | Earnings on | | Proportionate | Total Deferred | Expected and | | Proportionate | Total Deferred | | | | | | |
| | Actual | Pension Plan | Changes of | Share of | Outflows of | Actual | Changes of | Share of | Inflows of | | | | | | |
| Employer Name | Experience | Investments | Assumptions | Contributions | Resources | Experience | Assumptions | | Resources | 2024 | 2025 | 2026 | 2027 | 2028 | Thereafter |
| | (14) | (15) | (16) | (17) | (18) | (19) | (20) | (21) | (22) | (23) | (24) | (25) | (26) | (27) | (28) |
| Park River Area School District | \$ 15.514 | \$ 254,113 | \$ 65,882 | . , | \$ 519,286 | \$ 220,997 | \$ - | \$ 183,614 | \$ 404,611 | \$ (39,012) \$ | (75,225) \$ | . , | \$ (5,904) \$ | (5,525) \$ | . , |
| Parshall School | \$ 15,514 12,691 | \$ 254,113 207,873 | \$ 05,862 | 495,646 | 770,103 | \$ 220,997 180,782 | | 595,037 | 5 404,611 | \$ (39,012) \$ 7,570 | (102,660) | 162,017 | \$ (5,904) \$ (48,595) | (48,280) | 24,232 |
| Peace Garden Spec Ed | 4.826 | 79,053 | 20,495 | 105,243 | 209.617 | 68,751 | | 44.039 | 112,790 | 17,811 | (6.918) | 108,919 | (5,518) | (5,394) | (12,073) |
| Pembina Spec Ed Coop | 856 | 14.027 | 3.637 | 11,039 | 29,559 | 12,199 | - | 19,720 | 31,919 | 440 | (6,139) | 14,121 | (3,360) | (3,338) | (4,084) |
| Pingree - Buchanan School | 6,472 | 106,012 | 27,485 | 111,009 | 250,978 | 92,196 | - | 63,003 | 155,199 | (2,442) | (20,779) | 134,406 | (3,310) | (3,158) | (8,938) |
| Powers Lake School | 9,592 | 157,123 | 40,736 | 133,666 | 341,117 | 136,646 | - | 58,981 | 195,627 | 35,696 | (10,298) | 173,211 | (13,234) | (13,005) | (26,880) |
| Richardton-Taylor | 11,772 | 192,829 | 49,993 | 68,767 | 323,361 | 167,699 | - | 485,878 | 653,577 | (63,347) | (112,991) | 128,153 | (98,144) | (97,853) | (86,034) |
| Richland School | 12,206 | 199,931 | 51,834 | 176,706 | 440,677 | 173,876 | | 76,500 | 250,376 | 1,371 | (24,195) | 214,053 | 6,770 | 7,071 | (14,769) |
| Robinson School Rolette School | - 8,262 | - 135.328 | - 35,085 | 71.937 | 250,612 | - 117,692 | - | 330.595 | - 448.287 | (62,697) | (77,412) | - 102,795 | - (38,387) | - (38,181) | - (83,793) |
| Roosevelt School | 2,504 | 41,016 | 10,634 | 31,457 | 85,611 | 35,671 | - | 131,694 | 167,365 | (62,697) (7,401) | (24,890) | 20,166 | (28,699) | (28,638) | (12,292) |
| Roughrider Area Career And Tech Center | 2,504 | 30,409 | 7,884 | 121,232 | 161,381 | 26,446 | - | 131,694 | 26,625 | 27,791 | 21,249 | 57,412 | (28,699) | (20,030) 11,874 | 4,595 |
| Roughrider Service Program | 1,382 | 22,643 | 5,870 | 4,287 | 34,182 | 19,692 | | 64,165 | 83,857 | (34,275) | (26,358) | 20,079 | (3,079) | (3,043) | (2,999) |
| Rugby School | 25,774 | 422,179 | 109,454 | 154,576 | 711,983 | 367,160 | - | 295,464 | 662,624 | 11,635 | (79,542) | 412,006 | (77,875) | (77,248) | (139,617) |
| Rural Cass Spec Ed | 13,173 | 215,774 | 55,942 | 823,427 | 1,108,316 | 187,654 | - | 88,548 | 276,202 | 193,010 | 85,500 | 317,189 | 67,440 | 67,758 | 101,217 |
| Sargent Central School | 10,949 | 179,347 | 46,498 | 52,905 | 289,699 | 155,974 | | 316,709 | 472,683 | (25,128) | (85,621) | 141,387 | (60,629) | (60,354) | (92,639) |
| Sawyer School | 5,198 | 85,138 | 22,073 | 308,838 | 421,247 | 74,043 | - | 184,507 | 258,550 | (15,466) | 23,316 | 115,868 | 22,159 | 22,285 | (5,465) |
| Scranton School | 7,674 13.347 | 125,705 218,630 | 32,590 56,682 | 10,270 303,441 | 176,239 592,100 | 109,323 190,138 | - | 216,138 254 | 325,461 190,392 | (33,964) 60,543 | (67,935) 12.511 | 79,943 265.544 | (38,249) 27,234 | (38,056) 27,554 | (50,961) 8.322 |
| Se Region Career And Tech Selfridge School | 13,347 4,053 | 218,630 66,390 | 56,682 17,212 | 303,441 6,285 | 592,100 93,940 | 190,138 57,738 | - | 254 592,822 | 190,392 650,560 | 60,543 (99,244) | 12,511 (120,186) | 265,544 (36,788) | 27,234 (93,779) | 27,554 (93,678) | 8,322 (112,945) |
| Sheyenne Valley Area Voc | 6.629 | 108.578 | 28,150 | 82.510 | 225,867 | 94.428 | | 62.063 | 156.491 | 37.044 | 1.404 | 96.197 | (19,736) | (19,567) | (25,966) |
| Sheyenne Valley Spec Ed | 10,354 | 169,604 | 43,972 | 433,011 | 656,941 | 147,501 | | 622,172 | 769,673 | (28,677) | (80,483) | 152,124 | (12,878) | (12,626) | (130,192) |
| Slope County | 184 | 3,021 | 783 | 137 | 4,125 | 2,627 | - | 2,492 | 5,119 | (355) | (1,157) | 2,460 | (642) | (636) | (664) |
| Solen - Cannonball School | 12,281 | 201,155 | 52,152 | 385,199 | 650,787 | 174,940 | - | 259,612 | 434,552 | (30,098) | (50,184) | 190,097 | 53,641 | 53,941 | (1,162) |
| Souris Valley Spec Ed | 7,378 | 120,857 | 31,333 | 62,561 | 222,129 | 105,107 | - | 348,668 | 453,775 | (14,087) | (74,842) | 55,031 | (61,097) | (60,909) | (75,742) |
| South Cent. Prairie Sp Ed | 2,390 | 39,144 | 10,148 | 253,988 | 305,670 | 34,042 | | 41,452 | 75,494 | 59,766 | 63,364 | 110,049 | 5,291 | 5,349 | (13,643) |
| South East Education Cooperative | 4,854 15,943 | 79,500 261,138 | 20,611 | 333,321 409,134 | 438,286 753,918 | 69,140 227,106 | - | 234,666 156,455 | 303,806 383,561 | (19,989) 117,005 | 7,845 29,510 | 94,229 306,516 | 39,671 | 39,783 (10,088) | (27,059) |
| South Heart School South Prairie School District | 15,943 | 318,019 | 67,703 | 184,713 | 604,597 | 227,106 276,574 | · | 139,019 | 415,593 | 49,641 | (37,926) | 306,516 | (10,477) (30,373) | (29,900) | (62,109) (90,002) |
| South Valley Spec Ed | 2,573 | 42,141 | 10,925 | 86,373 | 142,012 | 36,649 | | 274.806 | 311,455 | (15,024) | (48,377) | 2,925 | (24,316) | (29,900) | (60,392) |
| Southwest Special Education Unit | 695 | 11,384 | 2,951 | 60,389 | 75,419 | 9,900 | | 27,593 | 37,493 | 5,916 | 3,399 | 17,145 | 4,405 | 4,427 | 2,634 |
| St. John's School | 23,545 | 385,669 | 99,989 | 574,811 | 1,084,014 | 335,408 | - | 236,291 | 571,699 | 124,804 | 37,485 | 482,365 | (2,468) | (1,891) | (127,980) |
| St. Thomas School | | | - | 7,711 | 7,711 | - | - | 898,735 | 898,735 | (165,467) | (151,500) | (155,355) | (146,578) | (146,576) | (125,548) |
| Stanley School | 22,761 | 372,815 | 96,656 | 11,370 | 503,602 | 324,229 | - | 950,953 | 1,275,182 | (184,012) | (277,719) | 184,278 | (147,821) | (147,259) | (199,047) |
| Starkweather School | 4,167 | 68,248 | 17,694 | 98,379 | 188,488 | 59,354 | - | 98,882 | 158,236 | 5,894 | (526) | 72,257 | (6,858) | (6,760) | (33,755) |
| Sterling School Strasburg School District | <u>1,254</u> 6,853 | 20,547 112,258 | <u>5,327</u> 29,104 | 57,015 | 84,143 332,767 | <u>17,870</u> 97,629 | | <u>153,331</u> 159,504 | <u>171,201</u> 257,133 | (29,674) | <u>(41,470)</u> (45,455) | (17,579) 86,155 | (2,097) 6,029 | (2,066) 6,198 | <u>5,828</u> 25,062 |
| Surasburg School District | 17.186 | 281.499 | 72.982 | 39.398 | 411.065 | 244.814 | | 402.023 | 646.837 | (2,355) (48,914) | (132,239) | 222.274 | (84,131) | (83,707) | (109,055) |
| Sweet Briar Elem School | 975 | 15.968 | 4,140 | 33,786 | 54.869 | 13,887 | | 5.344 | 19,231 | 6,203 | 228 | 18.318 | 2,981 | 3,012 | 4,896 |
| Tgu School District | 16,506 | 270,371 | 70,097 | - | 356,974 | 235,136 | - | 588,489 | 823,625 | (139,445) | (171,797) | 186,166 | (96,843) | (96,438) | (148,294) |
| Thompson School | 20,380 | 333,821 | 86,546 | 508,708 | 949,455 | 290,317 | - | 54,902 | 345,219 | 97,453 | 1,499 | 390,322 | 29,207 | 29,709 | 56,046 |
| Tioga School | 26,087 | 427,299 | 110,782 | 700,658 | 1,264,826 | 371,613 | - | 259,969 | 631,582 | 70,734 | (34,952) | 452,723 | 20,930 | 21,571 | 102,238 |
| Turtle Lake-Mercer School | 9,255 | 151,593 | 39,302 | 19,566 | 219,716 | 131,837 | - | 163,251 | 295,088 | (12,417) | (61,116) | 123,601 | (39,578) | (39,350) | (46,512) |
| Twin Buttes Elem. School | 3,350 | 54,880 | 14,228 | 133,341 | 205,799 | 47,728 | | 143,590 | 191,318 | 1,028 | (15,977) | 53,612 | (297) | (220) | (23,665) |
| Underwood School United School | 9,769 24.404 | 160,015 399,731 | 41,486 103,635 | - 96,257 | 211,270 624,027 | 139,162 347,638 | - | 291,891 232,343 | 431,053 579,981 | (70,239) (54,830) | (96,206) (135,471) | 116,510 363,150 | (46,793) (34,194) | (46,549) (33,593) | (76,506) (61,016) |
| Upper Valley Spec Ed | 24,404 | 290,682 | 75.362 | 131.253 | 515.043 | 252.800 | - | 232,343 471.873 | 724.673 | (54,830) (74,081) | (135,471) (146,567) | 229,792 | (34,194) (63,441) | (33,593) (62,999) | (92,334) |
| Valley - Edinburg School | 10,424 | 170,740 | 44,266 | - | 225,430 | 148,489 | - | 265,471 | 413,960 | (95,483) | (109,254) | 122,466 | (34,612) | (34,355) | (37,292) |
| Valley City School | 40,438 | 662,375 | 171,728 | | 874,541 | 576,054 | | 1,139,947 | 1,716,001 | (243,910) | (364,116) | 486,169 | (185,710) | (184,719) | (349,174) |
| Velva School | 19,356 | 317,049 | 82,198 | 166,757 | 585,360 | 275,731 | - | 355,469 | 631,200 | (28,931) | (106,353) | 296,921 | (44,817) | (44,347) | (118,313) |
| Wahpeton School | 46,743 | 765,644 | 198,501 | 232,214 | 1,243,102 | 665,865 | - | 1,055,768 | 1,721,633 | (167,789) | (292,697) | 638,457 | (162,794) | (161,654) | (332,054) |
| Ward County | 216 | 3,544 | <u>919</u> 51.866 | 764 | 5,443 | 3,082 173,984 | · _ · · _ · · _ · _ · | 1,613 | 4,695 387,820 | (196) 9,896 | (1,089) | 3,270 | (397) | (385) | (455) (59,114) |
| Warwick School Washburn School | 12,213 14,620 | 200,055 239,468 | 51,866 62,085 | 152,428 218,460 | 416,562 534,633 | 173,984 208,260 | - | 213,836 960 | 387,820 209,220 | 9,896 65,796 | (25,959) (12,734) | 205,303 268,061 | (50,842) 5.935 | (50,542) 6,291 | (59,114) (7,936) |
| West Fargo School | 507.432 | 239,468 | 2,154,891 | 6,758,268 | 534,633 | 7.228,260 | - | 960 | 7.228.494 | 1.889.407 | (12,734) (317,473) | 9.062.637 | 5,935 | 161.886 | (442,131) |
| West River Student Services | 4,550 | 74,527 | 19,322 | 200,333 | 298,732 | 64.815 | - | 187,399 | 252,214 | (37,189) | (24,384) | 49,647 | 15,066 | 15,180 | 28,198 |
| Westhope School | 8,557 | 140,168 | 36,340 | 141,968 | 327,033 | 121,901 | | 67,647 | 189,548 | (1,183) | (17,723) | 145,879 | 9,499 | 9,708 | (8,695) |
| White Shield School | 11,001 | 180,192 | 46,717 | 197,371 | 435,281 | 156,709 | - | 392,745 | 549,454 | 13,742 | (36,252) | 134,041 | (84,881) | (84,606) | (56,217) |
| Williams Co School Dist #8 | - | • | | 726,934 | 726,934 | - | - | 4,300,172 | 4,300,172 | (507,393) | (523,577) | (575,292) | (625,140) | (625,144) | (716,692) |
| Williston Basin School Dist #7 | 192,190 | 3,148,053 | 816,166 | 37,837,338 | 41,993,747 | 2,737,795 | | 321,845 | 3,059,640 | 6,299,982 | 5,604,713 | 9,358,770 | 6,000,137 | 6,004,847 | 5,665,658 |
| Williston School Wilmac Special Education | - 36.242 | - 593.647 | - | 3,106,548 1.025.985 | 3,106,548 1,809,783 | - 516.283 | - | 34,142,649 62.481 | 34,142,649 578,764 | (4,712,470) 216,732 | (4,735,903) 125,796 | (4,976,924) 725,784 | (5,460,182) 99,859 | (5,460,183) 100,744 | (5,690,439) (37,896) |
| Wilmac Special Education Wilton School | 36,242 | 593,647 190,292 | 153,909 49,335 | 1,025,985 215,681 | 1,809,783 466,925 | 516,283 | - | 62,481 22,916 | 578,764 188,409 | 216,732 35,005 | 125,796 3,159 | 725,784 217,647 | 99,859 | 100,744 10,036 | (37,896) 2,923 |
| Wing School | 4,721 | 77,331 | 20,049 | 132,431 | 234,532 | 67,253 | - | 202,466 | 269,719 | (32,645) | (44,185) | 49,754 | (264) | (150) | (7,697) |
| Wishek School | 9,613 | 157,466 | 40,825 | 218,464 | 426,368 | 136,945 | | 165,540 | 302,485 | (18,102) | (51,706) | 140,366 | 24,293 | 24,528 | 4,504 |
| Wolford School | - | - | - | 4,697 | 4,697 | | - | 468,041 | 468,041 | (154,576) | (159,268) | (149,500) | - | - | - |
| Wyndmere School | 10,179 | 166,730 | 43,226 | 83,837 | 303,972 | 145,002 | - | 155,823 | 300,825 | (31,547) | (40,288) | 152,108 | (29,374) | (29,123) | (18,629) |
| Yellowstone Elem. School | 4,094 | 67,064 | 17,387 | 58,302 | 146,847 | 58,324 | | 14,928 | 73,252 | (1,657) | (4,502) | 76,626 | 5,294 | 5,390 | (7,556) |
| Zeeland School | 3,085 | 50,529 | 13,100 | 64,089 | 130,803 | 43,944 | - | 100,039 | 143,983 | 871 | (22,383) | 49,934 | (8,232) | (8,157) | (25,213) |
| Grand Totals: | \$ 5,228,950 | \$ 85,649,689 | \$ 22,205,583 | \$ 114,938,791 | \$ 228,023,013 | \$ 74,487,737 | ş - | \$ 114,938,791 | \$ 189,426,489 | \$ 1,081,087 \$ | (17,835,248) \$ | 84,302,129 | \$ (7,076,857) \$ | (6,948,712) \$ | 6 (14,925,914) |

Note: Columns may not foot due to rounding





Retirement & Investment

MEMORANDUM

TO:TFFRFROM:Jan Murtha, Executive DirectorDATE:January 24, 2024RE:TFFR Admin Rules

Enclosed for your consideration is the Attorney General Opinion finding the TFFR proposed changes to administrative rules to be in substantial compliance and a copy of the administrative rules updated to reflect minor changes requested by the Office of Attorney General (AGO). The AGO requested the following changes:

Page 2 strike 28-32-02.1 and replace with 15-39.1-05.2 and 54-52.5-02

Page 8 replaces 2023 with 2024

Page 10 remove strikethrough from repealed also add Repealed Effective _____

Page 11 replace 2023 with 2024

Page 12 replace 2023 with 2024

Page 13 replace 2023 with 2024

The AGO also opined that neither RIO nor either of its boards (SIB and TFFR) have the authority to promulgate rules on behalf of the agency. This opinion by the AGO only impacted one rule, which had been created in 1994, apparently in error, and only contained an outdated address for the agency. The AGO determined that the TFFR Board did not have the authority to update the rule (i.e. correct the address) now because the rule should not have been created in 1994, and therefore the remedy was to request that the rule be stricken from the code.

Board Action Requested: Approve corrections requested by AGO and final adoption of rules to submit to Legislative Counsel.



OFFICE OF ATTORNEY GENERAL www.attorneygeneral.nd.gov

(701) 328-2210

Drew H. Wrigley ATTORNEY GENERAL

OPINION

January 22, 2024

Ms. Janilyn Murtha, Executive Director North Dakota Retirement & Investment-Teachers Fund for Retirement 1600 E. Century Avenue, Suite 3 P.O. Box 7100 Bismarck, ND 58507-7100

Dear Ms. Murtha,

The Office of Attorney General has examined the proposed New N.D. Admin. Code §§ 82-03-01-10 - Creating a Veteran's Exception, 82-05-03-04 - Payment Of Interest Accrual On Account, 82-05-03-05 - Overpayment of Benefits Process, 82-05-03-06 - Underpayment Of Benefits Process, 82-05-03-07 - Related To Appeals of Actions Related to Erroneous Payments of Benefits, Amendments to N.D. Admin. Code §§ 82-01-01-01 - Relating To Fund And Agency Organization and Administration, 82-02-01-01 – Definitions, 82-03-01-01 – Refunds, 82-03-01-04 - Repurchases, 82-05-01-01 - Application For Benefits, 82-05-03-01 - Timing Of Benefit Payments, 82-05-03-03 - Overpayment Write-Off Process, 82-05-04-02 - Retirement Benefit Options, 82-05-06-01 Retiree Reemployment Reporting, 82-07-01-01, 82-07-01-03, 82-07-03-01, and 82-07-04-01 - Disability Retirement Eligibility and Determination and Suspension Of Disability Benefit Process, 82-08-01-03 Qualified Domestic Relations Order Benefits, and 103-01-01-01 - Relating To Fund and Agency Organization and Administration, Definitions and Repeal of N.D. Admin. Code § 82-05-02-03 - Level Social Security Income Retirement Benefit Option rules, the publication of that notice, and the filing of that notice with the Legislative Council. This office has also determined that 1) a written record of the agency's consideration of any comments to the proposed rules was made, 2) a regulatory analysis was issued, 3) a takings assessment was prepared, 4) a small entity regulatory analysis and an economic impact statement were prepared, and 5) the proposed rules are within the agency's statutory authority.

Ms. Janilyn Murtha January 22, 2024 Page 2

These administrative rules are in substantial compliance^{1,2} with N.D.C.C. ch. 28-32 and are hereby approved as to their legality. Upon final adoption, these rules may be filed with the Legislative Council.

Attorney General

copy Liz Fordahl, Legislative Council

¹ The North Dakota Retirement & Investment Office requested publication of an abbreviated Notice of Intent to Adopt Administrative Rules and Notice of Public Hearing (Notice) in each official county newspaper in a timely manner. However, publication of the hearing notice in the Ransom County Gazette did not allow 20 days between the date of publication and the hearing. All other hearing notices allowed at least 20 days between the publication date and the hearing date.

² N.D.C.C. ch. 54-52.5 does not provide the Retirement Investment Office with independent rule making authority. N.D. Admin. Code § 103-01-01-01 should be struck from the code.

82-01-01-01. Organization of the teachers' fund for retirement.

1. **Organization and administration.**

- a. History. The 1913 legislative assembly created the teachers' insurance and retirement fund by legislation codified as North Dakota Century Code chapter 15-39. This chapter provided a retirement program for public, nonpublic, and certain college teachers. In 1971, the legislative assembly repealed North Dakota Century Code chapter 15-39 and enacted North Dakota Century Code chapter 15-39.1 which created the present teachers' fund for retirement. The 1973 legislative assembly provided for teacher retirement options by enacting North Dakota Century Code chapter 15-39.2. The primary objective of the teachers' fund for retirement is to provide income security to retired teachers.
- b. Board of trustees. A seven-member board of trustees, as established by North Dakota Century Code section 15-39.1-05.1, is responsible for managing the fund.
- c. Qualified tax status of fund.
 - (1) Qualified plan. The fund is a qualified employee pension plan under sections 401 and 501 of the Internal Revenue Code of 1986, as amended [U.S.C. title 26].
 - (2) Exclusive benefit and purpose. As a qualified employee pension plan, all assets of the fund are held in trust for the exclusive benefit of members and their beneficiaries. Fund assets may not be diverted or used for any purpose other than to provide pension benefits and other incidental benefits allowed by law.
- d. Investment of the fund. The assets of the fund are invested and managed by the North Dakota state investment board. The state investment board invests the fund's assets in accordance with the "prudent investor" rule.
- e. Accrued benefits nonforfeitable. Upon plan termination or complete discontinuance of contributions under the fund, the rights of all participants to benefits accrued to the date of such termination or discontinuance will become nonforfeitable to the extent funded.

2. Description of portion of organization and functions subject to North Dakota Century Code chapter 28-32.

- a. Overview. The teachers' fund for retirement is an "administrative agency" within the definition of that term under subsection 1 of North Dakota Century Code section 28-32-01.
- b. Rulemaking. North Dakota Century Code section 15-39.1-07 authorizes the board of trustees to adopt rules as may be necessary to fulfill the responsibilities of the board. The board follows the procedures established in North Dakota Century Code chapter 28-32 in adopting rules. The rules adopted by the board implement various statutory provisions set forth in North Dakota Century Code chapter 15-39.1.
- c. Administration. Administration rules for the state retirement and investment office as they pertain to the teachers' fund for retirement are contained in North Dakota Administrative Code title 103.
- 3. **Inquiries.** General inquiries and questions relating to policies of the board may be addressed sent to the executive director: address listed on the funds website at www.rio.nd.gov.

Executive Director

1930 Burnt Boat Drive P.O. Box 7100 Bismarck, ND 58502-7100

History: Amended effective August 1, 1983; November 1, 1985; September 1, 1990; November 1, 1994; January 1, 1998; May 1, 1998; May 1, 2000; **General Authority:** NDCC 15-39.1-07 **Law Implemented:** NDCC 28-32-02.1, 15-39.1-05.2, 54-52.5-02

Section 82-02-01-01 is amended as follows:

82-02-01-01. Definitions.

Unless made inappropriate by context, all words used in this title have the meanings given to them under North Dakota Century Code chapter 15-39.1. The following definitions are not established by statute and apply for the purpose of this title:

- 1. "Acceptance of benefit" means the benefit payment date that is the first calendar day of each month for benefits paid by paper check or electronic funds transfer to a financial institution.
- 2. "Account balance" or "value of account" means the member's accumulated contributions or assessments, plus the sum of any member purchase or repurchase payments, plus interest at an annual rate of six percent compounded monthly.
- 3. "Administrative" means to manage, direct, or superintend a program, service, or school district or other participating employer.
- 4. "Benefit payment date" means the date the member is paid a benefit which is the first day of the month. Benefits may be paid retroactive to a member's retirement date.
- 5. "Benefit service credit" means employment service used to determine benefits payable under the fund.
- 6. "Bonus" means an amount paid to a member in addition to regular contract salary which does not increase the member's base rate of pay, is not expected to recur or continue in future fiscal years, or is not expected to be a permanent salary increase. A bonus is not considered eligible retirement salary and is not subject to payment of member and employer contributions.

Bonuses include the following:

- a. Recruitment or contract signing payments defined in North Dakota Century Code section 15.1-09-33.1.
- b. Retention, experience, or service-related payments.
- c. Early retirement incentive payments, severance payments, or other payments conditioned on or made in anticipation of a member's retirement or termination.
- d. Payments made to recognize or reward a member's accomplishments or service.
- e. Other special or irregular payments which the board determines to be bonuses using criteria and documentation described in section 82-04-02-01.
- 7. "Cessation of employment" means severance or termination of employment.
- 8. "Contributions" means the assessments or payments made to the fund.
- 9. "Covered employment" means employment as a teacher in a North Dakota state agency, state institution, school district, special education unit, regional education association, or other governing body of a school district.
- "Covered payroll" means all amounts included in payroll, salary, or compensation paid to active members on which contributions to and benefits from the pension plan are based according to the definition of salary in subsection 10 of North Dakota Century Code section 15-39.1-04. Covered payroll may also be referred to as pensionable or eligible payroll, salary, compensation, or earnings.
- 11. "Dual member" is a member who is also a member of an alternative plan as defined in North

Dakota Century Code section 15-39.1-10.3.

- 11.12. "Eligibility service credit" means employment service used to determine vesting and benefit eligibility for dual members and qualified veterans under the Uniformed Services Employment and Reemployment Rights Act of 1994. Eligibility service credit is not used for benefit calculation purposes.
- <u>12.13.</u>"Extracurricular services" means outside of the regular curriculum of a school district or other participating employer which includes advising, directing, monitoring, or coaching athletics, music, drama, journalism, and other supplemental programs.
- 13.14. "Member" is a teacher as defined in North Dakota Century Code section 15-39.1-04 who is a participant in the fund.
- 14.<u>15.</u>"Participating employer" means the employer of a teacher, including a North Dakota state agency, state institution, school district, special education unit, area career and technology center, regional education association, or other governing body of a school district who contributes to the teachers' fund for retirement.
- 15.16. "Performance or merit pay" means an amount paid to a member pursuant to a written compensation plan or policy that links a member's compensation to attainment of specific performance goals and duties. The specific goals, duties, and performance measures under which performance pay is expected to be made must be determined in advance of the performance period and documented in writing. Performance or merit pay may be in addition to regular salary or may replace regular salary increases. Performance or merit pay is considered eligible retirement salary and subject to payment of member and employer contributions, unless the teachers' fund for retirement board determines the payments are ineligible salary using criteria and documentation described in section 82-04-02-01.
- <u>16.17.</u>"Plan year" means the twelve consecutive months commencing July first of the calendar year and ending June thirtieth of the subsequent year.
- 17.<u>18.</u>"Referee" means all sporting and nonsporting event judges and officials, including referees, umpires, line judges, scorekeepers, timekeepers, ticket takers, ushers, and other judges or officials.
- 18.19. "Retirement date" means the date selected by the member to begin retirement benefits. The benefit is calculated as of the retirement date and can be no earlier than the first or fifteenth day of the month following eligibility for retirement benefits or the first day of the month following eligibility for death benefits. Notwithstanding the foregoing a member's retirement will not be effective until the member accepts the first benefit payment.
- 19.20. "Salary reduction or salary deferral amounts under 26 U.S.C. section 125, 132(f), 401(k), 403(b), or 457" means amounts deducted from a member's salary, at the member's option, to these plans. These reductions or deferrals are part of salary when calculating retirement contributions. Employer contributions to plans specified in 26 U.S.C. section 125, 132(f), 401(k), 403(b), or 457 which are made for the benefit of the member will not be counted as retirement salary when calculating retirement contributions. Member contributions paid by the

employer under IRC section 414(h) pursuant to a salary reduction agreement do not reduce salary when calculating retirement contributions.

20.21. "Special teachers" include licensed special education teachers, guidance and school counselors, speech and language pathologists, social workers, school psychologists, librarians, media specialists, technology coordinators, program coordinators, and other staff members licensed by the education standards and practices board provided they are under contract with a school district or other participating employer to provide teaching, supervisory, administrative, or extracurricular services.

- 21.22. "Supervisory" means to have general oversight or authority over students or teachers, or both, of a school district or other participating employer.
- <u>22.23.</u>"Teaching" means to impart knowledge or skills to students or teachers, or both, by means of oral or written lessons, instructions, and information.
- 23.24. "Vested" means the status attained by a teacher when the teacher has earned three years of service credit for a tier one member or five years of service credit for a tier two member for covered employment in this state.
- 24.25."Written agreement" means a teaching contract, school board minutes, or other official document evidencing a contractual relationship between a teacher and participating employer.

History: Effective September 1, 1990; amended effective May 1, 1992; May 1, 1998; May 1, 2000; May 1, 2004; July 1, 2008; July 1, 2012; April 1, 2016;_____. General Authority: NDCC 15-39.1-07 Law Implemented: NDCC 15-39.1

CHAPTER 82-03-01

MEMBERSHIP IN THE FUND

Section

| 82-03-01-01 | Teachers' Withdrawal From Fund - Refund | | | |
|-------------------|---|--|--|--|
| 82-03-01-02 | Nonvested Teachers' Withdrawal From Fund - Refund [Repealed] | | | |
| 82-03-01-03 | Termination of Participation | | | |
| 82-03-01-04 | Repurchase of Forfeited Service Credit | | | |
| 82-03-01-05 | Purchase of Benefit Service Credit | | | |
| 82-03-01-06 | Veterans' Rights | | | |
| 82-03-01-07 | Nonrecognition of Waived Service Credit | | | |
| 82-03-01-08 | Dual Membership - Receipt of Retirement Benefits While Contributing to the Public | | | |
| | Employees Retirement System or the Highway Patrolmen's Retirement System | | | |
| 82-03-01-09 | Employer Service Purchase | | | |
| <u>82-03-0110</u> | Veteran's Exception – Proof of Qualified Military Retirement | | | |

Section 82-03-01-01 is amended as follows:

82-03-01-01. Teachers' withdrawal from fund - Refund.

When a teacher terminates covered employment, the teacher may claim a refund of assessments paid to the fund during membership. A teacher wishing to claim a refund of assessments must request an application from the administrative office, complete the form, and return it for processing. Once the application has been processed, the refund will be paid the first day of the month following the expiration of one hundred twenty calendar days from the last date of covered employment.

The waiting period may be waived by the board if the teacher produces evidence that the teacher will not be returning to covered employment in North Dakota. The following written evidence is required before the board will grant a waiver:

- 1. Proof of resignation or nonrenewal of contract;
- 2. Proof that the teacher's employer has accepted the resignation, i.e., letter or copy of official school board minutes; and
- 3. Proof that the individual has either accepted noncovered employment or permanently relocated out of state, or a medical statement from a medical doctor provider attesting to nonemployment during the upcoming school year for medical reasons.

No refund can be issued to a teacher who has terminated a teaching position only for the summer months or for a leave of absence.

History: Effective September 1, 1990; amended effective April 1, 1994; May 1, 1998; May 1, 2000;

General Authority: NDCC 15-39.1-07 Law Implemented: NDCC 15-39.1-20

Section 82-03-01-04 is amended as follows:

82-03-01-04. Repurchase of forfeited service credit.

An individual who has forfeited service credit under section 82-03-01-03 may

repurchase such service upon returning to teach or becoming an active dual member in accordance with the following:

- 1. An active teacher may immediately repurchase forfeited service credit upon returning to TFFRcovered employment. If the repurchase payment is made within five years of returning to teach, the repurchase cost must be the amount withdrawn plus interest.
- 2. An active <u>A dual</u> member of the public employees retirement system or the highway patrol retirement system may repurchase withdrawn service credit from the fund. If the repurchase is made within five years from the date of initial eligibility or July 1, 1987, the repurchase cost must be the amount withdrawn plus interest.
- 3. If the repurchase payment is not made within five years, the <u>The</u> cost of the remaining <u>repurchased</u> service credit will be calculated on an actuarial equivalent basis.
- 4. The cost may be paid in a lump sum or in installments. Installments may be made monthly, quarterly, semiannually, or annually for up to five years. Interest is charged on the unpaid balance based on the actuarially assumed investment return rate in effect at the time the member signs the installment agreement.
- 5. If a teacher retires prior to full payment of the repurchase amount, service credit will be granted in proportion to the actual principal payments made or the teacher may elect to make a lump sum payment to complete the purchase or elect to have the payments included in a refund of the account balance.
- 6. If a teacher passes away prior to full payment of the repurchase amount, service credit will be granted in proportion to the actual principal payments made or the designated beneficiary may elect to make a lump sum payment to complete the purchase or elect to have the payments included in a refund of the account balance.

History: Effective September 1, 1990; amended effective May 1, 1992; April 1, 1994; May 1, 1998; _____.

General Authority: NDCC 15-39.1-07 **Law Implemented:** NDCC <u>15-39.1-10.3</u>, <u>15-39.1-15</u>, 15-39.1-24 Section 82-03-01-10 is created as follows:

Section 82-03-01-10. Veteran's exemption – Proof of qualified military retirement.

A teacher applying for an exception to membership in the teachers' fund for retirement for retired military personnel must provide proof of at least twenty years of service in any branch of the armed forces of the United States on full-time active duty and proof of retirement with full military retirement benefits. The following documents will be accepted as proof of service and proof of military retirement benefits: military record of service, commonly referred to as DD214.

History: Effective , 20234 General Authority: NDCC 15-39.1-07 Law Implemented: NDCC 15-39.1-19.3

Section 82-05-01-01 is amended as follows:

82-05-01-01. Application for benefits.

A member or beneficiary must make written application for benefits on enrollment forms provided by the fund before benefits can be paid. The enrollment form must be signed by the member or beneficiary and notarized or witnessed by a plan representative. The form of payment option selected may not be changed after the first benefit payment has been accepted by the member or beneficiary except as allowed under section <u>82-05-01-03 and section</u> 82-05-02-02. If the member dies before accepting the first benefit payment, the member's beneficiary is eligible for death benefits the first day of the month following the member's death.

Retirement benefits may not be issued to a member who has terminated a teaching position only for the summer months or for a leave of absence.

History: Effective September 1, 1990; amended effective April 1, 1994; May 1, 2000; July 1, 2012;_____. General Authority: NDCC 15-39.1-07 Law Implemented: NDCC 15-39.1-10, 15-39.1-17

CHAPTER 82-05-02 FORMS OF BENEFIT PAYMENTS

Section82-05-02-01Standard Form of Benefit Payments82-05-02-02Optional Forms of Benefit Payments82-05-02-03Level Income Option [Repealed]82-05-02-04Retroactive Retirement Eligibility82-05-02-05Partial Lump Sum Distribution Option

Section 82-05-02-03 is repealed:-

82-05-02-03. Level income option. [Repealed]

A teacher who retires prior to social security normal retirement age may elect the level income option. This choice of benefit option is irrevocable once the teacher has begun receiving benefits. Under the level income option, the teacher's monthly benefit is adjusted so that the combined benefits received from the fund and social security remain level before, and after, the date social security benefits begin. The adjusted benefit payable from the fund must be determined on an actuarial equivalent basis. A teacher is not eligible for the level income option if the reduced level income benefit is less than two hundred dollars per month.

History: Effective September 1, 1990; amended effective May 1, 2000. Repealed effective , 2024. General Authority: NDCC 15-39.1-07 Law Implemented: NDCC 15-39.1-16

CHAPTER 82-05-03 PAYMENT OF BENEFITS

Section

82-05-03-01 When Benefit Payments Begin - Direct Deposit

82-05-03-02 Death Benefits - Proof of Death

82-05-03-03 Overpayment of Retirement Benefits - Write-Offs

82-05-03-04 Interest Payments - Interest Accrual on Account - Pre-Retirement Death

82-05-03-05 Erroneous Payment of Benefits – Overpayments

82-05-03-06 Erroneous Payment of Benefits – Underpayments

82-05-03-07 Erroneous Payment of Benefits – Appeals

Section 82-05-03-01 is amended as follows:

82-05-03-01. When benefit payments begin - Direct deposit.

If the teacher terminates covered employment or and becomes eligible for retirement benefits within the first fifteen days of the month, retirement benefits are paid beginning on the fifteenth first day of the month following the official date of retirement. If a teacher terminates covered employment or becomes eligible for retirement benefits after the first fifteen days of the month, retirement benefits are paid beginning the first day of the following the following month.

Annuity payments will be directly deposited to a teacher's account in a bank, credit union, savings and loan, or other financial institution provided that the financial institution is an automated clearing house (ACH) financial participant. The teacher must complete the official direct deposit form provided by the fund.

History: Effective September 1, 1990; amended effective May 1, 1998; _____. General Authority: NDCC 15-39.1-07 Law Implemented: NDCC 15-39.1-10

Section 82-05-03-03 is amended as follows:

82-05-03-03. Overpayment of retirement benefits - Write-offs.

<u>All overpayments must be collected using the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in like capacity and familiar with such matters would use in the conduct of an enterprise of like character and with like gains.</u> If the cost of recovering the amount of the overpayment of retirement benefits is estimated to exceed the overpayment, the teachers' fund for retirement board may consider the repayment to be unrecoverable and written off.

History: Effective April 1, 2016<u>; amended effective</u> General Authority: NDCC 15-39.1-07 Law Implemented: NDCC 15-39.1-29, 15-39.1-31

Section 82-05-03-04 is created as follows:

82-05-03-04. Interest payments - Interest accrual on account - Pre-retirement death.

The pre-retirement death benefit paid to any beneficiary shall be equal to the account value included accumulated interest up to the date of death. No interest shall continue to accrue to the account beyond the time of death of the member.

History: Effective ____, 20234

Section 82-05-03-05 is created as follows:

82-05-03-05. Erroneous Payment of Benefits – Overpayments.

<u>1. An "overpayment" means a payment of money by the teachers fund for retirement that results in a person receiving a higher payment than the person is entitled to under the provision of the retirement plan of membership.</u>

2. A person who receives an overpayment is liable to refund those payments upon receiving a written explanation and request for the amount to be refunded.

3. If the overpayment of benefits was not the result of any wrongdoing, negligence, misrepresentation, or omission by the recipient, the recipient may make repayment arrangements subject to the executive director's approval within sixty days of the written notice of overpayment with the minimum repayment amount no less than fifty dollars per month. If repayment arrangements are not in place within sixty days of the date of the written notice of overpayment, the executive director shall offset the amount of the overpayment from the amount of future retirement benefit payments so that the actuarial equivalent of the overpayment is spread over the benefit payment period.

4. If the overpayment of benefits was the result, in whole or in part, of the wrongdoing, negligence, misrepresentation, or omission of the recipient, the recipient is liable to pay simple interest charges at the rate of six percent on the outstanding balance to compensate the fund for lost earnings, from the time the erroneous benefit was paid through the time it has been refunded in full. Recovered funds are first applied to interest and, if any amount is left over, that amount is applied to principal. The recipient may make repayment arrangements, subject to the executive director's approval, within sixty days of the written request for refund with the minimum repayment amount no less than fifty dollars per month. If repayment arrangements are not in place within sixty days of the date of the written notice of overpayment, the executive director shall offset the amount of the overpayment from the amount of future retirement benefit payments so that the actuarial equivalent of the overpayment is spread over the benefit payment period.

5. If an individual dies prior to fully refunding an erroneous overpayment of benefits, the teachers' fund for retirement may make application to the estate of the deceased to recover the remaining balance.

History: Effective <u>, 20234.</u> General Authority: NDCC 15-39.1-07 Law Implemented: NDCC 15-39.1-17

Section 82-05-03-06 is created as follows:

82-05-03-06. Erroneous Payment of Benefits – Underpayments.

<u>1. An "underpayment" means a payment of money by the teachers' fund for retirement that results in a person receiving a lower payment than the person is entitled to under the provisions of the retirement plan of membership.</u>

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

<u>3. If the underpayment of benefits was not the result of any wrongdoing, negligence, misrepresentation, or omission by the employer or recipient, the underpayment of benefits is to include simple interest at the rate of six percent from the time the underpayment occurred.</u>

4. If the underpayment of benefits was the result, in whole or in part, of the wrongdoing, negligence, misrepresentation, or omission of the employer or recipient, the underpayment of benefits will not include simple interest.

5. If an individual dies prior to receiving the underpayment of benefits, the teachers' fund for retirement must pay the designated beneficiary on record or, in the absence of a designation of beneficiary, to the

<u>estate.</u>

History: Effective , 202<mark>34.</mark> General Authority: NDCC 15-39.1-07 Law Implemented: NDCC 15-39.1-17

Section 82-05-03-07 is created as follows:

82-05-03-07. Erroneous Payment of Benefits – Appeals.

A person not satisfied with repayment arrangements made under section 82-05-03-05 may appeal the executive director's decision in writing to the board. The written request must explain the basis of the appeal and must be received in the office within sixty days of the executive director's written decision.
 The board may release a person from liability to refund an overpayment, in whole or in part, if it determines: a. The receipt of overpayment is not the fault of the recipient. b. It would be contrary to equity and good conscience to collect the refund.

History: Effective , 202<mark>34.</mark> General Authority: NDCC 15-39.1-07 Law Implemented: NDCC 15-39.1-17 Section 82-05-04-02 is amended as follows:

82-05-04-02. Actuarial factors - Optional payment forms.

Under the optional joint and survivor, term certain and life, <u>and partial lump sum and level income</u> forms of annuity payment shall be based on the following actuarial assumptions:

- 1. Interest rate 7.25 percent per year, compounded annually.
- 2. Member's mortality (used for nondisabled members) A mortality table constructed by blending thirty percent of the mortality rates under a combination of PubT-2010 employee and PubT-2010 healthy retiree tables for males, adjusted by one hundred four percent for ages fifty-five and older, and projected to 2022 using projection scale MP-2019, with seventy percent of the mortality rates under a combination of PubT-2010 employee and PubT-2010 healthy retiree tables for females, adjusted by one hundred four percent for ages fifty-five and older, and projected to 2022 using projection scale MP-2019.
- 3. Beneficiary's mortality A mortality table constructed by blending seventy percent of the mortality rates under a combination of PubT-2010 employee and Pub-2010 contingent survivor tables for males, adjusted by ninety-five percent for ages forty-five and older, and projected to 2022 using projection scale MP-2019, with thirty percent of the mortality rates under a combination of PubT-2010 employee and Pub-2010 contingent survivor tables for females, adjusted by ninety-five percent for ages forty-five and older and projected to 2022 using projection scale MP-2019. Mortality tables for survivors under age eighteen use the RP-2014 juvenile tables with fifty percent blending of the male/female rates and projected to 2022 using projection scale MP-2019.
- 4. Disabled member's mortality A mortality table constructed by blending thirty percent of the mortality rates under the PubNS-2010 non-safety disabled mortality table for males, projected to 2022 using projection scale MP-2019, with seventy percent of the mortality rates under the PubNS-2010 non-safety disabled mortality table for females, projected to 2022 using projection scale MP-2019.

In addition, the above actuarial assumptions shall be used to determine actuarial equivalence for other purposes not covered by sections 82-05-04-01, 82-05-04-03, and 82-05-04-04, such as the determination of the reduction to a member's benefit because of the existence of a qualified domestic relations order.

History: Effective May 1, 2000; amended effective May 1, 2004; July 1, 2008; April 1, 2016; July 1, 2021;______.

General Authority: NDCC 15-39.1-07 **Law Implemented:** NDCC 15-39.1-16, 15-39.1-24 Section 82-05-06-01 is amended as follows:

82-05-06-01. Retiree reemployment reporting requirements.

Participating employers and retirees must complete and submit a <u>"TFFR Retired Member Employment Notification"</u> form required by the fund and a copy of the employment contract within thirty days of the retired member's return to covered employment.

Time spent performing extracurricular duties and attending professional development sessions is excluded from the annual hour limit. Extracurricular duties include those duties outlined in the extracurricular schedule of a participating employer's master agreement, unless the duty was part of the retiree's regular job duties and base salary prior to retirement. Employer and member contributions are required to be paid based on the employer payment plan model. Contributions are calculated on the retirement salary paid to the reemployed retiree, including salary for extracurricular duties and professional development.

Employer and member contributions are required to be paid on salary earned by retirees who perform in-staff subbing duties while under contract with a teachers' fund for retirement participating employer.

Retirees who perform regular substitute teaching duties and are not under contract with that teachers' fund for retirement participating employer are not subject to the annual hour limit and employer and member contributions are not required to be paid.

History: Effective July 1, 2008; amended effective July 1, 2012;______. **General Authority:** NDCC 15-39.1-07 **Law Implemented:** NDCC 15-39.1-19.1, 15-39.1-19.2

82-07-01-01. Definitions.

The following definitions govern the determination of disability benefits under the fund:

- 1. "Medical examination" means an examination conducted by a licensed medical doctor provider or a psychologist that includes a diagnosis of the disability, the treatment being provided for the disability, the prognosis and classification of the disability, and a statement indicating how the disability prevents the individual from performing the duties of a teacher.
- 2. "Permanent disability" means a condition of "<u>and</u> total disability" that is static or deteriorating and the prognosis does not indicate an anticipated recovery from the disability means the inability to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or has lasted or can be expected to last for a continuous period of not less than twelve months and results in the individual's inability to perform the duties of a teacher.
- 3. "Temporary disability" means a condition of "total disability" that is expected to last at least twelve months, but is not considered permanent.
- 4. "Total disability" means any medically determinable physical or mental impairment that is expected to last for a continuous period of not less than twelve months and results in the individual's inability to perform the duties of a teacher. "Total disability" includes conditions of "temporary disability" and "permanent disability" as defined in this section.

History: Effective September 1, 1990; amended effective May 1, 1998; July 1, 2008; **General Authority:** NDCC 15-39.1-07 **Law Implemented:** NDCC 15-39.1-18

Section 82-07-01-03 is amended as follows:

82-07-01-03. Determination of disability - Procedures.

The following procedures govern the determination of disability benefits under the fund:

1. Application process.

- a. Application for disability benefits must be made within thirty-six months from the last date of covered employment on the form provided by the fund. On a case-by-case basis, the board may extend the thirty-six month period.
- b. If the fund member is unable or unwilling to file an application, the member's employer or legal representative may file the member's disability application.
- c. The application must describe the disability, explain the cause of the disability, the limitations caused by the disability, the treatment being followed, the efforts by the employer and the member to implement reasonable accommodations, and the effect of the disability on the individual's ability to perform as a teacher.
- d. Applicants shall be provided information on potential services offered by the office of vocational rehabilitation.
- e.d. The employer's statement of disability must provide information about the member's sick leave benefits, explain how the disability affects the performance of the teaching duties, include a detailed listing of job duties, and describe efforts to provide reasonable accommodation for the member.

2. Medical examination process.

- a. The applicant for disability retirement must provide the fund with medical examination reports.
- b. An initial medical examination should be completed by the member's attending or family physician medical provider on the medical examination form provided by the fund. If deemed necessary by the fund's medical consultant, an additional examination must be completed by a specialist in the disability involved. Available medical or hospital reports may be accepted in lieu of a medical examination report if deemed acceptable by the fund's medical consultant.
- c. The fund is not liable for any costs incurred by the applicant in undergoing medical examinations and completing and submitting the necessary medical examination reports, medical reports, and hospital reports.
- d. A medical examination report is not necessary if the applicant provides written proof documenting eligibility for disability benefits under the Social Security Act. In such cases, the applicant is eligible for disability benefits under North Dakota Century Code section 15-39.1-18 without submitting further medical information to the fund but is subject to recertification requirements specified in this chapter.

3. Medical consultant review.

- a. The fund shall retain a medical-doctor <u>provider</u> to act as its consultant and evaluate and make recommendations on disability retirement applications.
- b. The medical consultant shall review all medical information provided by the applicant.
- c. The medical consultant shall advise the board regarding the medical diagnosis and whether the condition is a "permanent and total disability" or "temporary disability".

4. Decision.

- a. The board shall consider applications for disability retirement at regularly scheduled board meetings. The discussion concerning disability applications must be confidential and closed to the general public.
- b. The applicant must be notified of the time and date of the meeting and may attend or be represented.
- c. The executive director <u>or designee</u> shall provide to the board for its consideration a case history brief that includes membership history, medical examination summary, and the medical consultant's conclusions and recommendations.
- d. The board shall make the determination for eligibility at the meeting unless additional evidence or information is needed.
- e. The executive director <u>or designee</u> may make an interim determination concerning eligibility for disability retirement benefits when the medical consultant's report verifies that a <u>permanent and</u> total <u>or temporary</u> disability exists. However, the board must review the interim determination and make a final determination at its next regularly scheduled board meeting unless additional evidence or information is needed.
- f. The applicant shall be notified in writing of the decision.
- g. If the applicant is determined to be eligible for disability benefits, the disability annuity is payable on, or retroactive to, the first day of the month following the member's last day of

paid employment.

h. If the applicant is determined not to be eligible for disability benefits, the executive director or designee shall advise the applicant of the appeal procedure.

Redetermination and recertification. 5.

- A disabled annuitant is subject to redetermination and recertification to maintain eligibility. a. The schedule for redetermination and recertification must be as follows:
 - (1) Temporary disability. On July first, following Following the first anniversary date of disability retirement, and every two years thereafter (unless normal retirement is reached). No further recertification is required after the fourth recertification of temporary disability has been filed and accepted. Basis recovery will begin when the member reaches normal retirement age.
 - (2) Permanent and total disability. On July first, following Following the second anniversary date of disability retirement, and five years thereafter unless normal retirement is reached. No further recertification is required after the second recertification of permanent disability has been filed and accepted. Basis recovery will begin when the member reaches normal retirement age.
- The fund may require additional recertifications, or waive the necessity for a recertification, b. if the facts warrant this action.

When a member who is drawing disability benefits is also eligible for normal retirement benefits at the time disability benefits commence, recertification will cease according to the following schedule:

| Before age 60 | Age 65 |
|-----------------------------------|---------|
| At or after age 60, before age 65 | 5 years |
| At or after age 65, before age 69 | Age 70 |
| At or after age 69 | 1 year |

Basis recovery will also begin according to the above schedule.

- C. The fund will send a recertification form to the disabled annuitant to be completed and sent back to the fund.
- d. The fund may require the disabled annuitant to be reexamined by a doctor medical provider at the annuitant's own expense. The submission of medical reports by the member, and the review of those reports by the fund's medical consultant, may satisfy the reexamination requirement.
- The executive director must make the redetermination and recertification decision and e. bring the matter to the board only if warranted. The disability annuitant may appeal an adverse recertification decision to the board in the same manner as the initial determination.
- f. If it is determined that the disability annuitant was not eligible for benefits during any time period when benefits were provided, the executive director may do all things necessary to recover the erroneously paid benefits.

History: Effective September 1, 1990; amended effective April 1, 1994; May 1, 1998; May 1, 2000; July 1, 2012;

Law Implemented: NDCC 15-39.1-18

Section 82-07-03-01 is amended as follows:

82-07-03-01. Forms of disability benefits.

Except for the level income with social security and partial lump sum distribution options option, all optional forms of retirement benefits are available to members entitled to disability retirement annuities.

History: Effective September 1, 1990; amended effective May 1, 1998; July 1, 2012; _____. **General Authority:** NDCC 15-39.1-07 **Law Implemented:** NDCC 15-39.1-18

82-07-04-01. Suspension of disability benefits.

- 1. When a member receiving disability retirement benefits is not recertified as eligible for continued benefits, the board shall presume the member does not have a "total disability" and the disability benefits must cease on the first day of the month following the date the member is not recertified eligible for continued benefits.
- 2. When a member receiving disability retirement benefits returns to active teaching in North Dakota or out of state, the board shall do one of the following:
 - a. Presume the member does not have a "total disability" and, pursuant to subsection 3 of North Dakota Century Code section 15-39.1-18, suspend the member's disability benefits on the first day of the month following the date the member returns to active teaching.
 - b. If the member consents, allow continued payment of the disability benefit for up to six months to permit a member who has partially recovered from the disability to return to active teaching on a trial basis. If the member terminates employment prior to the end of the trial period as set by the board, the board shall not deem the member recovered under North Dakota Century Code section 15-39.1-18, and the member's benefits must continue as permitted under North Dakota Century Code chapter 15-39.1 and this title. If, at the end of the trial period, the member has not terminated employment, the board shall presume the member does not have a "total disability" qualified disability and shall suspend the member's disability benefits on the first day of the month following the date the member's trial period ends pursuant to North Dakota Century Code section 15-39.1-18. A member who has had their disability benefit terminated under this section must reaaply to receive any future disability benefit after the conclusion of any trial period.

History: Effective September 1, 1990; amended effective May 1, 1998; July 1, 2008; _____. General Authority: NDCC 15-39.1-07 Law Implemented: NDCC 15-39.1-18, 15-39.1-19.1

82-08-01-03. Format for a qualified domestic relations order.

A qualified domestic relations order must be substantially in the following form:

| STATE OF NORTH DAKOTA COUNTY OF | | IN DISTRICT COURT |
|---------------------------------|---|--------------------|
| , |) | |
| |) | |
| Plaintiff, |) | |
| |) | QUALIFIED DOMESTIC |
| |) | RELATIONS ORDER |
| -VS- |) | |
| |) | Case No |
| |) | |
| , |) | |
| Defendant. |) | |
| | | |

ACTIVE OR INACTIVE MEMBERS

This Order is intended to meet the requirements of a "Qualified Domestic Relations Order" relating to the North Dakota Teachers' Fund for Retirement, hereafter referred to as the "Plan". The Order is made pursuant to North Dakota Century Code section 15-39.1-12.2. The Order is an integral part of the judgment entered on [DATE OF DIVORCE] granting a divorce to the above-entitled parties. [This Order is also drawn pursuant to the laws of the state of North Dakota relating to the equitable distribution of marital property between spouses and former spouses in actions for dissolution of a marriage.] or [This Order is drawn pursuant to the laws of the state of North Dakota relating to the provision of child support to a minor child in actions for dissolution of a marriage.]

BACKGROUND INFORMATION

[MEMBER'S NAME AND SOCIAL SECURITY NUMBER] is the participating member whose lastknown address is [MEMBER'S ADDRESS]. The member's date of birth is [MEMBER'S D.O.B.].

[ALTERNATE PAYEE'S NAME AND SOCIAL SECURITY NUMBER] is the alternate payee whose last-known address is [ALTERNATE PAYEE'S ADDRESS]. The alternate payee's date of birth is [ALTERNATE PAYEE'S D.O.B.].

The participating member and the alternate payee were married on [DATE OF MARRIAGE]. IT IS HEREBY ORDERED THAT:

I. BENEFITS

Benefits under the plan are distributed as follows: (Choose one)

1. The alternate payee is awarded [<u>%</u>] of the member's accrued <u>monthly</u> annuity benefit as of [<u>DATE OF DIVORCE</u>]; (OR)

2. The alternate payee is awarded [<u>\$</u>] of the member's accrued <u>monthly</u> annuity benefit as of [<u>DATE OF DIVORCE</u>].

If payments to the alternate payee begin prior to the member's sixty-fifth birthday, such benefits shall be reduced actuarially, except that if the member retires or dies prior to the member's sixty-fifth birthday, the alternate payee shall receive a commensurate share of any early retirement subsidy, beginning as of the date of the member's retirement or death. Such increase shall be determined actuarially.

II. TIME OF BENEFIT RECEIPT

Benefit payments to the alternate payee will begin: (Choose one)

- 1. When the participating member qualifies for normal retirement benefits under the plan. (OR)
- 2. When the participating member qualifies for early retirement. (OR)
- 3. When the alternate payee reaches [DATE OR EVENT]. The date or event must be after the date participating member would qualify for early retirement. (OR)
- 4. When the participating member retires and begins receiving retirement benefits from the plan.

Benefits to the alternate payee are payable even if the member has not separated from covered employment. In all cases, the payment will not begin later than when the participating member retires.

If the participating member begins receiving disability retirement benefits, the alternate payee will also begin receiving the benefits awarded in section I of this Order. The alternate payee's benefit will begin when the member's benefits begin and will be actuarially reduced to reflect the earlier disability payment start date.

III. DURATION OF PAYMENTS TO ALTERNATE PAYEE OVER THE LIFE OF THE ALTERNATE PAYEE (Choose one)

1. The payments shall be made to the alternate payee on a monthly basis over the life of the alternate payee and shall cease upon the alternate payee's death and will not revert back to the member. The payment shall be calculated on the basis of a single life annuity and will be actuarially adjusted based upon the plan's assumptions to reflect the life expectancy of the alternate payee.

(OR)

2. The payments shall be made to the alternate payee on a monthly basis over the life of the alternate payee and calculated on the basis of:

(Choose one)

- (a) a 20-year term certain and life option; (OR)
- (b) a 10-year term certain and life option.

The payment will be actuarially adjusted based upon the plan's assumptions to reflect the life expectancy of the alternate payee.

Upon the alternate payee's death, payments will not revert back to the member, but will continue to the alternate payee's designated beneficiary under the term certain and life option identified above.

IV. MEMBER WITHDRAWS FROM RETIREMENT SYSTEM (Choose one)

A. If the participating member discontinues employment and withdraws the member account in a

lump sum, the alternate payee shall receive [____%] of the member's account balance as of [DATE OF DIVORCE] accumulated with interest as required by the Plan from the divorce date until the refund is paid; (OR)

B. If the participating member discontinues employment and withdraws the member account in a lump sum, the alternate payee shall receive [<u>\$</u>] from the member's account balance accumulated with interest as required by the Plan from [DATE OF DIVORCE] until the refund is paid. [Note: The dollar amount in this option cannot exceed the member's account balance.]

V. LIMITATIONS OF THIS ORDER (Order must reflect all provisions of this section.)

- A. This Order recognizes the existence of the right of the alternate payee to receive all OR a portion of the benefits payable to the participating members as indicated above.
 - B. Nothing contained in this Order shall be construed to require any Plan or Plan administrator:
 - 1. To provide to the alternate payee any type or form of benefit or any option not otherwise available to the participating member under the Plan.
 - 2. To provide the alternate payee benefits, as determined on the basis of actuarial value, not available to the participating member.
 - 3. To pay any benefits to the alternate payee which are required to be paid to another alternate payee under another order previously determined by the Plan administrator to be a qualified domestic relations order.
 - 4. To provide to the alternate payee any increased benefit due to the participating member under the disability provisions of this plan.
- C. If the alternate payee dies prior to beginning receipt of benefits under this Order, the entire amount that may be due to the alternate payee reverts to the participating member.
- D. If the participating member dies prior to retirement and before the alternate payee begins benefits, the alternate payee will receive [___%] share of the member's survivor benefits based on service as of [DATE OF DIVORCE]. The alternate payee and any other beneficiaries will each select their own form of survivor benefit.

If the alternate payee is already in payment, the benefits will continue and the value of the benefits to the alternate payee will reduce any survivor payment to other beneficiaries.

- E. The benefit enhancements provided by the North Dakota legislature for service during the marital relationship which are adopted after the end of the marital relationship apply to the alternate payee's portion of benefits under this Order.
- F. If participant or alternate payee receives any distribution that should not have been paid per this Order, the participant or alternate payee is designated a constructive trustee for the amount received and shall immediately notify RIO and comply with written instructions as to the distribution of the amount received.
- G. Alternate payee is ORDERED to report any payments received on any applicable income tax return in accordance with Internal Revenue Code provisions or regulations in effect at the time any payments are issued by RIO. The plan is authorized to issue Form 1099R, or other applicable form on any direct payment made to alternate payee. Plan participant and alternate payee must comply with Internal Revenue Code and any applicable regulations.
- H. Alternate payee is ORDERED to provide the plan prompt written notification of any changes in alternate payee's mailing address. RIO shall not be liable for failing to make payments to alternate payee if RIO does not have current mailing address for alternate payee at time of

payment.

- I. Alternate payee shall furnish a certified copy of this Order to RIO.
- J. The Court retains jurisdiction to amend this Order so that it will constitute a qualified domestic relations order under the plan even though all other matters incident to this action or proceeding have been fully and finally adjudicated. If RIO determines at any time that changes in the law, the administration of the plan, or any other circumstances make it impossible to calculate the portion of a distribution awarded to alternate payee by this Order and so notifies the parties, either or both parties shall immediately petition the Court for reformation of the Order.

Signed this ______ day of ______, 20____.

(Judge Presiding)

OR RETIRED MEMBERS

This Order is intended to meet the requirements of a "Qualified Domestic Relations Order" relating to the North Dakota Teachers' Fund for Retirement, hereafter referred to as the "Plan". The Order is made pursuant to North Dakota Century Code section 15-39.1-12.2. The Order is an integral part of the judgment entered on [DATE OF DIVORCE] granting a divorce to the above-entitled parties. [This Order is also drawn pursuant to the laws of the state of North Dakota relating to the equitable distribution of marital property between spouses and former spouses in actions for dissolution of a marriage.] or [This Order is drawn pursuant to the laws of the state of North Dakota relating to the provision of child support to a minor child in actions for dissolution of a marriage.]

BACKGROUND INFORMATION

[MEMBER'S NAME AND SOCIAL SECURITY NUMBER] is the participating member whose lastknown address is [MEMBER'S ADDRESS]. The member's date of birth is [MEMBER'S D.O.B.].

[ALTERNATE PAYEE'S NAME AND SOCIAL SECURITY NUMBER] is the alternate payee whose last-known address is [ALTERNATE PAYEE'S ADDRESS]. The alternate payee's date of birth is [ALTERNATE PAYEE'S D.O.B.].

The participating member and the alternate payee were married on [DATE OF MARRIAGE].

IT IS HEREBY ORDERED THAT:

I. BENEFITS

Benefits to the participating member under the plan are distributed as follows: (Choose one)

- 1. The alternate payee is awarded [<u>%</u>] of the monthly retirement benefit as of [<u>DATE OF</u> <u>DIVORCE</u>]; (OR)
- 2. The alternate payee is awarded [<u>\$</u>] of the monthly retirement benefit as of [<u>DATE OF</u> <u>DIVORCE</u>].

II. TIME OF BENEFIT RECEIPT.

The benefits are payable to the alternate payee in the month following receipt of this signed Order by the plan or plan administrator as the participating member is currently retired and receiving benefits under the Plan.

III. DURATION OF BENEFITS TO ALTERNATE PAYEE OVER THE LIFE OF THE PARTICIPATING

MEMBER

The payments shall be made to the alternate payee on a monthly basis over the life of the participating member and, if applicable, a continuing monthly annuity will be payable to the surviving alternate payee after the member's death. The amount of the payments to the alternate payee will be calculated on the basis of: (Choose the annuity option in existence at the time of the divorce or legal separation.)

- (1) Single life annuity option (<u>OR</u>)
- (2) 100% joint and survivor option (OR)
- (3) 50% joint and survivor option (<u>OR</u>)
- (4) 20-year term certain and life option (<u>OR</u>)
- (5) 10-year term certain and life option.

If the alternate payee is the designated beneficiary, the alternate payee must remain as the beneficiary under the joint and survivor options.

IV. LIMITATIONS OF THIS ORDER (Order must reflect all provisions of this section.)

- A. This Order recognizes the existence of the right of the alternate payee to receive all OR a portion of the benefits payable to the participating members as indicated above.
 - B. Nothing contained in this Order shall be construed to require any Plan or Plan administrator:
 - 1. To provide to the alternate payee any type or form of benefit or any option not otherwise available to the participating member under the Plan.
 - 2. To provide the alternate payee benefits, as determined on the basis of actuarial value, not available to the participating member.
 - 3. To pay any benefits to the alternate payee which are required to be paid to another alternate payee under another order previously determined by the Plan administrator to be a qualified domestic relations order.
- C. If the provisions of this Order are applied to disability benefits, the benefits will cease to all parties upon the member's recovery. The parties will then need to submit a new order to allow for the equitable distribution of any future benefits payable from the plan.
- D. Upon the alternate payee's death, if the member is still surviving, the entire amount that may be due to the alternate payee reverts to the participating member. Upon the member's death, if the alternate payee is still surviving, the entire benefit will cease under a single life option.

Under a joint and survivor option, the alternate payee will receive the one hundred percent or fifty percent survivor benefit for the remainder of the alternate payee's life, since the alternate payee is the joint annuitant. If a term certain option was selected, and the member passes away before the term certain period has expired while the alternate payee is still living, then the benefit to the alternate payee will continue and the member's portion will continue to the member's designated beneficiary to complete the term certain period. If in the last case, the alternate payee dies before all payments due under the certain period have been made, the alternate payee's share will continue to the alternate payee's designated beneficiary.

E. The benefit enhancements provided by the North Dakota legislature for service during the marital relationship which are adopted after the end of the marital relationship apply to the alternate payee's portion of benefits under this Order.

- F. If the participant or alternate payee receives any distribution that should not have been paid per this Order, the participant or alternate payee is designated a constructive trustee for the amount received and shall immediately notify RIO and comply with written instructions as to the distribution of the amount received.
- G. Alternate payee is ORDERED to report any payments received on any applicable income tax return in accordance with Internal Revenue Code provisions or regulations in effect at the time any payments are issued by RIO. The plan is authorized to issue Form 1099R, or other applicable form on any direct payment made to alternate payee. Plan participant and alternate payee must comply with the Internal Revenue Code and any applicable regulations.
- H. Alternate payee is ORDERED to provide the plan prompt written notification of any changes in alternate payee's mailing address. RIO shall not be liable for failing to make payments to alternate payee if RIO does not have current mailing address for alternate payee at time of payment.
 - I. Alternate payee shall furnish a certified copy of this Order to RIO.
- J. The Court retains jurisdiction to amend this Order so that it will constitute a qualified domestic relations order under the plan even though all other matters incident to this action or proceeding have been fully and finally adjudicated. If RIO determines at any time that changes in the law, the administration of the plan, or any other circumstances make it impossible to calculate the portion of a distribution awarded to alternate payee by this Order and so notifies the parties, either or both parties shall immediately petition the Court for reformation of the Order.

Signed this ______, 20 _____,

(Judge Presiding)

History: Effective April 1, 1994; amended effective January 1, 1998; May 1, 1998; May 1, 2002; May 1, 2004;_____.

General Authority: NDCC 15-39.1-07 **Law Implemented:** NDCC 15-39.1-12.2

103-01-01. Organization of the state retirement and investment office.

1. Organization and administration.

- a. History. Chapter 667 of the 1989 Session Laws created the state retirement and investment office with the law expiring on June 30, 1991. Chapter 628 of the 1991 Session Laws extended the expiration date until June 30, 1993. In 1993, the legislative assembly repealed the expiration date creating North Dakota Century Code chapter 54-52.5. The office was created to coordinate the activities of the state investment board and the teachers' fund for retirement.
- b. Governing authority. The state investment board is the governing authority of the state retirement and investment office. This authority is established by North Dakota Century Code section 54-52.5-02. The board is responsible for overseeing and operating the agency to coordinate the activities of the state investment board and the teachers' fund for retirement.
- 2. Description of portion of organization and functions subject to North Dakota Century Code chapter 28-32. The state retirement and investment office is an administrative agency under subsection 1 of North Dakota Century Code section 28-32-01.
- 3. **Inquiries.** General inquiries and questions may be addressed sent to the address listed on the agency website at www.rio.nd.gov.=

Retirement and Investment Office 1930 Burnt-Boat Drive

P.O. Box 7100

Bismarck, ND 58507-7100

Telephone: 701-224-4885

800-952-2970 Fax: 701-224-4897



Retirement & Investment

MEMORANDUM

TO:TFFRFROM:Jan Murtha, Executive DirectorDATE:January 19, 2024RE:RMD Implementation

On November 16, 2023 the Board approved and the Employee Benefits Programs Committee authorized an interim change in ND Century Code related the age of required minimum distributions to maintain compliance with federal law. Information regarding those presentations may be found at:

Employee Benefits Programs Committee | North Dakota Legislative Branch (ndlegis.gov)

tffrmat20231116.pdf (nd.gov)

Implementation of the change affects both communications and program operations.

- A. Communication: The change in law will be noted in the Member Handbook when the handbook is next updated online. It is anticipated that changes to the Member Handbook will be published in March 2024. In addition, information notifying active members of the change will be included in the next member newsletter, also scheduled to be published in March 2024. Currently inactive members are only contacted through a direct mailing when they near the RMD age. This is a very manual process that we hope to improve upon with the new system.
- B. Operations: Currently, Retirement Services runs an annual report to determine which members are nearing RMD age, followed by a direct mailing containing information on the rule and appropriate applications. This process will continue until the launch of the new system which we anticipate will automatically generate form communications that will be delivered electronically to affected members. The report will be updated to reflect the new RMD age.

Board Action Requested: Information only.



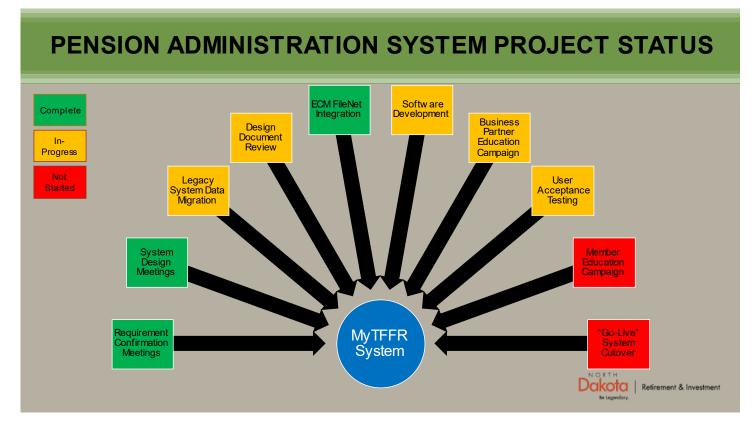
Retirement & Investment

MEMORANDUM

| TO: | TFFR |
|-----|------|
| | |

- FROM: Chad R. Roberts, DED/CRO
- DATE: January 4, 2023
- RE: January 2024 pension administration system project update

Project Status



User acceptance testing has begun. This is an important milestone, as it allows Retirement Services and Fiscal staff to see the working product and begin to test processes and scenarios to ensure that the system is functioning appropriately. The user acceptance testing will continue through the end of August 2024 as additional elements of the system build are released for testing.

Data migration and testing slowed some during the months of November and December due to infrastructure issues faced by the vendor because of an offshore data breach and flooding in India. The incidents affected the servers and structure in India however, it did not expose any TFFR member data or other proprietary data. Data migration has resumed and is anticipated to finish on schedule.

The FileNet document migration to allow the new system to both utilize FileNet going forward and to retrieve existing documents from FileNet is now complete.

Budget Status

The project remains slightly under budget by approximately \$60,000 due to the savings found through the elimination of the SharePoint licensing listed in the contract by using the existing State SharePoint licensing.

Unanticipated Issues

As mentioned above, there was both a data breach and mass flooding in India where the vendor has significant human and infrastructure resources. No TFFR member data was exposed in the breach since our contract requires all data to reside within the contiguous United States and Canada.

The breach and subsequent flooding did however cause a near full stop in production and development on the vendor's side. Operations have since resumed, and the vendor is confident they can still meet deadlines and are making up for lost time.

Board Action Requested: Information only

Confidential materials will be sent to Board members via secure link.



MEMORANDUM

- TO: TFFR Board of Trustees
- FROM: Chad R. Roberts, DED/CRO
- DATE: January 23, 2024
- RE: FY 2023 Annual Ends Report

<u>Summary</u>

Attached is the Annual Ends Report for TFFR for the 2023 Fiscal Year. The report summarizes and provides metrics for performance of the program to demonstrate the program is adhering to policies and expectations of the TFFR Board and the SIB.

The report addresses four key areas: membership data and contributions, member services, account claims, and trust fund evaluation and monitoring.

Board Action Requested: Acceptance.

A quick look back

FY2023 TFFR ANNUAL ENDS REPORT

Chad R. Roberts, MAcc – DED/CRO



Retirement & Investment

Be Legendary.

WHAT DOES AN ENDS REVIEW COVER?

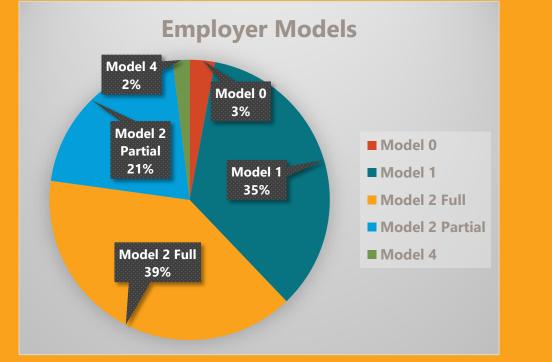
- Membership and Contributions
 - Contributions
 - Business partner summary
 - Business partner outreach programs and communications

- Member Services
 - Outreach programs
 - Member communications
 - Online portal usage

WHAT DOES AN ENDS REVIEW COVER?

- Account Claims
 - Payments to members and beneficiaries
 - Refunds, rollovers, & transfers
 - Service credit purchases

- Trust Fund Monitoring
 - Actuarial services
 - External audit
 - Internal audit
 - Awards and recognition



Participating Employers

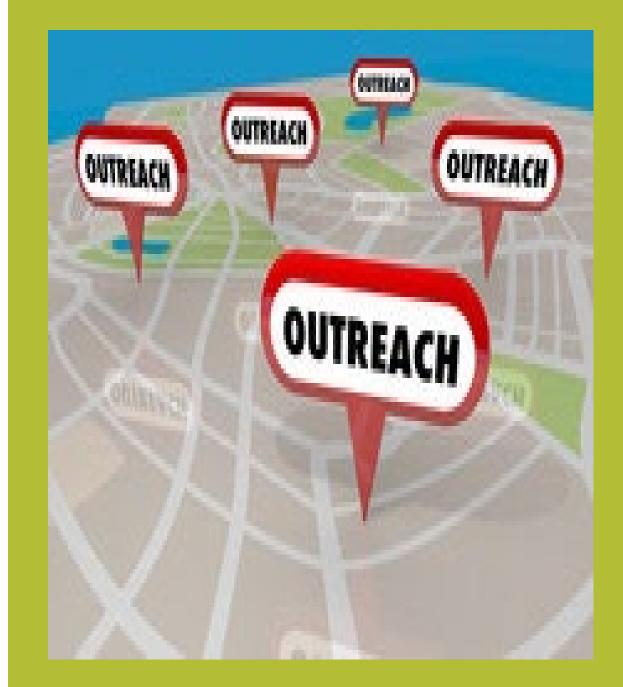


CONTRIBUTIONS

- Employers contributed \$102,307,888
 - An increase of 1.9% over FY2022
- Members contributed \$94,283,739
 - An increase of 1.9% over FY2022
- Total employers decreased to 206 in FY2023 from 207 in FY2022
- 180 employers (87%) used the online portal for reporting
 - Slight uptick in usage over FY2022 (177)
- 14 employers changed their models
 - Four changed from model 1 to model 2
 - One changed from model 0 to model 2
 - One changed from mode 0 to model 1 ⁴

BUSINESS PARTNER OUTREACH

- Conferences as vendor
 - Booth at NDCEL 2022
 - Booth at NDSBA 2022
 - Booth at Business Manager Association 2023
- New business manager virtual training
 - Nov 2022 and Feb 2023
 - 40 attended total
- Virtual info mixers for Business Partners
 - Oct 2022, Dec 2022, Jan 2023, March 2023, and Apr 2023
 - 185 attended total
- 3 issues of "Briefly" newsletter produced
 - Oct 2022, Jan 2023, and Apr 2023





Members Participating in Outreach

MEMBER SERVICES

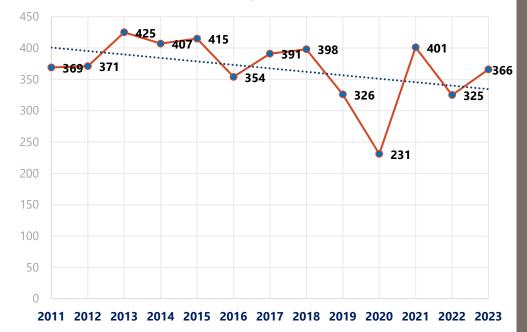
- Members registered for TFFR portal
 - Active 37%
 - Retired 28%
 - Total 8,778
 - Increase of 10.4% over FY2022
- Group benefit presentations
 - Eight in-person sessions throughout state
 - 261 total attendees
 - Two virtual sessions
 - 84 total attendees
- Individual benefit meetings
 - 58 total sessions
- Retirement education workshops
 - One in-person held in Bismarck
 - 44 attendees

ACCOUNT CLAIMS

- Distributed \$262,282,053 total payments in FY2023
 - Increase of 3.97% over FY2022
- \$253,704,476 total regular benefits
 - Increase of 3.79% over FY2022
 - \$28,539 average benefit paid
- \$7,920,125 total refunds issued
 - 9.8% increase over FY2022
- \$657,452 total partial lump sum payments
 - 3.2% increase over FY2022
- Payment trends
 - Number of retirements up 11.2%
 - Average benefit increased 2.10%









TFFR Fund Actuarial Valuation

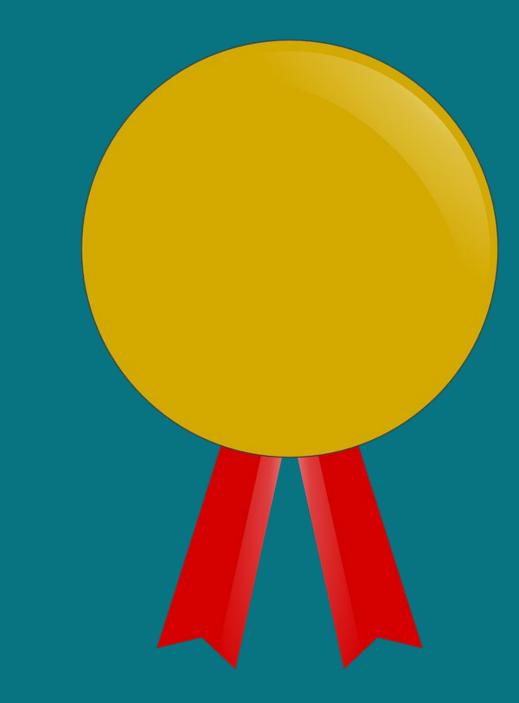


TRUST FUND MONITORING

- FY2023 valuation completed in October 2023
 - AVB increased to 71.21% from 69.93%
 - ADC increased to 12.50% from 12.12%
 - Still below current 12.75% contribution rate of employers
 - Effective funding period increased to 20 years from 19 years
- FY2023 Membership trends
 - Active membership decreased to 11,766 from 11,802
 - Average age decreased to 41.2 from 41.3
 - Retirees increased to 8,567 from 8,424
 - Disabilities increased to 123 from 121
 - Total members increased to 25,102 from 24,490

AUDITS AND AWARDS

- Retirement Services and Internal Audit have become more collaborative
 - Internal Audit attends Retirement Services staff meetings
 - Internal Audit is a member of the core PAS project team
 - Internal Audit is assisting with the development of the compliance program
 - Compliance conducted full review of FY 2021 and FY2022 deaths, refunds, and service credit purchases
- External auditors issued an unqualified opinion for FY2023
- TFFR was awarded the 2023 Public Pension Standards Awards for Plan Funding and Plan Administration by the Public Pension Coordinating Council



REPORT TAKEAWAYS

- Employer and member contributions increased
- Model 0 schools continue to decline
- Increased business partner outreach through both frequency and methods
- Member portal enrollment is increasing
- Member outreach participation continues to improve
- Regular pension, refund, and partial lump sum payments all increased
- Retirements increased in FY2023
- Fund balance continues to improve
- Membership is increasing
- Audit and compliance are a key program focus
- RIO staff is doing a phenomenal job at ensuring the security of the TFFR Fund!









MEMORANDUM

TO: TFFR Board of Trustees

FROM: Chad Roberts, DED/CRO

DATE: January 4, 2024

RE: TFFR Ends Report – 2nd Quarter ending December 31, 2023

This report highlights exceptions to the normal operating conditions of the TFFR program for the period spanning October 1, 2023, through December 31, 2023.

TFFR staff and the PAS vendor completed pilot 4 of the pension system design phase in October of 2023. Pilot 4 was the last phase of the design sessions. The vendor is now developing the actual modifications for the NeoSpin software and the user acceptance testing phase will begin in January of 2024.

Presentations were given by Retirement Services staff members at the annual conferences for both the North Dakota School Boards Association and the North Dakota Council of Educational Leadership in October. The presentations offered a preview of the new pension administration system to business partners.

Retirement Services staff provided a presentation on the new pension administration system to business partners through coordinated brunch and learn sessions with both the North Dakota School Boards Association and the North Dakota Council of Educational Leadership.

GRS completed the FY2023 actuarial valuation report and presented it to the TFFR Board of Trustees at the November board meeting.

Retirement Services staff members provided member education sessions in Bismarck, Minot, Jamestown, and Williston in October 2023.

The ED and DED/CRO attended the National Council on Teacher Retirement annual conference in La Jolla, California in October.

An internal applicant presently filling the part-time temporary administrative assistant position was selected to fill the vacant temporary full-time member specialist position and will start in that role on January 2, 2024. The temporary part-time administrative assistant position has been posted.

Board Action Requested: Board acceptance



Retirement and Investment

MEMORANDUM

- TO: TFFR Board of Trustees
- FROM: Sarah Mudder, communications and outreach director
- DATE: January 25, 2024

RE: TFFR outreach 2023 (Q4) conducted and 2024 (Q1) planned

The Retirement and Investment Office (RIO) staff who administer the Teachers' Fund for Retirement (TFFR) program engaged with members and partners in the four quarter of the calendar year as follows:

EVENTS

Member - Retirement (Group Benefits) Presentations

| Location | 2023 (Date an | d Attendance) | 2022 (Date and | Attendance) |
|-------------|---------------|---------------|----------------|-------------|
| Bismarck | Oct. 3 | 37 | Oct. 17 | 9 |
| Devils Lake | | | Oct. 11 | 24 |
| Dickinson | Sept. 26 | 22 | Nov. 2 | 24 |
| Fargo | Sept. 20 | 57 | Oct. 4 | 73 |
| Grand Forks | Sept. 19 | 29 | Oct. 5 | 43 |
| Jamestown | Oct. 10 | 14 | Sept. 27 | 24 |
| Mandan | | | Nov. 3 | 23 |
| Minot | Oct. 4 | 37 | Oct. 12 | 38 |
| Williston | Oct. 11 | 12 | | |
| Virtual | Nov. 29 | 58 | Nov. 15 and | 84 |
| | | | Dec. 8 | |
| Total | 8 | 266 | 10 | 342 |

Employer - Business Manager Webinars

| Topics | 2023 (Date an | d Attendance) | 2022 (Date and | Attendance) |
|------------------|---------------|---------------|----------------|-------------|
| Reporting | Sept. 26 | 36 | Oct. 12/13 | 43 |
| New Mgr Workshop | Nov. 2 | 38 | Nov. 2 | 29 |

Board Education

| Courses | Attended/Completed |
|---|--------------------|
| Onboarding Training – agency overview, etc. | 4 of 7 |
| Fiduciary Responsibility | 3 of 7 |
| Open Meetings/Open Records | 3 of 7 |
| Asset Allocation | 3 of 7 |
| Performance Reports | 3 of 7 |
| Governance Manual Part #1 | 3 of 7 |

PUBLICATIONS

Member – Newsletters (GovDelivery)

| Publication | Date | Open Rate/Subscribers |
|---------------------|----------|-----------------------|
| Active Member News | Sept. 27 | 39% / 9,095 |
| Retired Member News | December | Paper / 9,700 |

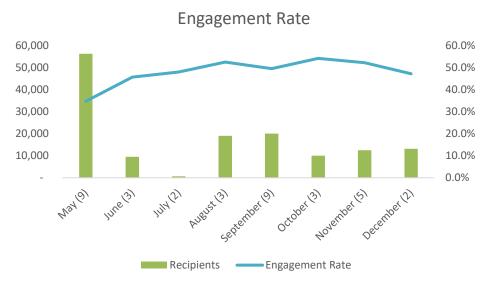
Employer – Newsletters and Updates (GovDelivery)

| Publication | Date | Open Rate/Subscribers |
|------------------------------|---------|-----------------------|
| Newsletter | Oct. 16 | 35% / 470 |
| Update, Return to Teach | Sept. 7 | 29% / 465 |
| Update, Member form/software | Aug. 1 | 32% / 192 |

News Releases

| Publication | Date | Open Rate/Subscribers |
|---------------------------|----------|-----------------------|
| Evanoff appointment | Sept. 26 | 63% / 119 |
| TFFR earns pension awards | Dec. 7 | 46% / 667 |

GovDelivery Monthly Metrics



Upcoming activities (Q1) include:

EVENTS

Employer - Business Manager Webinars

Models, Salaries and Retirements on Jan. 18, 2024

PUBLICATIONS

Employer – Newsletters and Updates (GovDelivery) Employer Newsletter, Jan. 9, 2024

Update, GASB 68 Information, week of Jan. 29, following January board meetings

Member – Newsletters (GovDelivery)

Member Newsletter, March 2024

APPOINTED/ELECTED

Jan Murtha, Investment Committee, National Association of Public Pension Attorneys (NAPPA) Jan Murtha, Legislative Committee 2024, National Council on Teacher Retirement (NCTR)

PRESENTATIONS/CONFERENCES

Jan Murtha, "Participant Education and Communication," NAPPA Winter Seminar, Feb. 21-23, 2024 Jan Murtha, attendee, NCTR/NASRA winter joint meeting, Feb. 24-26, 2024 Jan Murtha, attendee, NIRS Annual Retirement Policy Conference, Feb. 26-27, 2024

BOARD ACTION REQUESTED: Board acceptance.



Retirement & Investment

MEMORANDUM

| TO: | SIB |
|-------|--------------------------------|
| FROM: | Jan Murtha, Executive Director |
| DATE: | January 19, 2024 |
| RE: | Executive Limitations |

A verbal update will be provided at the meeting on staff relations and strategic planning. Including updates on the following topics:

I. Strategic Planning

RIO staff began the strategic planning process in November by issuing a survey to obtain opinions from board, committee and staff members. Strategic planning sessions were conducted with representatives and managers from each agency division. These sessions involved reviewing the current strategic plan, reviewing the survey responses, and discussing both amendments to the current strategic plan as well as additional content requested by the Governor's Office. Staff is presently creating action plans for next biennium goals. A final draft of an updated strategic plan will be shared with the Governance and Policy Review committees of both the SIB and TFFR Board in February for additional feedback followed by a presentation to the Governor's Office, RIO staff and each full board, in March.

II. New Board & Committee Member Update

The next new board member onboarding meeting is scheduled for Monday, January 29, 2024, at 9:00am. This meeting is virtual only and a Teams link will be provided. The topic of this training is Fiscal Operations Overview with Mr. Skor (CFO/COO) presenting.

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

| Position Title* | Status |
|--|---|
| Retirement Membership Specialist (temporary) | Filled with internal candidate. |
| Administrative Assistant (part-time - temporary) | Vacancy due to promotion. Interviews completed. |

*New FTEs related to the Internal Investment program are expected to be posted in Spring of 2024.

IV. Current Project Activities/Initiatives:

- **TFFR Pioneer Project** The TFFR Pioneer Project continues with implementation consistent with the project plan. Currently the project is in an elaboration phase involving review of system components. The amount of time spent on the project by various staff members continues to vary from 5 to 25 hours or more per week.
- Northern Trust Initiative In an effort to enhance the infrastructure for the investment program the Investment and Fiscal teams continues to coordinate with Northern Trust for additional functionality/capabilities.
- Audit Consultant Report: Staff has created an Executive Steering committee comprised of the ED, CFO/COO, and IA Supervisor to oversee a project to implement consultant recommendations related to

modernizing RIO's internal audit program. The Audit Committee approved procuring co-sourcing of some internal audit services to assist staff with implementing the recommendations. An RFP was issued and the Audit Committee interviewed finalists and selected a vendor at a special January Audit Committee meeting. As of the date of this memorandum the notice of award is pending. A verbal update regarding the consultant will be shared at the board meeting.

- **Compensation Study RFP:** An RFP for a Compensation Study was issued for consultant services necessary to prepare and present an incentive compensation plan for approval to the Board and develop compensation goals for agency positions. Staff has been working with the vendor to complete the project. A final presentation will be made to both the ERCC and full SIB in February.
- **Investment Program Software Solutions:** NDIT has determined that the investment software solution to provide the necessary infrastructure for internal investment management qualifies as a large IT project. RIO staff is working with NDIT and State Procurement through the procurement process. The Executive Steering Committee met in November and approved an RFP. The procurement process is pending.

V. Board & Committee Presentations November 17, 2023 through January 26, 2023.

In addition to the activities noted in the SIB Outreach report, Staff attended or provided or is scheduled to attend or provide presentations to Boards and Committees during the above referenced time period:

- Cash Management Study 11/27/23
- Investment Software ESC 11/27/23
- SIB Securities Litigation Committee 12/5/23
- SIB Investment Committee 12/8/23
- SIB Securities Litigation Committee 12/8/23
- Legacy and Budget Stabilization Fund Advisory Board 12/13/23
- Board/committee education session 12/15/23
- Retirement (PAS Project) ESC 1/2/24
- SIB Executive Review and Compensation Committee 1/9/24
- SIB Investment Committee 1/12/24
- Cash Management Study 1/12/24
- JEL Leadership meeting 1/17/24
- SIB Audit Committee 1/18/24
- ND State of the State 1/23/24
- TFFR Board meeting 1/25/24
- SIB meeting 1/26/24

VI. Presentations/Conferences

I have been appointed to the following committees: Investment Committee, National Association of Public Pension Attorneys (NAPPA) and Legislative Committee 2024, National Council on Teacher Retirement.

I will also attend the winter meetings of NAPPA, NCTR, NASRA, and NIRS in February.

Staff is participating as a speaker on the following panels:

Jan Murtha, "Participant Education and Communication," NAPPA Winter Seminar, Feb. 21-23, 2024. Lance Ziettlow, "Manager Selection: Everybody Sounds the Same," Pension Bridge Private Credit, Feb. 26-27, 2024

Scott Anderson, "Re-strategizing the portfolio and optimizing due diligence in the market landscape," Private Equity International NEXUS 2024, March 6-8, 2024

Board Action Requested: Board acceptance.



MEMORANDUM

| TO: | TFFR |
|-------|---|
| FROM: | Chad R. Roberts, DED/CRO |
| DATE: | January 4, 2024 |
| RE: | Board reading materials for January 2024 TFFR Board of Trustees |

Attached are three suggested readings concerning pensions, retirements, and factors impacting retirement funds and the retirements of retirees.

Jackson, N. M. (2018). TEACHING RETIREMENT: District leaders can guide teachers to a more financially sound future. *District Administration*, *54*(10), 45–47.

The article discusses the issues relating to the state-run pensions program for the teachers in the U.S. It mentions the need of the districts stay in touch with policymakers to communicate the important role that retirement benefits play in enabling districts to attract and retain qualified teachers. It also mentions the views of Keith Brainard, research director at the National Association of State Retirement Administrators on retirement savings plans.

Munnell, A. H., Belbase, A., & Sanzenbacher, G. (2018). *An Analysis of Retirement Models to Improve Portability and Coverage.* Boston: Center for Retirement Research at Boston College.

To better understand the challenges of the 401(k) system and its coverage and to assess possible strategies to improve it, this report presents a three-part analysis. The first part focuses on 401(k)s and documents the extent and nature of portability, the flow of money to IRAs, and leakage from both systems. It summarizes resulting problems and potential solutions. But beyond the existing 401(k) system, a coverage gap remains. So, the second part of the analysis identifies the nature of the coverage gap among wage and salary employees and assesses proposed solutions. But these solutions would not affect the 16 percent of workers in non-standard employment. Therefore, the third part of the analysis looks at options for covering these workers. The objective of this report is to assess and present a wide – though not comprehensive – range of available options by examining and summarizing existing proposals and, where relevant, examples from other countries

Employee Benefit Research Institute and Greenwald Research, 2023 Retirement Confidence Survey, EBRI Chartbook (Employee Benefit Research Institute, April 27, 2023).

The RCS is the longest-running survey of its kind, measuring worker and retiree confidence about retirement, and is conducted by the Employee Benefit Research Institute (EBRI) and Greenwald Research. The 2023 survey of 2,537 Americans was conducted online January 5 through February 2, 2023. All respondents were ages 25 or older. The survey included 1,320 workers and 1,217 retirees — this year included an oversample of roughly 944 completed surveys among caregivers (598 workers and 346 retirees). Data were weighted by age, sex, caregiver status, household income, and race/ethnicity. Unweighted sample sizes are noted on charts to provide information for margin of error estimates. The margin of error would be ±2.8 percentage points for workers, ±2.9 retirees, and ±3.3 for caregiver respondents in a similarly sized random sample.

Board Action Requested: Information only

District leaders can guide teachers to a more financially sound future

ost public school teachers still have access to a state-funded pension plan. But for the majority, their retirement benefits will be worth less than what they contributed during their years in the classroom, according to an analysis by the Fordham Institute.

The study, which examined the largest school districts in each state and in Washington, D.C., looked at how long it would take teachers to reach the "crossover point," when the value of their retirement benefits would equal or exceed their contributions. The median crossover point for the 51 districts is 25 years, which means teachers must work for a particular district for a quarter century before their retirement payout will be worth more than what they personally contributed. Because few teachers stay in their jobs for that long, their retirement savings are ultimately lost.

Teachers face more hurdles than just the problems with state-run pensions. Educators who don't rely on state pensions often have access to 403(b) retirement savings plans, which are similar to the 401(k)s used by private employers—but are often more lightly regulated. A recent analysis showed that

millions of people who save in 403(b)s may be losing almost \$10 billion per year in excessive investment fees. In addition, nearly one-half of public school teachers do not participate in Social Security, says Keith Brainard, research director at the National Association of State Retirement Administrators. That means for many teachers, the state pension system and 403(b)s are their only options for retirement planning.

By Nancy Mann Jackson

As school districts clamor to recruit and retain high-quality teachers, a generous, dependable retirement savings plan can be an important draw. To offer that, district leaders must understand the challenges posed by current offerings and identify alternatives.

Who's subsidizing whom?

It takes decades for many teachers on state pensions to cross over into earning on their retirement savings. And plans



TEACHING RETIREMENT~

that are not portable from one district to another "disadvantage young and mobile teachers relative to teachers who stay in the plan for their full careers," says Martin Lueken, author of the Fordham study.

For instance, teachers who split a career working in two systems will accrue only about half of the pension wealth that they would have received by working the same number of years under one system, Lueken says. And research shows that younger teachers' retirement contributions are subsidizing the benefits of older teachers, and mobile teachers are subsidizing the benefits of full-career teachers.

In addition to the lack of portability, pension plans require teachers to make contributions that are not directly linked to their benefits.

Instead, "benefits are based on a formula that's independent of contributions made," says Lueken, who also is director of fiscal policy and analysis at EdChoice, an organization that specializes in school choice research.

"Required contributions are estimated using a discount rate that made sense in the 1980s, but doesn't make sense today," Lueken says.

Thirty years ago, for instance, it was common for a low-risk, 30-year bond to yield an 8 percent return; but today, the same bond would yield a return of about 3 percent. While most pensions anticipate 1980s-level returns, financial markets have changed considerably, Lueken says.

Many states also have pension debt on their books, showing that the plans are not fully funded. This means current teachers' contributions are necessary to keep paying current retirees.

Making more informed decisions

While true changes to state-run retirement plans will have to come from lawmakers, district administrators can take several steps to improve their teachers' retirement outlook.

One of the most important tools dis-

"If our veteran teachers stay, we will share with them some of the savings we get by not having to recruit, hire and train their replacements."

> —Rob Smith, Alpine School District (Utah)

trict leaders have is education, says Chad Aldeman, editor of TeacherPensions.org and principal of Bellwether Education Partners, an organization focused on closing achievement gaps.

Many teachers need more information about how their retirement plans work and how to make the right decisions about their options.

"Ninety percent of teachers are enrolled in defined benefit pension plans, and those plans can be quite complicated," Aldeman says. "Teachers may not fully appreciate how the plans work or how much the district is spending on those benefits."

Earlier-career teachers are often

unaware of key milestones, such as when they "vest" in the plan and qualify for a pension.

Similarly, vested teachers who take a break from the classroom or leave the profession altogether face a difficult decision about whether to withdraw their money or wait for a pension upon retirement. "The math behind that decision is not intuitive, and districts could help teachers make the right decision for their unique circumstances," Aldeman says.

A few states allow educators to choose between a traditional pension plan and a more portable, defined contribution plan, such as a 403(b), or a "hybrid" plan that combines a smaller pension with a defined contribution component. For most teachers who aren't sure that they will remain in teaching, the portable option is typically the better choice. But "most of these states automatically default teachers into the pension plan," Aldeman says.

As a general rule, teachers who want to supplement their pension plans should look for "simple products like index funds with low fees of no more than 1 percent," Aldeman says.

"There are horror stories about teachers being targeted by predatory invest-

Retirement language

Want to improve your district's retirement offerings for teachers? Start by ensuring that you understand these terms.

- **DEFINED BENEFIT (DB) PLAN**. A retirement plan in which an employer promises a specified pension payment or lump sum (or combination) on retirement that is predetermined by a formula based on the employee's earnings history, length of service and age, rather than depending directly on individual investment returns.
- **DEFINED CONTRIBUTION (DC) PLAN.** A retirement plan in which the employer, employee or both make set contributions on a regular basis. Benefits paid in retirement fluctuate, as they are based on the contributions made plus any investment earnings on the money in the account.
- **HYBRID PLAN**. A retirement plan that combines a DB and a DC, and is usually in the form of a smaller pension with a defined contribution component.

ment companies selling products with lots of hidden fees and opaque rules," Aldeman says. "District leaders could take a more active role in screening those financial vendors."

Advocating for improvements

Even if decisions aren't made locally, local actions can affect retirement plan legislation in the statehouse.

"Districts should stay in touch with policymakers to communicate the important role that retirement benefits play in enabling districts to attract and retain qualified teachers," says Brainard of the retirement administrators association. "Public employers often are among the largest employers in legislative districts, and legislators should be familiar with the public employees, including teachers, in their respective districts."

In their interactions with legislators and elected officials, district administrators can advocate for changes that will make teacher retirement plans "more flexible and portable, more transparent, and more equitable, and that offer more choices for teachers with different preferences and life circumstances," says Lueken, the Fordham study author.

For instance, he recommends eliminating vesting requirements or shortening them to one or two years. Rather than encouraging retention, these requirements are too rigid for most modern teachers and are "not good for having a dynamic workforce," Lueken says.

In addition, administrators should push lawmakers to offer more plan choices, Lueken says.

A teacher with a defined contribution plan like a 401(k), who must leave the state midcareer—perhaps to care for an ill parent—can take the retirement plan with them, but in most cases, they would have to leave a defined benefit pension plan behind.

If state legislators aren't interested in adding another type of plan, administrators should advocate for greater portabil-



RETAIN UNTIL RETIREMENT—Veteran teachers in the Alpine School District receive a stipend as an incentive in their retirement packages. The Utah district also makes contributions to a state plan, to which teachers can add payments.

ity. For instance, in South Dakota, teachers who leave before reaching retirement eligibility can claim a refund benefit that includes both their own contributions and most of the employer contributions.

Managing plans creatively

Some districts manage certain parts of their teacher retirement packages, such as a voluntary supplemental 403(b).

If your district sponsors such a plan, take responsibility for managing it effectively, Brainard says. This includes making sure that:

- participants are paying fees that are reasonable
- investment options are appropriate
- the plan administrator is adequately communicating with plan participants
- employees are given sound advice regarding asset allocation and adequate contributions

Districts that want to provide valuable retirement benefits to their teachers can get creative and offer new or expanded benefits of their own. For example, Alpine School District, located in a suburb of Provo, Utah, pays 10 percent of each teacher's salary into the state retirement system's defined contribution plan. Teachers can contribute additional funds to the retirement plan, but they are not required to do so. In addition to contributing to the state program, Alpine contributes 1.5 percent of each employee's salary into a 401(k).

For teachers who have at least 15 years of consecutive service, Alpine also provides another retirement incentive: The district pays those teachers a stipend for four years that is 54 percent of the difference between their base salary and the base salary of a beginning teacher.

"Most districts do not offer retirement benefits like this, but we want to encourage the retention of our great educators," says Rob Smith, assistant superintendent at Alpine School District. "This stipend is separate from the teacher's salary. If our veteran teachers stay, we will share with them some of the savings we get by not having to recruit, hire and train their replacements." **D**A

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AN ANALYSIS OF RETIREMENT MODELS TO IMPROVE PORTABILITY AND COVERAGE

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Executive Summary

Retirement security is an important policy issue. A number of factors may result in the need for more retirement income than in the past. The U.S. population is living much longer and working only a bit longer, so retirement spans are lengthening.¹ Low interest rates and rising out-of-pocket health care costs may also play a role. At the same time, workers will receive less income from Social Security relative to their pre-retirement earnings – at any given claiming age – as the Full Retirement Age moves from 65 to 67, Medicare premiums are projected to take a larger share of the benefit,² and more people are slated to pay taxes on a portion of their benefits. While Social Security's progressive benefit formula provides low earners with higher benefits relative to earnings, these workers often claim benefits early and receive actuarially reduced amounts in exchange for receiving benefits for a longer period.⁴ Since Social Security alone is insufficient for most workers to maintain their pre-retirement living standard, they will be increasingly reliant on a retirement savings plan.⁵

In the United States, most retirement savings plans in the private sector are provided through an employer on a voluntary basis. Many of those with retirement plans have insufficient balances to maintain their standard of living in retirement, and half the workforce does not participate in a plan at any given time.⁶

For the half of private sector workers who *do* participate in a plan at their current job, portability between plans is often difficult, money often moves from the generally lower-cost workplace system to the generally higher-cost "retail" system of Individual Retirement Accounts (IRAs), and leakage from the combined workplace and retail system may negatively affect balances.

¹ Between 1980 and 2016, life expectancy at 65 increased by 4.4 years for men, from 14.7 to 19.1 years (U.S. Social Security Administration, 2017a). Meanwhile, the average retirement age increased by 0.6 years for men, from 64.1 to 64.7 (authors' updates of Munnell, 2015). As a result, the retirement span grew by 3.8 years over this period. ² The Medicare actuaries project Medicare out-of-pocket costs to increase from about 16 percent of average Social

Security benefits in 2017 to over 30 percent of benefits by 2045 (Centers for Medicare & Medicaid Services, 2017). ³ Ellis, Munnell, and Eschtruth (2014).

⁴ Among workers in the lowest earnings tercile, 63 percent claim before their Full Retirement Age (U.S. Social Security Administration, 2017b).

⁵ Many analysts use the Aon and Georgia State University Replacement Rate Study for measures of adequacy (Palmer, 2008). Households need less income in retirement than they did while working to maintain the same standard of living as they tend to pay less in taxes, no longer need to save for retirement, and may have paid off their mortgage. The study found that retired households require 75 to 90 percent of their pre-retirement income to maintain the same standard of living, depending on the number of earners, marital status, and earnings level. ⁶ Ellis, Munnell, and Eschtruth (2014).

Among the half of workers who do not participate in a plan at their current job, 84 percent are with an employer that does not offer a plan, while the remaining 16 percent work for an employer that offers a plan but either choose not to participate or are not eligible to participate. Additionally, an increasing number of workers – such as, contractors or temporary workers – do not have a traditional employer-employee relationship, so they are also part of the group that lacks coverage from an employer.

This report examines the employer-based voluntary retirement system and explores a variety of potential changes through a three-part analysis:

- The first part focuses on the 401(k) system and documents the extent and nature of portability, the flow of money to IRAs, and leakage from both systems. It summarizes resulting problems and potential solutions.
- The second part explains the coverage gap among traditional wage and salary employees and assesses potential options for shrinking the gap.
- The third part looks at the separate challenge of covering workers in non-standard employment, who would tend to be left out of fixes for traditional workers.
- The overall objective of this study is to summarize what is currently known using analysis of existing proposals and, where relevant, examples from other countries, and to provide a wide (though not comprehensive) list of available options.

Portability, Transfers to IRAs, and Leakage

The current defined contribution system could be improved along three dimensions. The first dimension is to minimize procedural barriers to moving money between employer plans in order to reduce the number of small and lost accounts. Currently, plans are not required to accept incoming rollovers and face no standards for timely and efficient plan-to-plan transfers when people switch jobs. This lack of orderly procedures can make it difficult to move money from an old plan to a new plan. Often, even simple processes for transferring assets between plans require several steps and can take a month or more to complete. Additionally some plans

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do not accept rollovers from other 401(k)s. As a result, 401(k) plan balances often do not follow workers as they move jobs, and people can end up with multiple small accounts – which may make keeping track of accounts more challenging.

The second dimension is the effect of transfers from the workplace system to the advisororiented retail component (such as IRAs). IRAs often involve higher fees and can result in conflicts of interest for financial advisors when dealing with clients. Of course, IRAs also have potential benefits to the retail market, such as a broader array of investment alternatives, the ability to consolidate assets, and personalized financial advice. However, these benefits may not outweigh the costs of receiving advice that could reflect a conflict of interest. The third dimension is leakage from both workplace plans and IRAs, which tends to cut balances

at retirement by about 25 percent on average. Although the current system imposes a 10-percent penalty tax on pre-retirement withdrawals on top of income taxes, this provision may not be an effective deterrent for many participants. For example, for low- and moderate-income workers who pay little or no income tax, the penalty may seem acceptable. In addition, a meaningful portion of the participant's account may include employer (or "free") contributions. So the net cost for "cashing out" can seem quite minimal, in both financial and psychological terms, for many workers.

Options for addressing the three issues discussed above that could enhance portability, protect transfers from the workplace to IRA system, and reduce leakage) are outlined in Table ES-1.

| Goal | Option |
|-------------------------|--|
| Enhance portability | Require plans to accept rollovers |
| | Standardize rollover rules and paperwork |
| | Encourage direct rollovers |
| | Set up a public registry to prevent lost accounts |
| | Create clearinghouse to automatically roll over small balances |
| Protect transfers from | Limit forced transfers and expand their investment options |
| workplace to IRA system | Reduce conflicts of interest through the Fiduciary Rule |
| | Enhance transparency of fees |
| Reduce leakage | Limit or prohibit cashouts at job termination |
| - | Tighten hardship withdrawal criteria |
| | Coordinate age for penalty-free withdrawals with Social Security |
| | claiming provisions |

Table ES-1. Options to Address 401(k) Portability, Transfers to IRAs, and Leakage

Plan Coverage for Traditional Workers

Even if policymakers were able to solve all the problems in the defined contribution system, a large coverage gap would remain. At any moment in time, about half of private sector workers are not participating in an employer-sponsored retirement plan. (For the purposes of this report, "coverage" and "participation" are used synonymously.) That pattern means that some workers never gain coverage during their work lives and others have only intermittent coverage. For many workers, Social Security alone is not enough to enable them to maintain their pre-retirement standard of living.

The percentage of workers covered has not improved since the late 1970s. This pattern may be driven by two factors. First, many employers – particularly small employers – do not offer a retirement plan, partly due to high costs but often for non-financial reasons such as workers' preference for cash wages. Second, the uncovered employees who work for an employer with a plan either choose not to participate, often through inertia, or are not eligible because they have not worked for the employer long enough, work too few hours, or are in a type of job that is not covered by the plan. As a result, increasing coverage will require both expanding access to employer-based plans and increasing participation in existing plans.

Two types of federal and state initiatives have been aimed at increasing coverage for traditional workers: (1) efforts to reduce barriers to adopting plans and (2) laws that require employers to provide access to workers. At the federal level, efforts to reduce barriers have focused on lowering the costs of offering a plan. These efforts are reflected in products for small businesses, like SIMPLE and SEP plans, and regulations facilitating multiple-employer plans, which can lower costs by pooling resources across related employers. States have also attempted to make it easier for small businesses to offer retirement plans: Washington and New Jersey are creating marketplaces that include a curated list of retirement plans suitable for small businesses. However, past efforts to broaden coverage through simpler products or better markets have not resulted in a significant increase in total coverage.⁷

In contrast, efforts to expand coverage by moving away from the voluntary model and imposing a mandate on employers have been effective in other countries such as the United Kingdom; and even within the voluntary system, 401(k) plans that automatically enroll workers

⁷ An Investment Company Institute study (2017) shows that only 6 percent of households have a SEP, SIMPLE, or SAR-SEP IRA, vehicles designed to make it easier for firms to offer a retirement saving plan.

– with the ability to opt out – have boosted participation rates. Along these lines, U.S. policy experts developed an idea that would require employers without a plan to automatically enroll workers in an IRA. This proposal has not been adopted at the federal level, but several states are moving forward with these auto-IRAs.

Table ES-2 summarizes options to expand retirement savings among traditional workers with and without access to workplace plans. These changes could substantially shrink the coverage gap.

| Goal | Option |
|--|--|
| Improve participation among workers eligible for 401(k)s | Mandate that 401(k) plans automatically enroll new employees immediately and non-participating employees periodically |
| Enhance voluntary system | Publicize availability of federal plans designed for small business (SEP IRAs, SIMPLEs) Expand marketplaces like those in New Jersey and Washington if they prove successful Enact legislation to facilitate the establishment of open MEPs Expand the Saver's Tax Credit |
| Establish plans with auto-enrollment for employees without coverage | Impose a federal mandate on employers without a plan to auto enroll their workers in an IRA; or Revise Employee Retirement Income Security Act of 1974 (ERISA) to enable a federal mandate on employers to auto enroll their employees in 401(k)s (or open MEPs), like in the United Kingdom Enable states to mandate employers without a plan to auto enroll their workers in an IRA; or Revise ERISA to enable states to mandate employers without a plan to auto enroll their workers in open MEPs Promote efforts to move administrative burden from employers to third- party platforms |
| Require employer contributions along with coverage of employees | Impose a federal mandate that employers must contribute to a retirement plan on behalf of their employees, as in Australia Combine mandatory coverage with shift in responsibility from employers to third-party platforms |

Table ES-2. Options to Expand Coverage by Retirement Plans

A more comprehensive approach to expanding coverage might involve shifting responsibility for the provision of retiree benefits from the employer to a third-party platform (see right-hand column of Table ES-3, on the next page). This option could be either voluntary or mandatory. On the voluntary side is a proposal offered a decade ago by the ERISA Industry Committee (ERIC) that would allow employers to shift responsibility for the provision of benefits to an outside administrator.⁸ On the mandatory side, a 2012 proposal by the Center for American Progress (CAP) would provide all workers with access to an IRA-based plan modeled after the Federal Thrift Savings Plan.⁹ International models could also achieve similar objectives: Australia and the Netherlands provide near-universal access to employer-based pensions with a minimal administrative burden on employers and accounts that are far more portable than 401(k) plans.

Table ES-3. Options to Broaden Coverage by Degree of Compulsion and Locus of Administration

| | Locus of administration | | |
|------------------------|---|-------------------------------------|--|
| Degree of compulsion | Employer | Third party | |
| Voluntary/supplemental | Existing U.S. system + enhancements (part-time, MEPs, state marketplaces) | ERIC model | |
| Mandatory/universal | Mandatory auto-enrollment of all workers (federal or state policy) U.K. model | CAP model Australia, Netherlands | |

Introducing Broader Options to Cover Self-Employed and Contingent Workers

Even if all traditional workers had coverage through their employers, the self-employed, and the growing number of contingent workers would be left out. Covering the self-employed and contingent workers in supplementary plans, however, is in its infancy even in countries that have aimed for universal coverage. One step in that direction may be creating some type of plan with auto-enrollment for workers in non-standard employment. Table ES-4 (on the next page) presents several ways to encourage and evaluate broader options to expand coverage to workers without a traditional employer relationship.

⁸ ERISA Industry Committee (2007).

⁹ This proposal has been modified over time. See Madland, Rowell, and Davis (2016), Madland (2012), and Davis and Madland (2013).

| Goal | Option |
|--|--|
| Provide coverage under an individual mandate | Require individuals to contribute a percentage of earnings |
| Provide coverage in current U.S. voluntary system | Encourage innovative efforts to bring retirement plans to contingent workers (e.g. Betterment plan for Uber) Create an auto-IRA arrangement using tax code |

 Table ES-4. Options to Cover Self-Employed and Contingent Workers

Conclusion

A changing retirement landscape may require today's workers to accumulate more savings, but barriers exist for accumulating and managing money in defined contribution plans, and many do not participate in any form of employer-provided retirement program.

A number of changes could help make existing plans work better by enhancing portability and safeguarding small accounts, protecting transfers from the workplace to IRA system, and reducing leakage.

Coverage could be expanded substantially within the existing financial infrastructure, but a more ambitious approach may be required to relieve the burden on employers and to cover the self-employed and the growing number of contingent workers. For these more ambitious approaches, the central issues revolve around how much compulsion is desirable in the U.S. retirement system and the optimal role for employers.

Introduction

Retirement security is an important policy issue. A number of factors may result in the need for more retirement income than in the past. The U.S. population is living much longer and working only a bit longer, so retirement spans are lengthening.¹⁰ Low interest rates and rising out-of-pocket health care costs may also play a role. At the same time, workers will receive less income from Social Security relative to their pre-retirement earnings – at any given claiming age – as the Full Retirement Age moves from 65 to 67, Medicare premiums are projected to take a larger share of the benefit,¹¹ and more people are slated to pay taxes on a portion of their benefits.¹² While Social Security's progressive benefit formula provides low earners with higher benefits relative to earnings, these workers often claim benefits early and receive actuarially reduced amounts in exchange for receiving benefits for a longer period.¹³ Since Social Security alone is insufficient for most workers to maintain their pre-retirement living standard, they will be increasingly reliant on a retirement savings plan.¹⁴

In the United States, most retirement savings plans in the private sector are provided through an employer on a voluntary basis. However, many workers with an employer plan have insufficient balances to maintain their standard of living in retirement, and half the workforce does not participate in a plan at any given time.¹⁵

These challenges are set against a background where the employer retirement system has changed from defined benefit to defined contribution. Until the early 1980s, most workers who were covered by an employer plan relied solely on a defined benefit plan, where benefits typically equal a percentage of final earnings and are paid as an annuity.¹⁶ In 2017, most

¹⁰ Between 1980 and 2016, life expectancy at 65 increased by 4.4 years for men, from 14.7 to 19.1 years (U.S. Social Security Administration, 2017a). Meanwhile, the average retirement age increased by 0.6 years for men, from 64.1 to 64.7 (authors' updates of Munnell, 2015). As a result, the retirement span grew by 3.8 years over this period.

¹¹ The Medicare actuaries project Medicare out-of-pocket costs to increase from about 16 percent of average Social Security benefits in 2017 to over 30 percent of benefits by 2045 (Centers for Medicare & Medicaid Services, 2017). ¹² Ellis, Munnell, and Eschtruth (2014).

¹³ Among workers in the lowest earnings tercile, 63 percent claim before their Full Retirement Age (U.S. Social Security Administration, 2017b).

¹⁴ Many analysts use the Aon and Georgia State University Replacement Rate Study for measures of adequacy (Palmer, 2008). Households need less income in retirement than they did while working to maintain the same standard of living as they tend to pay less in taxes, no longer need to save for retirement, and may have paid off their mortgage. The study found that retired households require 75 to 90 percent of their pre-retirement income to maintain the same standard of living, depending on the number of earners, marital status, and earnings level. ¹⁵ Ellis, Munnell, and Eschtruth (2014).

¹⁶ Borzi (2005).

covered workers rely solely on a defined contribution plan – often a 401(k) – where retirement income depends on the amount the individual and employer contribute plus investment earnings accumulated in the account over time, and the individual, rather than the employer, bears both investment and longevity risk.¹⁷ The defined benefit plan tends to work well for people who spend their working lives with a single employer, while defined contribution plans are better for mobile employees.¹⁸

Defined contribution plans have three limitations that can inhibit efficient money management. First, they are less portable in practice than in theory; it is hard to move 401(k) savings from one plan to another. Second, in contrast, it is relatively easy to move 401(k) savings into the retail environment of Individual Retirement Accounts (IRAs), which have fewer consumer protections and, often, higher fees than workplace plans. Finally, 401(k) plans are prone to pre-retirement withdrawals, which can substantially erode balances at retirement.

Beyond the limitations of 401(k)s, however, lies the greater challenge of coverage. Since the late 1970s, only about half of private sector wage and salary workers have participated in any type of retirement plan at their current job.¹⁹ (For the purposes of this report, "coverage" and "participation" are used synonymously.) This lack of coverage means that some employees end up at retirement with no source of income other than Social Security, and others cycle in and out of coverage, producing very small accumulations of retirement assets.

One group that lacks coverage is workers without a traditional employer relationship – a growing part of the labor force. A recent update of the Bureau of Labor Statistics' (BLS) *Contingent Worker Survey* by Katz and Krueger (2016) showed that the percentage of workers in any type of alternative work arrangement (i.e. temporary help agency workers, on-call workers, contract company workers, and independent contractors) rose from 10 percent in 2005 to 16 percent in 2015. One result for these contingent workers – as well as for self-employed workers not captured in this group – is that they are not enrolled in any employer retirement plan on their current job.²⁰ This lack of coverage, depending on the length of time they spend in contingent

¹⁷ Brien and Panis (2011) illustrate how the role of annuities can help transfer some of the investment and longevity risks to insurance companies.

¹⁸ This assessment is less true today than in the past as many private sector employers have shifted their defined benefit plan to a cash balance plan where lump-sum payments are available upon termination. ¹⁹ Munnell and Bleckman (2014).

²⁰ Nightingale and Wandner (2011) discuss some of the policy implications of informal and non-standard employment for low-skilled workers.

work, may result in less savings at retirement because very few people open an IRA on their own.²¹

In short, several reasons can help explain why so many workers are not building up retirement savings on a regular basis. For workers with a 401(k) plan, portability is difficult within the workplace system, 401(k) assets often move into IRAs with higher fees, and a lot of money leaks out through pre-retirement withdrawals.²²

Among those workers without savings in an employer-sponsored plan, many are with an employer that does not offer a plan, others work for employers that offer a plan for which they are not eligible, and some who are eligible choose not to participate. Additionally, workers in non-standard employment do not have a traditional employer-employee relationship, so they also lack coverage. As a result, many workers are left with either no coverage or with multiple small accounts.²³

To better understand the challenges of the 401(k) system and its coverage and to assess possible strategies to improve it, this report presents a three-part analysis. The first part focuses on 401(k)s and documents the extent and nature of portability, the flow of money to IRAs, and leakage from both systems. It summarizes resulting problems and potential solutions. But beyond the existing 401(k) system, a coverage gap remains. So, the second part of the analysis identifies the nature of the coverage gap among wage and salary employees and assesses proposed solutions. But these solutions would not affect the 16 percent of workers in nonstandard employment. Therefore, the third part of the analysis looks at options for covering these workers.

The objective of this report is to assess and present a wide – though not comprehensive – range of available options by examining and summarizing existing proposals and, where relevant, examples from other countries.

²¹ Knoll (2010), Iwry and John (2009), and Springstead and Wilson (2000).

²² For estimates of leakage in 401(k)s and IRAs, see Munnell and Webb (2015).

²³ Banerjee (2014) found that individuals with less than \$25,000 in assets are more likely to withdraw money from their defined contribution accounts when they leave their employer.

Portability, Transfers to IRAs, And Leakage

401(k) plans are the main way that private sector workers save for retirement (see Figure 1). The balances in these accounts, together with 401(k) assets rolled over to IRAs, are workers' primary source of retirement income other than Social Security.²⁴ Outside of workplace-based plans and rollovers, individuals save very little except through the accumulation of home equity. Data from the 2016 *Survey of Consumer Finances* show that the typical household approaching retirement had about \$17,000 of financial assets outside of retirement accounts (see Figure 2). Yet, in that same year, the typical working household with a 401(k) approaching retirement had \$135,000 in 401(k)/IRA assets.²⁵

Three contributors to small retirement balances are the lack of portability within the 401(k) system, the movement of money from workplace plans to the retail IRA market, and leakage from both workplace plans and IRAs. This section describes each of these issues and evaluates some proposed solutions.

Difficult to Move Savings from One Plan to Another

Data from the *Survey of Income and Program Participation* show that nearly a quarter of all workers ages 25-34 move to a new job each year (see Figure 3).²⁶ Even among mature workers, ages 45-54, 18 percent change jobs each year. Mobility rates for those with a retirement plan are lower than for those without but still very high – 20 percent and 14 percent for the age groups mentioned above. These high annual mobility rates mean that roughly 20 million people change jobs each year – 10 million of whom have a retirement plan. Increasingly, the plan they have is a 401(k).

In theory, defined benefit plans – with benefits typically based on final pay – are well designed for people who spend their career with a single employer, while defined contribution plans are better suited to mobile workers because they can easily take their savings with them as they move from job to job. However, in practice, it is often very hard to move money between defined contribution plans.

²⁴ Ellis, Munnell, and Eschtruth (2014).

²⁵ The 401(k)/IRA asset figure is also from the *Survey of Consumer Finances*; see Munnell and Chen (2017).

²⁶ Light and McGarry (1998),), and U.S. Department of Labor (2015).

When participants change jobs, they can choose between four options regarding their 401(k) assets:

- Leave balances in the previous employer's plan
- Roll over balances to the new employer's plan
- Roll over balances to an IRA
- Cash out

In some cases, this decision could be difficult and what's best for the worker may depend on a variety of factors. For example, Federal government employees moving to the private sector might consider leaving their money in the Federal Thrift Savings Plan due to its low administrative fees. And workers who are leaving one small employer plan with high fees for another might find that rolling over to an IRA instead can reduce fees. In most cases, however, a very effective option for preserving and accumulating retirement savings is rolling over money to the new employer's plan.²⁷ Unfortunately, this option is often difficult, and sponsors report that only 10-15 percent of participants move their balances to a new employer's plan.²⁸

For workers who want to move their money from one 401(k) to another, the rollover can be done either directly or indirectly.²⁹ A *direct* rollover involves either sending funds straight to the new plan or sending a check made payable to the new plan. Several factors make this process cumbersome. First, the financial services provider at the old employer has little incentive to facilitate a rollover out of its asset pool as its compensation is based on assets under management. Second, the new employer plan is not required to accept a rollover from the old employer plan. Third, the U.S. Government Accountability Office (GAO) reports that some new plans have waiting periods – that can last weeks to months – before accepting 401(k) balances from a previous employer; such delays are possible because employers face no specific deadline for processing these transactions.³⁰ Fourth, rollovers can involve a complex verification process to ensure that the incoming funds are tax qualified. Fifth, the paperwork required for plan-to-

 $^{^{27}}$ Anyone engaging in a rollover who is considering moving from a traditional account – which holds pre-tax assets – to a Roth account – with post-tax assets – would need to consider the tax consequences of a Roth conversion. Such a conversion requires paying taxes today on the transferred amount.

²⁸ U.S. Government Accountability Office (2013).

²⁹ Whether a rollover is direct or indirect, workers must fill out the form 1099-R.

³⁰ U.S. Government Accountability Office (2013). One question is whether this pattern is driven by plan eligibility standards. Often retirement plans will require some amount of time to pass or number of hours worked before a new hire is enrolled. An employer with such an eligibility standard might have difficulty accepting a rollover. One option might be to hold the rollover in some escrow arrangement until the new employee is enrolled.

plan rollovers is not standardized; some distribution forms are only a few pages, others 15 pages. Finally, the Internal Revenue Service (IRS) regulations expressly allow sending a check payable to the new plan to the participant rather than the recordkeeper, which requires the participant to give the check to the recordkeeper. This additional step further prolongs the rollover period and unnecessarily shifts part of the burden of completing the procedure from the recordkeeper to the individual.

An *indirect* rollover involves issuing a check payable to the departing participant, which must be deposited within 60 days in a new 401(k) or IRA. This approach introduces the added problem of adverse tax consequences if participants do not understand the 60-day deadline. Even if they do understand the deadline, they may be confused by the 20-percent withholding requirement. Specifically, when a participant receives a cashout, the 401(k) plan must withhold 20 percent of the distribution for tax purposes. If the individual rolls the remaining 80 percent into a tax-qualified account within the 60-day grace period, the individual must add funds from other sources to replace the 20 percent withheld or the withholding will count as income subject to income tax. For example, an individual who attempts to indirectly roll over \$100,000 will receive a check for just \$80,000 and will need to find an additional \$20,000 within 60 days before sending the money on to the final 401(k) or IRA. This requirement makes indirect rollovers an especially difficult option for workers who do not have extra savings available.

Given the difficulties with the process of plan-to-plan rollovers, money often either moves from the workplace system to an IRA or stays in the old employer plan; in this latter case, workers can end up with multiple small accounts.

Having a number of relatively small accounts over a lifetime poses three potential problems for building up retirement saving. First, some of these accounts may simply get lost. Companies are frequently restructured, and plans are terminated, merged, or renamed. If accounts are lost, key information may be held by different plans, different service providers, or different government agencies. Second, participants with many small accounts are also less likely to have an asset allocation that best reflects their risk/return preferences compared to those

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with a single consolidated account.³¹ Third, plan participants are much more likely to cash out small amounts.

This pattern of cashing out is evident in a tabulation of data from the *Health and Retirement Study* (HRS) that show the relationship between account size and the disposition of funds (see Table 5).³² Of those people working in 2012, the HRS asks whether they switched employers since the last survey in 2010, whether the previous employer provided a defined contribution plan, how much money was in that account, and what was done with the balances. The results show that 58 percent of people with 401(k) balances of \$5,000 or less with their previous employer withdrew their money; this percentage drops to 37 percent for balances between \$5,000 and \$20,000 and then falls off sharply. This pattern is similar to the results from other studies.³³

Money Moves from Workplace to Retail Accounts

One result of the lack of portability between 401(k) plans is that a lot of money is rolled over from the workplace system to the retail world of IRAs. Sometimes the employers make these rollovers when departing workers leave small balances behind. More often, the participant makes the rollover because it is easier to roll over to an IRA than to another plan.

SMALL BALANCES. If participants leave their jobs with 401(k) balances of less than \$5,000 and fail to specify what should be done with these savings, employers can transfer the funds out of the plan and into an IRA.³⁴

Prior to 2001, employers could pay out 401(k) balances of less than \$5,000 in cash and close the account. In order to protect small balances, 2001 legislation reduced the payout limit to less than \$1,000 and allowed employers to roll over amounts between \$1,000 and \$4,999 to an IRA.³⁵ Current law also allows employers, in some cases, to transfer out accounts with \$5,000

³¹ Choi, Laibson and Madrian (2009) found that most participants are passive decision makers and stay with default plan options. Similarly, Mitchell et al. (2006) found that plan participants are inattentive portfolio managers, with 80 percent of participants not adjusting investment allocations over a two-year period. Individuals with assets spread out over several accounts will likely not reallocate based on their combined asset level but rather stay with the default option in each account.

³² Authors' calculations from University of Michigan, *Health and Retirement Study* (2010-2012).

³³ Williams (2013), and Yakoboski (1997).

³⁴ Purcell (2009).

³⁵ These thresholds are not adjusted for inflation so, over time, their impact on overall 401(k) asset accumulation is gradually diminishing.

or more. For example, a plan can transfer an account with a balance of \$20,000 if less than \$5,000 is attributable to contributions made on the current job.

The same 2001 legislation also required the DOL to prescribe the investment options for these forced rollovers. Essentially, under the regulations issued in 2004, the plan satisfies its fiduciary obligation if the investment preserves the dollar value of the rolled balances. In other words, the money can be invested in a money market fund. The motivation for this guidance was an expectation that participants would end up tapping these small account balances before retirement. However, the fees charged to the forced transfer accounts often outpace the low returns earned by the conservative investments prescribed by the DOL's safe harbor rules, causing account balances to decline.³⁶

This problem is not trivial. Data provided by the U.S. Social Security Administration (SSA) show that, over the period 2004-13, separated employees left more than 16 million accounts of \$5,000 or less in workplace plans, with an aggregate value of \$8.5 billion.³⁷ In short, a substantial number of accounts are vulnerable to forced transfers by the employer.

LARGER ACCOUNTS. Every aspect of the rollover process makes it easier to roll over money to an IRA than to a new employer's plan. As noted, some employers do not accept rollovers, and employers who do are not required to process them on a timely basis. In contrast, it is always possible to roll over to an IRA, and IRA rollovers involve no waiting period. As a result, while 401(k) plans serve as the main gateway for retirement saving, they often do not retain the money. As of 2016, more than half of 401(k) balances had been rolled over to IRAs, and these rollovers are responsible for the bulk of IRA assets. As a result, IRAs are now the largest single repository of retirement plan savings (see Figure 4).³⁸

The rollover activity is extraordinary, given that participants are typically passive in other interactions with their 401(k) plans. For example, they rarely change their contribution rate or rebalance their portfolios in response to market fluctuations or as they age.³⁹ Indeed, inertia has

³⁶ U.S. Government Accountability Office (2014).

³⁷ U.S. Government Accountability Office (2014).

³⁸ ICI (2016) estimates that \$6.2 trillion of the total \$7.3 trillion in IRA assets are held in traditional IRAs. Of traditional IRAs, 86 percent were opened with rollovers. For more information on the role of IRAs in retirement savings, see Holden and Schrass (2016) and Munnell and Chen (2017).

³⁹ Munnell and Sundén (2004),), and Ameriks and Zeldes (2004).

been identified as such a problem that reforms have focused on automatic mechanisms, such as auto-enrollment to boost participation, auto-escalation of contribution rates to encourage adequate saving levels, and target-date funds to promote a diversified portfolio that automatically rebalances with age.⁴⁰ Thus, one would think that the force of inertia would lead participants to leave their balances in their old 401(k) accounts until they draw them down in retirement. The fact that they move their funds suggests a strong motivating force. As shown in Table 6, some households are drawn by the opportunity to obtain a wider menu of investment options or to consolidate their account holdings. But others may be influenced by advertisements from financial services firms urging participants to move their funds out of their old 401(k) plans into a new IRA.⁴¹

The shift from 401(k)s to IRAs moves the employee's money to an environment with fewer regulatory protections, more potential conflicts of interest, and higher fees. IRAs, unlike 401(k)s, are not subject to the fiduciary requirements of the Employee Retirement Income Security Act of 1974 (ERISA), as detailed below. As a result, broker dealers who handle IRA rollover transactions are not prohibited from steering clients to mutual funds that pay ongoing commissions to the broker dealer. The potential concern is that investors could end up in funds for which they may not be well suited or that have high fees. Financial services firms handling IRAs face no requirement to disclose fees which may make it more likely that participants end up paying higher fees in IRAs than in workplace plans.⁴² As Figure 5 shows, the bulk of 401(k) participants are in large plans where fees generally average less than 1 percent of assets – less than 0.5 percent in the case of very large plans.⁴³

⁴⁰ Madrian and Shea (2001),), Thaler and Benartzi (2004),), Young (2012),), and Clark, Utkus, and Young (2015). ⁴¹ A Charles Schwab ad shows a man with a 1980s boombox and the tag line "Let's talk about that 401(k) that you picked up back in the '80s." Merrill Edge (launched by Bank of America, owner of Merrill Lynch) depicts a woman with her arms spread and the phrase "Catching up with my old 401(k)s." TD Ameritrade shows a sad young woman with writing in the background that says "roll over your old 401(k)." Fidelity's "follow the green line" campaign includes an ad with a woman speaking to a Fidelity representative about how to roll over her "old 401(k)."

⁴² A GAO study found that participants in IRAs are more likely to invest in products such as individual variable annuities or retail mutual funds, which generally have higher fees. For more detail, see U.S. Government Accountability Office (2009). Munnell, Aubry, and Crawford (2015) find that IRAs have lower net returns than 401(k)s, which could be one symptom of higher fees. Alfred (2015) shows that 401(k) plans with large assets can have very low fees. IRAs, on the other hand, tend to be invested in mutual funds with higher fees (Munnell, Webb, and Vitagliano 2013). Turner and Klein (2014) conclude that a substantial rollover from a low-fee 401(k) plan to an IRA is generally a mistake. Aven Gladych (2015) notes that enhanced disclosure of fees for 401(k)s helped bring fees down.

⁴³ Authors' estimates from U.S. Department of Labor, *Form 5500 Private Pension Plan Bulletin* (2013) and BrightScope and Investment Company Institute (2014).

Another potential concern is that IRAs can be more susceptible to pre-retirement withdrawals than 401(k)s. The broader issue of leakage is addressed in the next section; here, the emphasis is simply on the differences in withdrawal rules and procedures between 401(k)s and IRAs.

Virtually all withdrawals from 401(k)s and IRAs made before age 59½ are subject to a 10-percent tax penalty (in addition to federal and state income taxes). Exceptions include distributions for large health care expenses (those that exceed 10 percent of Adjusted Gross Income), in the event of permanent and total disability, and for periodic payments over a lifetime. IRAs, however, offer three additional exemptions not available in 401(k)s: (1) withdrawals to cover expenditures for postsecondary education for any family member, (2) up to \$10,000 toward first home purchase or repair, and (3) expenditures on health insurance for those unemployed for 12 or more weeks.

In addition to the exemptions from the 10-percent penalty tax, the barriers to accessing funds are lower in the case of IRAs than 401(k)s. As discussed below, 401(k) withdrawals can be made only at job change or for reasons of hardship. IRA withdrawals can be made at any time and without justification.⁴⁴ Moreover, 401(k) hardship withdrawals involve interactions with plan administrators, the filing of paperwork, and, at least in theory, justification for the withdrawal. In contrast, the providers of IRAs generally do not discourage withdrawals prior to reaching retirement age. Finally, while in 1992 Congress imposed the 20-percent withholding requirement on money taken out of a 401(k), no such withholding exists on IRA transactions.⁴⁵ All of these factors may result in more leakage or pre-retirement withdrawals from IRAs than from 401(k)s.

The bottom line is that many participants in large 401(k) plans with low fees could be much better off having their balances remain in the 401(k) system rather than rolled over into IRAs.

⁴⁴ It is unclear the extent to which IRA early withdrawal penalties are enforced.

⁴⁵ Purcell (2009).

Leakage from Workplace and Retail Accounts Reduce Retirement Saving

Leakage out of workplace plans and IRAs reduces retirement saving. This reduction would not be a concern if people were over-saving, but the evidence suggests they generally are not.⁴⁶ It is also not a concern if money is withdrawn for a true emergency, such as an unexpected health shock or unemployment. But, regardless how compelling the reason for the withdrawal, money used for other purposes is not available for retirement.

The current system does try to dissuade leakage through the penalty tax on early withdrawals on top of income taxes. However, this provision may not be an effective deterrent for many participants. For example, for those who pay little or no income tax due to low earnings, the penalty may seem acceptable (particularly when facing a financial emergency). In addition, a meaningful portion of the participant's account may represent "free" employer contributions. So, the net cost for "cashing out" can seem minimal, in both financial and psychological terms, for many workers.

Leakage can occur through three channels: in-service withdrawals (hardship withdrawals and withdrawals after age 59-½), cashout at job change, and loans. Researchers have tried to estimate annual leakage rates using household surveys and, more recently, tax data.⁴⁷ Unfortunately, the surveys are not designed to answer these precise questions and have led many researchers to focus on loans. Loans are pervasive but are mostly repaid and therefore just a small piece of the leakage puzzle – loans comprised only 18 percent of all leakages in 2015 according to Vanguard data.⁴⁸ Fortunately, the Vanguard data present a comprehensive picture of the percentage of assets leaking out each year through the various channels (see Figure 6). These data show that cashouts at job change account for 46 percent of all leakage, by far the largest source.

While the Vanguard data provide a useful way to identify the various leakage paths, they likely understate leakage rates because Vanguard's clients tend to be large plans with higher-paid workers who are less likely to allow their assets to leak out of the retirement system. In fact, the

⁴⁶ Ellis, Munnell, and Eschtruth (2014) provide a broad overview of retirement insecurity and inadequate saving. Poterba, Venti, and Wise (2012) find that many households outlive their assets.

⁴⁷ For a full review of the literature, see Munnell and Webb (2015).

⁴⁸ See Vanguard (2016) and Munnell and Webb (2015). One recent study using tax data did estimate the effect of all pre-retirement leakage – not just loan leakage – for households younger than 55 during the Great Recession (Argento, Bryant, and Sabelhaus 2015).

annual leakage rates based on household surveys amount to 1.5 percent of aggregate balances,⁴⁹ modestly higher than those implied by Vanguard, and estimates using tax data are much higher, amounting to 2.9 percent of assets.⁵⁰ Therefore, to estimate how much leakage reduces assets at retirement, Munnell and Webb (2015) assume that the leakage out of 401(k) plans equals 1.5 percent of assets each year (as opposed to the 1.1 percent suggested by the Vanguard 2015 data).

While an annual leakage rate of 1.5 percent may sound small, over the course of a worker's career the effect is significant. Estimates show that an average leakage rate of 1.5 percent reduces accumulated wealth at age 60 by 25 percent (see Figure 7).⁵¹ This estimate represents the overall impact for the whole population, averaged across both those who tap their savings before retirement and those who do not. For those whose assets do leak out of the system, the problem is more severe than indicated by these estimates.

A similar exercise can be used to estimate the impact of leakage from IRAs on wealth at age 60. It assumes that an individual rolls over money from a 401(k) three times during his career. The initial rollover into the IRA occurs at age 30, and withdrawal rates are taken from the experience of households in the 2010 *Survey of Consumer Finances* (SCF). Under these assumptions, leakage reduces IRA wealth by 23 percent.⁵²

Interestingly, the effects of leakage from 401(k)s and IRAs on age-60 wealth are relatively similar, which is consistent with an earlier study that estimated annual leakage at 1.5 percent from 401(k)s and 1.4 percent from IRAs.⁵³ The explanation may be that while IRAs are easier to access and have more options for penalty-free withdrawals, individuals who roll over to IRAs may be more savings oriented. Furthermore, once money is in an IRA, one of the biggest opportunities for leakage – when a worker changes jobs – is no longer relevant. In any case, the

⁴⁹ Butrica, Zedlewski, and Issa (2010).

⁵⁰ See Bryant, Holden, and Sabelhaus (2011) and Argento, Bryant, and Sabelhaus (2013).

⁵¹ This estimate of lifetime leakage relies on the following assumptions: the 401(k) participant begins contributing 6 percent of salary at age 30, the employer match rate is 50 percent, the participant's initial salary is \$40,000 (increasing at 1.1 percent a year in real terms), and investments earn a real 4.5-percent return. The calculations also assume a 75-percent linear decline in the leakage rate from age 30 to 60 – that is from higher than 1.5 percent at age 30 to less than 1.5 percent at age 60. The resulting estimate is considerably higher than Poterba, Venti, and Wise (2001), who assume much lower rates of job separation. This assumption, together with the exclusion from their analysis of hardship withdrawals, loan defaults, and IRA withdrawals, leads them to conclude that leakages will only reduce retirement wealth by about five percent.

⁵² Munnell and Webb (2015).

⁵³ Butrica, Zedlewski, and Issa (2010).

estimates suggest that, in a mature system, leakage reduces aggregate 401(k)/IRA wealth at retirement by about 25 percent.

Summing Up the Problem

A lack of portability among 401(k) plans, movement from workplace plans to IRAs with fewer consumer protections, and leakage from the workplace/IRA system can undermine a worker's ability to accumulate a robust retirement nest egg. These problems can be serious in a labor market like that of the United States, which is characterized by a high degree of worker mobility. The lack of portability is caused largely by administrative barriers to moving money from one 401(k) plan to another, which is often the best choice for mobile workers. Without easy portability, money either becomes stranded in small accounts or moves either involuntarily or voluntarily to IRAs. The retail IRA market is characterized by less protective regulation, possible conflicts of interest, and higher fees. Finally, the combined workplace/IRA system allows ample access to assets before retirement through cashouts and in-service withdrawals. While some access to retirement savings may well be desirable, the current environment reduces 401(k)/IRA wealth at retirement by about one quarter.

Options for Enhancing Portability in 401(k) Plans

Some options for enhancing portability include: (1) making it easier for participants to roll their balances from one 401(k) plan to another; (2) setting up a public registry for accounts; (3) creating a clearinghouse to automatically roll over small accounts or more broadly to facilitate rolling over balances within the system. The option to facilitate plan-to-plan rollovers is a smaller-scale improvement that could be done in the short term, while the registry and clearinghouse ideas are longer term initiatives with potentially larger payoffs.

FACILITATE TRANSFERS BETWEEN 401(K) PLANS. Establishing a few standardized procedures to facilitate rollovers from one 401(k) to another could improve the portability between plans. First, plans could be required to accept rollovers. Second, the process could be made more efficient by establishing a schedule for timely action by both the new and old employer plans and standardizing the paperwork. Third, indirect rollovers could be eliminated, as they add the possibility of adverse tax consequences to an already complicated process.

Some steps have been taken to simplify the verification process regarding the taxqualified status of the rollover money, since part of the reluctance to accept rollovers is the concern that funds coming from outside a plan may not be legally tax qualified under the Internal Revenue Code. In 2014, the IRS issued guidance to ease the process and make plan-to-plan rollovers less burdensome.⁵⁴ Specifically, the ruling enables receiving plans to verify the taxqualified status of sending plans simply by checking a recent Form 5500 filing for the sending plan on a public database. It is not yet clear whether this new ruling has altered behavior.

ESTABLISH A PENSION REGISTRY. Currently, the United States does not have a national pension registry, and no coalition of financial firms has undertaken such an initiative. A bill was proposed to establish such a registry in 2016; however, it did not gain traction.⁵⁵ In contrast, many other countries – such as Denmark, The Netherlands, Australia, and Belgium – provide consolidated online information for participants on all their workforce retirement accounts (see Table 7). These pension registries, which include information on both active and inactive accounts, may be helpful not only to participants but also to plan administrators, who can use them to locate missing participants and eliminate outstanding liabilities.⁵⁶ One other function a U.S. pension registry could provide is collecting information on forced transfer IRAs that could be used to establish the government as the account administrator of last resort, a function in Australia that is assumed by the Tax Office.

The closest the United States comes to a pension registry is the SSA's Potential Private Retirement Benefit Information. This information on deferred vested benefits from past employers for over 33 million people includes the name of any plan where a participant has savings, the plan administrator's name and address, the participant's name, Social Security number, savings balance, and the year that the plan reported savings left behind. SSA sends this information when an individual files for Social Security benefits. Participants can request the information earlier, but SSA received only about 760 requests in 2013.⁵⁷ SSA does not promote the availability of this information, nor does the agency consolidate information on accounts

⁵⁴ Internal Revenue Service (2014).

⁵⁵ Senators Elizabeth Warren and Steve Daines have put forward legislation in the form of the Retirement Savings Lost and Found Act of 2016, which would seek to create a national lost and found for pensions. The lost and found would allow employees to put in their name and find all of their past employer-sponsored retirement accounts. ⁵⁶ U.S. Government Accountability Office (2014).

⁵⁷ U.S. Government Accountability Office (2014).

from several employers to provide beneficiaries with a single statement. The GAO recommended that SSA make such information more accessible to individuals before retirement, perhaps sending consolidated information with the Social Security Statement (issued every five years). SSA rejected the recommendation because it would place the agency in the position of having to answer legal questions about private plans, an area where it lacks expertise.

U.S. federal agencies – the DOL, Pension Benefit Guaranty Corporation, and SSA – do not have any current efforts to develop a pension registry.⁵⁸ The DOL, in response to a GAO recommendation, noted that it does not have the authority to require the reporting necessary to establish a registry. Nevertheless, two industry associations (the American Bar Association and the American Benefits Council) have suggested a central database for participants to check for lost accounts in ongoing or terminated plans.⁵⁹ And much of the required information for such a database is already in place through large service providers. Thus, it is feasible to set up a U.S. pension registry with some concerted government effort to determine the appropriate scope, oversight, and financing method.

CREATE CLEARINGHOUSE TO AUTOMATICALLY ROLLOVER BALANCES. A clearinghouse that would automatically roll over balances from one plan to another could address many of the portability issues.⁶⁰ One such proposal – at least for small balances – has been suggested by a firm called the Retirement Clearinghouse to establish a platform to automatically route all the participant's old 401(k) balances to their next 401(k) plan through an IRA. The suggested costs are \$1.50 to \$3 per month in custodial fees for the holding period and a \$49 fee for the electronic transfer to a new plan.61 The goal is to keep the small balances in an IRA for as short a period as possible before transferring them to a new plan.

⁵⁸ The Pension Benefit Guaranty Agency (PBGC) has a Missing Participant Program, which holds retirement benefits for missing participants and beneficiaries in terminated retirement plans to help them find and receive these benefits. PBGC recently finalized a regulation to expand the universe from single-employer defined benefit plans to include terminating defined contribution plans. These plans will have the option of transferring missing participants' benefits to PBGC instead of establishing an IRA at a financial institution. Participant accounts will not be diminished by ongoing maintenance fees or distribution charges, and PBGC will pay out benefits with interest when participants are found. When implemented, the enhanced program aims to make it easier for people to locate their retirement benefits after their plan terminates.

⁵⁹ U.S. Government Accountability Office (2014).

⁶⁰ Williams (2013).

⁶¹ Pechter (2014).

While the technology may exist to provide automatic roll-ins, any firm attempting to take on this task would need buy-in from government regulators and from all the major financial services firms. To date, some progress has been made on this front. The Boston Research Group has documented a big payoff to 401(k) consolidation for a large health care company,⁶² the ERISA Advisory Council has heard testimony on the advantages of a single portable account, and the 2014 IRS guidance on plan rollovers made it easier for 401(k) plan IT systems to certify the tax-free status of roll-ins. However, such a process would require an advisory ruling from the DOL; and it would be important to determine who serves as a fiduciary for money passing through the system. Aside from the need to settle this latter point, it appears possible to consolidate small 401(k) account balances through this type of system.

A more ambitious effort, proposed by the Bipartisan Policy Center's Commission on Retirement Security and Personal Savings, would establish a national Retirement Security Clearinghouse. Under this proposal, the DOL and Treasury would convene industry stakeholders to develop standards for streamlining transfers and rollovers among defined contribution plans and IRAs. Plans could then choose to adopt these standards, which would allow plan participants to easily consolidate their retirement assets in one place.⁶³

In theory, developing a clearinghouse could be paired with the effort to establish a pension registry, perhaps with the DOL, Treasury, or another public or private entity involved in both functions. While these two aims are separate – a clearinghouse makes voluntary transfers between accounts easier, while a registry keeps a record of all accounts – they both share the goal of improving the ability to effectively manage retirement savings.

Options for Protecting Transfers from Workplace Plans to IRAs

As noted above, 401(k) balances can be transferred to IRAs by employers, or employees themselves can choose to roll them over. In both instances, the balances could be better protected than they are currently.

⁶² See Cormier (2013). The health care company had more than 190,000 participants and an average annual turnover of more than 40,000 employees. To control costs and better serve employees, the company instituted a "roll-in" program as a fringe benefit to help new or current employees consolidate their savings in the company's plan or, for departing employees, in the plan of the next employer. The plan saved \$6 million in costs, reduced subsequent cashouts by over 50 percent, and received considerable new money – over \$55 million from new employees' old 401(k) plans and \$10 million from their IRAs.

⁶³ Bipartisan Policy Center (2016).

SMALL BALANCES. In the absence of some type of clearinghouse solution, the GAO suggests two very specific changes that will reduce money automatically transferred to IRAs and the likelihood that balances will be eroded by fees. The first is to repeal the provision that allows plans to disregard previous rollovers when identifying balances in a current 401(k) account eligible for transfer. That is, an account with a balance of \$20,000 (including rollover contributions) would no longer be eligible based on the fact that assets accumulated based on contributions while at the current employer are less than \$5,000. The second proposal is to amend the law to enable plans to invest the assets of 401(k) forced transfers in higher-yielding investments, such as those included in the qualified default investment alternatives for the employer's 401(k) plan. However, the DOL expressed concern that this proposal would not guarantee the preservation of the principal.⁶⁴ Some innovative use of the Federal Thrift Savings Plan (TSP) might offer a solution for handling abandoned accounts.⁶⁵ With assets of \$443 billion, TSP may be able to absorb all of the 16 million small abandoned accounts with only a modest increase in fees.⁶⁶

LARGER ACCOUNTS. For larger accounts, two options are reducing conflicts of interest through the Fiduciary Rule and enhancing the transparency of fees.

The shift from 401(k)s to IRAs moves the employee's money to a less-protective regulatory environment. 401(k) plans are covered by ERISA, which requires plan sponsors to operate as fiduciaries who act in the best interest of plan participants. In contrast, the standard of conduct for a broker selling IRAs has historically been "suitability," a lower hurdle.

The standard for brokers would be changed by the DOL's "Fiduciary Rule," which was designed to ensure that those in the financial services industry act as fiduciaries (i.e. "solely in the interest" of clients) when giving advice regarding retirement savings.⁶⁷ Advisors would be

⁶⁴ U.S. Government Accountability Office (2014).

⁶⁵ TSP participants benefit from economies of scale, limited investment choices, and the broad relief from the regulations and compliance costs that apply to private sector plans. Therefore, the TSP's results are difficult to achieve for private sector 401(k) plans (ICI 2015).

⁶⁶ Federal Retirement Thrift Investment Board (2015). Such a transfer, however, would increase costs somewhat for current TSP participants unless TSP could parcel costs differentially across federal employees vs. everyone else.
⁶⁷ The new rule is designed to eliminate the incentive for brokers to put retirement savers in inappropriate investments. Fiduciaries cannot engage in this behavior, because they are bound by the "best interest" standard. So the strategy of the rule is to expand the group of investment professionals who must act as fiduciaries. Under ERISA, anyone providing investment advice within retirement plans must act as a fiduciary, so the lever used to

held to the fiduciary standard with respect to not only 401(k) assets but also distributions from 401(k) plans and IRA assets. In fact, the recommendation to roll over is itself a fiduciary act. Extending coverage to the rollover and then to IRA assets reflects the fact that both 401(k)s and IRAs are integral and equally important parts of the retirement income system. The Fiduciary Rule was issued in 2016 after a lengthy process.⁶⁸ As of December 2017, the rule is in the process of further review, with its enforcement provisions delayed until July 1, 2019 and its final details uncertain.⁶⁹

Moreover, as a 2009 GAO report found, when participants roll over their 401(k) balances into an IRA, they are likely moving to a higher-fee environment.⁷⁰ 401(k) fees have been coming down – perhaps due in part to the DOL's fee disclosure rules, which require 401(k) plans to disclose their fees in an easily understandable format. Financial services firms handling IRAs face no such requirement. Requiring them to disclose their fees may put some downward pressure on fees, as well as inform individuals about how much they are paying.

Options for Reducing Leakage

In deciding how much early access to allow to retirement savings, policymakers balance two conflicting goals: (1) keeping money in the plan; and (2) allowing access to those who need their funds, which can encourage participation and contributions. The following discussion assumes that the primary purpose of 401(k)s/IRAs is to preserve money for retirement. Many experts have proposed ways to reduce leakage, ranging from better education for plan participants to changes in withdrawal penalties to tighter access to the funds.⁷¹ In considering reforms, it may also be helpful to adopt a broad perspective that considers all leakage channels and, as discussed in Box 1 (on the next page), the possible role of precautionary saving. In any event, the ability to take money from 401(k) plans and IRAs could be made the same, including allowing loans from IRAs.

⁷⁰ U.S. Government Accountability Office (2009).

expand who is considered a fiduciary is to redefine the term "investment advice" by replacing a 1975 five-part test with a more sensible and inclusive functional test.

⁶⁸ For detailed analysis, see Borzi (1985 and 2011).

⁶⁹ See U.S. Department of Labor (2017). In addition, the rule has faced legal challenges in several federal courts in Texas, Kansas, Minnesota, and the District of Columbia. To date, U.S. District Courts in Texas, Kansas, and DC have upheld the legal validity of the rule, and appeals are pending.

⁷¹ Purcell (2009), AonHewitt (2011), U.S. Government Accountability Office (2009), Butrica, Zedlewski, and Issa (2010), and Fellowes and Willemin (2013). Burman et al. (2008) examine the interaction of public policies and behavioral influences.

Box 1. Increasing Precautionary Savings

As researchers and policymakers attempt to increase retirement savings by reducing leakage, many are turning to a somewhat counterintuitive notion: increase non-retirement savings. The idea is that hardship withdrawals from 401(k)s would be unnecessary if workers had another, more appropriate, pool of money set aside for emergencies. Indeed, a HelloWallet study found that workers who lack emergency savings were more likely to breach their 401(k)s than those with these savings, even when controlling for characteristics like age, education, income, and debt-to-income ratio.⁷² At the same time, workers have trouble accumulating liquid assets that can be used in an emergency because of a preference for instant gratification that leads liquid funds to be quickly spent.⁷³

The effort to increase so-called "precautionary savings" has generated two broad approaches: (1) separating some of workers' existing retirement savings into a liquid "emergency" bucket while maintaining the rest as true retirement savings; and (2) generating entirely new savings. The first approach recognizes that some leakage may be a response to legitimate emergencies and prevents individuals from going into debt, while other leakage should be limited. Some very preliminary research results suggest that under certain assumptions, 15 percent of retirement savings should be accessible for these emergencies while the remainder should be completely inaccessible until retirement.⁷⁴

One way to implement this theoretical finding has been suggested by David John of AARP in the form of "split accounts." This approach envisions separating contributions to 401(k)s into those for emergency use with penalty-free withdrawals and those for retirement, which would have the standard withdrawal penalties.⁷⁵ Some have suggested that once the emergency fund becomes large enough, say three months' worth of income, then all contributions would go to retirement.⁷⁶

The second approach, generating new precautionary savings, has been implemented on a small scale in several creative ways. One approach used by credit unions is called "borrow and save" and gives households that request a loan a portion of the money while depositing the rest in a savings account. Once the loan is paid off, the borrower gains access to any savings. Another idea is to encourage saving by tying higher rates of saving to a higher likelihood of receiving a "prize" (i.e. a payout much larger than the interest a savings account typically earns).⁷⁷ Others have attempted to increase non-retirement savings by taking a lesson from 401(k)s and offering matching contributions, with the match funded by money from foundations and individual donors.⁷⁸

⁷⁶ Laibson (2016).

⁷² Fellowes and Willemin (2013).

⁷³ Laibson (1997) and Angeletos et al. (2001).

⁷⁴ Beshears et al. (2014).

⁷⁵ John (2015).

⁷⁷ For a discussion of prize-linked savings products, see Kearney et al. (2010).

⁷⁸ For example, the "SAFE" and "Tripleboost" accounts tested by EARN in California were successful in increasing education saving among low- to middle-income families (Shipman 2016).

IN-SERVICE WITHDRAWALS. Hardship withdrawals provide a safety valve for families in financial trouble. However, to help limit leakages, these withdrawals could be limited to serious unpredictable hardships such as disability, high health care costs, and job loss.⁷⁹ Predictable events like housing and higher education could be excluded. With such limitations, the disincentive of a 10-percent tax penalty could be eliminated to avoid punishing those with severe financial problems. Another way to limit hardship withdrawals would be to restrict them to the amount of an employee's contributions. For post-59½ withdrawals, one idea is to coordinate the threshold age for penalty-free withdrawals with Social Security claiming provisions.⁸⁰

CASHOUTS. Cashing out when changing jobs could be eliminated entirely by prohibiting lump-sum distributions at termination.⁸¹ The allowable options could be limited to leaving the money in the prior employer's plan, transferring the money to the new employer's 401(k), or – for those leaving the labor force – rolling over the plan balance into an IRA. This approach could be done jointly with the actions described above intended to make direct rollovers between 401(k)s easier.

LOANS. Of the various ways to access funds, loans appear to be the best way to minimize leakage. Most borrowers continue to contribute to the plan while they have a loan; and most of the money is repaid. The likely point of default arises when a terminating employee cannot repay the loan within 60 days, causing the money to be treated as a taxable distribution and subject to penalties. But the estimated leakage from loan defaults is much smaller than from other sources. So, given that the availability of loans encourages employees to participate and contribute, loans are a low-leakage way to allow participants to access funds.

Still, defaults on loans from 401(k) accounts do occur, so the loans are not costless in terms of retirement security. Moreover, even if an individual pays back their loan, many plans do not allow a worker with an outstanding loan to make contributions to their 401(k), eliminating the chance to continue building up balances.

⁷⁹ See, for example, Munnell and Webb for a discussion of the literature and suggestions on policy options to reduce leakages (2014). For an international comparison, see Beshears et al. (2015).

⁸⁰ Munnell and Webb (2014).

⁸¹ Purcell (2009) suggests requiring at least part of the distribution to be rolled over.

An emerging alternative to 401(k) loans is to leverage the credit of the employer to offer employees low-interest loans outside of their retirement accounts. For example, MassMutual has made the "Kashable" service available to employers using its benefit platform.⁸² This service allows employees to receive emergency loans at a much lower interest rate than they could receive elsewhere. Repayment occurs automatically out of the worker's paycheck and does not incur the administrative fees of a loan out of the retirement account nor stop a worker's ability to make contributions. This approach may be a way to limit any leakage from loan defaults in the future.

Summing Up the Options

Table 1 summarizes the options for enhancing 401(k) portability, protecting transfers to IRAs, and reducing leakage.

| Goal | Option |
|-------------------------|--|
| Enhance portability | Require plans to accept rollovers |
| | Standardize rollover rules and paperwork |
| | Encourage direct rollovers |
| | Set up a public registry to prevent lost accounts |
| | Create clearinghouse to automatically roll over small balances |
| Protect transfers from | Limit forced transfers and expand their investment options |
| workplace to IRA system | Reduce conflicts of interest through the Fiduciary Rule |
| | Enhance transparency of fees |
| Reduce leakage | Limit or prohibit cashouts at job termination |
| | Tighten hardship withdrawal criteria |
| | Coordinate age for penalty-free withdrawals with Social Security |
| | claiming provisions |

Table 1. Options to Address 401(k) Portability, Transfers to IRAs, and Leakage

The proposals in this section could improve the system's administrative efficiency and management of 401(k)/IRA assets. These changes, however, would do little to improve coverage among private sector employees. This coverage issue is the focus of the next section.

⁸² MassMutual (2016).

Reducing the Coverage Gap

While the retirement savings of those with a 401(k) plan is often hindered by portability and leakage problems, workers still benefit from being covered by a 401(k). Many workers have no access to a 401(k), and this situation shows no sign of improving on its own. The precise percentage of workers covered depends on how coverage is defined. Employees can work for an employer that *offers* a plan for some of its employees, but not be eligible to participate. Their employer can offer a plan, and they can be eligible to participate but choose not to do so. Or they can actually *participate* in the plan. (For the purposes of this study, the terms "coverage" and "participation" are used synonymously).⁸³

The percentage of workers covered by an employer-sponsored plan also depends on the population under consideration. For example, using the *Current Population Survey* (CPS), restricting the population to full-time wage and salary workers ages 25-64 and using an employer *offer* as the criterion indicates that about 62 percent of that sample had at least the potential for plan participation in 2013 (see Figure 8). (Note: The Figure includes 2014 data, but 2013 data are emphasized here because of the inexplicable dip in 2014.⁸⁴) However, a commonly cited measure of coverage is all private sector wage and salary workers ages 25-64 *participating* in an employer-sponsored plan – only 44 percent in 2013 – and this definition is used for the remainder of the report unless specified. Of course, the CPS is only one of many datasets that measure coverage. Box 2 (on the next page) discusses coverage estimates from alternative surveys.⁸⁵

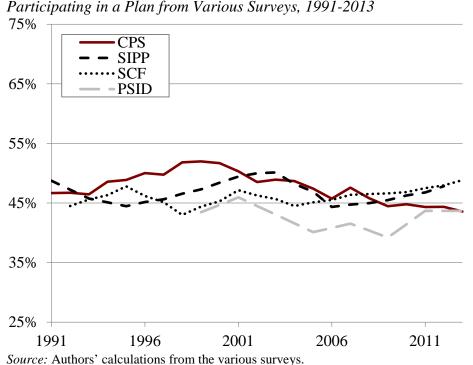
⁸³ "Coverage" is commonly used by the IRS and DOL to describe when a worker is eligible for the plan. "Participation" is also commonly used to describe when a covered employee is a participant in the plan. However, this study focuses on people who do not have a workplace plan for any reason – either they are not offered one or choose not to join it – so we rely on the "participation" measure. Overall, though, we believe that the word "coverage" is clearer and more accessible, so it is used synonymously with "participation" in this paper.

⁸⁴ Some of the recent decrease in estimated coverage may reflect a change in the CPS design (the effects of which are not well understood. See Copeland (2015b).

⁸⁵ An alternative estimate of participation not discussed in Box 2 is presented in Dushi, Iams and Lichtenstein (2015). The estimate used data from the *Survey of Income and Program Participation* (SIPP), a survey of individuals that relies on self-reported estimates of pension participation. To correct for any reporting bias related to 401(k)s, the analysis matched the SIPP responses with W-2 data. They concluded that the overall participation rate for private sector workers was 61 percent in 2012. This estimate could potentially overstate participation, because the authors assume that all respondents who believed they participated in a 401(k) when their W-2 showed no contributions were actually participating in a defined benefit plan.

Box 2. Alternative Coverage and Participation Estimates Tell the Same Story

The Figure below compares retirement plan participation rates from the CPS and three other household surveys from 1991-2013 for private sector workers ages 25-64. While participation has fluctuated for short intervals, all four datasets suggest that, over this period, 40-55 percent of workers are participating in a retirement plan in any given year.



given time (see table below).

Box Figure. *Percentage of Private Sector Wage and Salary Workers, Ages 25-64, Participating in a Plan from Various Surveys, 1991-2013*

While the household surveys show a generally consistent picture, a DOL survey of employers – the *National Compensation Survey* (NCS) – shows a much higher percentage of workers being offered a plan than the CPS. The discrepancy between the two surveys diminishes significantly, however, as the metric moves from being offered a plan to participating in a plan. So, the takeaway is the same: about half of private sector workers do not participate at a

Box Table. Pension Coverage and Participation in the CPS and NCS for Workers Ages 25-64, 2013

| Category | CPS | NCS | |
|--|-----|-----|--|
| Employer offers plan, public and private, full-time workers | 62% | 78% | |
| Employer offers plan, private, full-time workers | 57 | 74 | |
| Employer offers plan, private, full-time and part-time workers | 53 | 64 | |
| Employee participates in plan, private, full-time workers | 49 | 59 | |
| Employee participates in plan, private, full-time and part-time workers | 44 | 49 | |
| Source: Authors' calculations from U.S. Census Bureau, Current Population Survey (2014) and U.S. Departmen | | | |
| of Labor, National Compensation Survey (2014). | | | |
| | | | |

Participation in a retirement plan is closely correlated with earnings (see Figure 9). In the top quintile, two-thirds of workers – both male and female – are in an employer-sponsored plan. In the bottom quintile, that figure drops to roughly 10 percent. Moreover, the participation rate for men has declined, while the rate for women has been essentially flat (with gains among the lower earners largely offset by declines among the higher earners). The drop in male participation rates may have been caused in part by the rapid growth of 401(k) plans that made employee participation in employer plans voluntary, unlike the mandatory participation of defined benefit plans. Additional causes could include declines in unionization and large-firm employment, as these factors have been associated with higher plan coverage.⁸⁶ Pension participation among full-time, full-year workers is now equal for both men and women. (For the purposes of this study, the term "pension" refers to any type of employer-sponsored retirement plan.)

The CPS data show that, of private sector wage and salary workers not covered by a pension plan, roughly 25 percent work for an employer with a plan but are either ineligible or choose not to participate. The bulk of uncovered workers, however, are those whose employers do not offer any coverage; most of these workers are with small employers (firms with fewer than 100 workers) (see Figure 10).

Even if small employers were willing to offer 401(k) plans, the current architecture leads to very high costs for small plans. Figure 11 shows all the players in the 401(k) system; as the money flows through, each player takes a slice. Nevertheless, data from BrightScope indicate that the economies of scale for large plans (over \$100 million in assets) almost uniformly result in fees below 1 percent of assets, with the largest plans' fees typically below 0.50 percent. But these relatively low fees stand in stark contrast to those for small plans, where the average is about 2 percent and with many plans paying more (see Figure 12).⁸⁷ Paying 2 percent or more in fees makes investing prohibitively expensive and cuts balances at retirement nearly in half compared to a no-fee world. So the challenge in the coverage area is not just providing retirement plans for the uncovered population but doing so in a cost-effective way. Before discussing ways to address this issue, the next section looks at the implications of the lack of universal coverage.

 ⁸⁶ For an exploration of declining pension coverage among men in the 1980s, see Even and Macpherson (1994).
 ⁸⁷ Alfred (2015).

Implications of Coverage Gap

The fact that only about half the private sector workforce is covered by an employersponsored pension at any moment in time has two important implications for retirement income. First, some households will end up at retirement without any retirement savings and thus will be entirely reliant on Social Security. Second, projections of 401(k) accumulations based on steady contributions may not be realistic for households that move in and out of coverage.

RELIANCE SOLELY ON SOCIAL SECURITY. The data presented above provide only a snapshot of pension coverage in a given year. As workers switch jobs, many will move into coverage at some point over their work life, so the point in time snapshot understates the percentage of workers who will end up with coverage. The *Health and Retirement Study*, which asks respondents about participation and assets in employer-sponsored plans, shows that 69 percent of *households* ages 63-73 end up with assets from any type of employer-provided plan (see Figure 13).⁸⁸ In other words, more than 30 percent of households end up entirely dependent on Social Security; for low earners, the figure is four-fifths of households.⁸⁹

Lower earners' sole reliance on Social Security would not be a problem if the program provided sufficient income to maintain their standard of living. But Social Security was never intended to be the sole source of income for retirees. Social Security replacement rates – benefits as a percentage of pre-retirement earnings – fall far below the generally accepted benchmark of 75 percent to ensure an adequate retirement.⁹⁰ And low earners are more likely to claim early, which results in an actuarial reduction in the replacement rate. For example, for low earners retiring at age 62, Social Security currently replaces 44 percent of a worker's pre-

⁸⁸ The HRS is a nationally representative sample of older American households. This study began in 1992 by interviewing about 12,650 individuals (ages 51-61) from about 7,600 households and their spouses (regardless of age), and the survey has been re-administered every two years since 1992. The HRS is conducted by the Institute for Social Research (ISR) at the University of Michigan and funded by the National Institute on Aging.
 ⁸⁹ Data from the 2013 *Survey of Consumer Finances* show that almost a third of Americans have no retirement savings and are not covered by a defined benefit pension. Among respondents aged 55-64, 19 percent report having no retirement savings or pension outside of Social Security (Keith, Madland, and Weller 2015).
 ⁹⁰ Palmer (2008). This benchmark applies to single workers with pre-retirement earnings of \$50,000. For single

workers with \$20,000 and \$90,000 in pre-retirement earnings, the benchmarks are 88 percent and 81 percent, respectively. Munnell, Webb, and Hou (2014) show that half of today's working families are "at risk" of not being able to maintain their standard of living once they retire.

retirement earnings (see Figure 14).⁹¹ For those low-income workers who must pay their own Medicare premiums – Medicaid covers the premiums for about half such workers – the net replacement rate is lower. Thus, Social Security alone often does not provide enough retirement income. Working until the Full Retirement Age or beyond (to age 70) would produce higher replacement rates, but many people in this group may be unlikely to be able to stay in the labor force that long due to health issues and declining productivity.⁹²

INADEQUATE 401(K) BALANCES. The second implication of the lack of universal coverage is that workers will likely move in and out of coverage. As a result, their 401(k) accumulations could be much lower than projections based on the prospect of a steady lifetime of contributions. For example, a typical 25-year old worker in 1981 with median earnings who began contributing a steady 6 percent of their earnings with an employer match of 3 percent should accumulate about \$364,000 by age 60 (see Figure 15).

Yet, according to the Federal Reserve's *Survey of Consumer Finances*, the typical household approaching retirement had 401(k)/IRA balances of only \$135,000 in 2016, far short of the projected amount for the individual. A number of factors contribute to this discrepancy – including a failure to participate at young ages, low contribution rates, leakage, relatively high fees, and the lack of maturity of the 401(k) system – but moving in and out of covered employment is an important contributing factor. One study found that having only intermittent contributions could account for roughly a quarter of the difference between what a steady contributor could have earned and actual 401(k) savings for a typical household.⁹³

The consequences of having either no coverage or intermittent coverage are apparent when assessing summary measures of retirement preparedness. Lower-income households are much more likely to lack regular access to a workplace retirement savings plan, which is part of the reason why they are less likely to be on track to maintain their pre-retirement income at retirement (see Figure 16).

⁹¹ Replacement rates are from the U.S. Social Security Administration's Office of the Chief Actuary (Clingman et. al 2016).

⁹² Munnell, Webb, and Chen (2015) and Burtless (2013).

⁹³ Munnell (2014).

Summing Up the Problem

The coverage gap is large and includes both those who never have coverage and those with only intermittent coverage. Either type of gap poses a serious problem, because Social Security alone is often not enough – even for low-income workers. Having sufficient retirement savings requires that either employees have continuous participation in an employer plan throughout their career or that those with intermittent coverage make very high contributions when participating. Notably, the coverage gap has not diminished over the past several decades.

The causes of the coverage gap are twofold. First, many employers – particularly small employers – do not offer a retirement savings plan, perhaps partly due to high administrative costs but more likely due to non-financial reasons discussed below. This group accounts for 65 percent of the uncovered (see Figure 17). Second, as noted, another group of uncovered employees work for an employer that sponsors a plan but are either ineligible or choose not to participate. This group accounts for 22 percent of uncovered workers. The self-employed constitute the remaining 14 percent of the uncovered. The following discussion focuses on the first two groups; the problem of covering the self-employed is discussed in the final section.

Options for Expanding Coverage

In theory, any degree of coverage for traditional employees is achievable. It depends on the extent to which compulsion is introduced into pension arrangements and somewhat on the locus of pension arrangements – employer-based or centered on third-party platforms. At one end of the spectrum is the United States with an entirely voluntary, employer-based system. At the other end are Australia and the Netherlands, where coverage is mandatory and the employer plays a minimal role (see Table 2).

| | Locus of administration | | |
|------------------------|---|-------------------------------------|--|
| Degree of compulsion | Employer | Third party | |
| Voluntary/supplemental | Existing U.S. system + enhancements (part-time, MEPs, state marketplaces) | ERIC model | |
| Mandatory/universal | Mandatory auto-enrollment of all workers (federal or state policy) U.K. model | CAP model Australia, Netherlands | |

Table 2. Options for Broadening Coverage by Degree of Compulsion and Locus ofAdministration

The discussion proceeds in four steps: (1) documenting options for enhancing the existing U.S. retirement system; (2) describing efforts to introduce mandates on employers in the United States; (3) exploring international models with respect to their degree of compulsion and their locus of administration; and (4) reviewing proposals – one with voluntary participation and one with mandatory participation – to move the locus from employer to third-party platforms for the United States.

ENHANCING COVERAGE OPTIONS IN THE U.S. VOLUNTARY SYSTEM. Expanding coverage in the U.S. system has taken two tracks. One is to use auto-enrollment devices to expand coverage for those already covered by a 401(k) plan, and the other is to create special accounts for small businesses – the locus of most of today's uncovered employees. Automatic features in 401(k) plans have been very successful, and these provisions could be made mandatory for all plans. Special accounts for small business have met with little success to date but alternatives – Treasury's former *my*RA program and so-called "open" multiple-employer plans – provide options to explore.

Closing the Coverage Gap for Workers Eligible for a 401(k). The major innovation to encourage participation in 401(k) plans has been automatic enrollment.⁹⁴ Studies have shown that this simple change in the default increases participation by as much as 41 percentage points.⁹⁵ Even though participants are able to opt out, after three or four years, the vast majority of those automatically enrolled were still participating.⁹⁶ The Pension Protection Act of 2006 removed obstacles that had kept some employers from adopting these arrangements and established a safe harbor whereby employers that adopt automatic enrollment are deemed to have met the "top heavy" and anti-discrimination rules.⁹⁷ However, while the share of plans with

⁹⁴ The government changed the rules in 1998 to allow firms to require workers to "opt out" of a plan, instead of the traditional requirement to "opt in."

⁹⁵ Nessmith, Utkus, and Young (2007); Fidelity Investments (2007), and Madrian and Shea (2001).

⁹⁶ Choi, et al. (2001).

⁹⁷ One obstacle for employers was state laws that required employers to obtain an employee's permission before making payroll deductions. The Pension Protection Act amended ERISA to pre-empt state laws that conflict with automatic enrollment provisions. To qualify for the safe harbor, the plan sponsor must enroll employees at a deferral rate of at least 3 percent of compensation, increase the employee's deferral percentage by at least 1 percentage point annually up to 6 percent of compensation, and provide matching or non-elective contributions for the non-highly compensated of 100 percent on the first 1 percent of contribution and 50 percent on the next 5 percent for a total match of 3.5 percent.

auto-enrollment increased substantially in the wake of the PPA, the share of plans with this feature is still below 50 percent.⁹⁸ And employers often auto-enroll only new employees, so the effect on participation can be very gradual.⁹⁹ In short, auto-enrollment is not being applied as extensively as it could be.

One segment of the uncovered population – the relatively small group that chooses not to participate in a plan offered by their employer – could be helped by changes to 401(k) rules to make full use of behavioral incentives by *requiring* all employers with a 401(k) to adopt automatic features. Specifically, the requirements could include auto-enrollment with a 6-percent default contribution rate and auto-escalation until the combined employee-employer rate reaches 10 to 12 percent of earnings.¹⁰⁰ The use of auto-escalation is critical because, without it, participants often stay where they are put.¹⁰¹ And many plans with auto-enrollment currently have low default rates.¹⁰² Alternatively, employers could set a higher and predictable contribution rate from the start. In that case, employees could be defaulted into the plan with a 10-percent contribution rate without automatic escalation.

The default investment could be a low-fee, target-date fund. In addition, the autoenrollment provisions could apply to all workers, not just new hires, so that someone who might have chosen to opt out of the default in one year ends up enrolled in the following year. A plan following these practices would reduce non-participation rates for those with access to a plan to a bare minimum.

Improve Plans Available to Small Businesses. For decades, policymakers have tried to solve the coverage problem by introducing simpler products that could be adopted by small business. The SIMPLE (Savings Incentive Match Plan for Employees of Small Employers) is a prime example.¹⁰³ Firms with fewer than 100 employees can offer a SIMPLE, which can be set

⁹⁸ Utkus and Young (2017).

⁹⁹ Utkus and Young (2017).

¹⁰⁰ While 10-12 percent is the contribution rate required for the higher paid to accumulate adequate retirement saving to maintain their standard of living once they retire, little is known about the effects of such contribution rates on the lower paid over time. Lower-paid workers are likely to face more frequent financial crises and require easy access to some form of precautionary saving. Hence raising default rates increases the salience of establishing precautionary savings accounts at the same time.

¹⁰¹ Butrica and Karamcheva (2012).

¹⁰² Butrica and Karamcheva (2012).

¹⁰³ SIMPLE plans, which were introduced in 1996, generally replaced SARSEPs (Salary Reduction Simplified Employee Pensions), which were the earlier pension arrangements for small employers.

up as an IRA for each employee or as a 401(k) plan. The SIMPLE has a number of advantages. Firms can either match the employees' contributions or contribute a fixed percentage of their payroll without a direct contribution from employees. Once established, the SIMPLE is administered by the employer's financial institution and does not even require the employer to file an annual financial report. Furthermore, most employers are eligible for tax credits for the first three years after starting the SIMPLE.¹⁰⁴ The trend data on coverage, however, indicate that simplifying plan design has not led to a major expansion of coverage. This lack of take-up may be due to small employers' perception that plans are too expensive to set up, that they do not have the resources to administer them, and that their employees prefer cash wages (see Figure 18).

myRA. In 2015, the U.S. Treasury introduced the *my*RA (my retirement account) – a starter account for those without coverage at their current employer. Treasury discontinued this program in 2017 due to concerns about its cost effectiveness. *My*RAs were Roth IRAs, so contributions were made with after-tax dollars, contributions could be withdrawn tax free at any time, and earnings could be withdrawn tax free after age 59½. These accounts had no fees and, to protect the new saver, the Treasury constructed a security that preserved the principal and paid the same interest rate as the Government Securities Investment Fund in the federal employee TSP. *My*RAs were available to anyone with an annual income in 2016 under \$134,000 (\$194,000 for couples).

To avoid placing any burden on employers, their only task under the *my*RA program was to decide whether to offer the accounts and then to make payroll deductions for any employee who chose to participate. Employers were not required either to administer the accounts or to contribute to them. To avoid burdening – or competing with – financial services firms, the Treasury administered the accounts (in collaboration with a private sector bank) when they were small and, if the program had matured, would then have turned them over to the private sector once balances exceeded \$15,000 (or after 30 years, whichever comes first).¹⁰⁵

The *my*RA program started with an initial pilot in 2014, then Treasury launched the program nationwide in 2015. People had three ways to contribute to a *my*RA: automatic direct deposit through their employer, one-time or recurring contributions from a checking account, or

¹⁰⁴ U.S. Department of Labor and Internal Revenue Service (2009).

¹⁰⁵ U.S. Department of Treasury (2016).

direct deposit of all or part of their tax refund. Despite *my*RA's multiple access points, no fees, and preservation of principal, take-up was only about 10,000 accounts. One possible reason for the small takeup was limited marketing of the product (compared to private sector efforts to promote retirement savings products). Other issues may have been its default investment, the Roth rather than traditional IRA,¹⁰⁶ the role of government sponsorship, and its untested nature. Despite these issues, many of the state initiatives, described below, had discussed using the *my*RA as a starter account.

Multiple-Employer Plans (MEPs). Multiple-Employer Plan 401(k)s have the same limits as regular 401(k) plans, they have no income restrictions on participation, they allow the employer to make matching contributions, and they have ERISA's consumer protections.¹⁰⁷ But, as discussed above, individual 401(k)s for small employers tend to be very expensive, and employers are very concerned about their fiduciary liability. MEPs allow employers with a "common bond" to form a pooled 401(k) retirement plan, offering benefits through the same administrative structure but with generally lower costs and less compliance burden than if each employer offered a separate plan.

Specifically, a MEP can file one Form 5500, purchase one ERISA fidelity bond, and have a single audit for the entire plan. In a non-MEP situation, each employer would generally have its own Form 5500, bond, and audit.¹⁰⁸ Moreover, participating employers in a MEP generally have their fiduciary responsibility limited to selection and oversight of the person operating the plan.¹⁰⁹ It may also be possible for financial services firms to assume all the fiduciary liability.

Current law discourages the formation of MEPs in two ways.¹¹⁰ First, while the IRS has ruled that the combined plan of many unrelated employers is a single plan as long as the plan's assets are aggregated in one pool, as a consumer protection measure the DOL also requires that the plans "are tied together" by "genuine economic or representational interests." This restriction makes offering MEPs less attractive to providers, who would have to work with smaller groups

¹⁰⁶ Investments in a Roth IRA can only be rolled over to other Roth vehicles, which could exacerbate the problem of many small accounts over the employee's worklife.

 ¹⁰⁷ ERISA has established channels for adjudicating savers' complaints and sponsors' malfeasance and rules defining necessary disclosures, which help keep fees low and protect spouses in the case of divorce or death.
 ¹⁰⁸ Morse (2014). It is worth noting that the requirements are more onerous for plans with 100 or more participants than for plans with fewer than 100 participants.

¹⁰⁹ Borzi (2010).

¹¹⁰ U.S. Senate Committee on Finance (2015).

of employers and, thus, lower asset levels. Second, within a MEP, each plan is separately tested for compliance with coverage and nondiscrimination provisions, and a violation of these rules by one employer can disqualify the entire plan.

As a result of these factors, MEPs are not very common today. In 2014, MEPs represented fewer than 3,000 of the over 600,000 retirement plans identified in the Form 5500 Database.¹¹¹ Even among plans with 100 or more participants, among which MEPs are more common, just 2,159 plans out of 85,000, or 2.5 percent, were MEPs (see Figure 19). Some of these MEPs do represent the traditional notion of small employers linked together by a common bond, such as the South Dakota Association of Community Based Services. But both the largest defined benefit and defined contribution MEPs are sponsored by General Electric, whose various divisions (e.g. health care, aviation) operate separately and are brought together for retirement plan purposes under a MEP.¹¹²

To increase the prevalence of MEPs, in 2016, President Obama's budget and a bi-partisan group of Senators from the Committee on Finance proposed removing the "common bond" requirement (which would permit so-called open MEPs) to allow more small businesses to offer pooled plans to their workers.¹¹³ In addition, the Senate bill would limit the application of the disqualification sanction due to a rules violation to only the plan of the offending company.

Advocates of open MEPs maintain that they will not only expand coverage and portability but also promote more competition among providers of small business retirement plans and increase the quality of the investment products available to employees, while potentially reducing fees.¹¹⁴ However, MEPs are not without risks. In the health sphere, Multiple Employer Welfare Arrangements (MEWAs), like MEPs, allow multiple employers to access low-cost health coverage through a common provider. But, in some cases, MEWAs have been used to defraud employers by charging high administrative fees that leave little money left to pay employees' promised benefits. In response, the Affordable Care Act gave new authority to the DOL to stop this type of situation, and since 2010 the agency has pursued civil and

¹¹¹ Authors' calculations from Form 5500 database and U.S. Government Accountability Office (2012).

¹¹² U.S. Government Accountability Office (2012).

¹¹³ The proposals to improve MEPs would also fund pilots for states and nonprofits to try new approaches to expand retirement plans to groups who lack access, such as contractors and other self-employed individuals.
¹¹⁴ U.S. Government Accountability Office (2012). The Bipartisan Policy Center's Commission on Retirement Security and Personal Savings (2016) also recommends using MEPs to reduce the financial and legal burden of offering a retirement plan among small businesses.

criminal enforcement against MEWAs engaged in fraudulent practices.¹¹⁵ The experience with MEWAs raises the question of whether employers with no common bond will scrutinize a plan's operations as carefully as a group of companies with a shared interest. The 2016 report of the Bipartisan Policy Commission advocates creating a board that would certify open-employer MEPs to help reduce concerns on this front.

State Marketplaces. Another idea for improving coverage is to make it easier for employers to shop for plans through a marketplace. The marketplace concept has been adopted by two states: Washington and New Jersey.¹¹⁶ The intent is to educate small employers on plan availability and promote competition among providers to offer low-cost, low-burden retirement savings plans. Participation is voluntary. Employers participating in the marketplace could be covered under ERISA, although both marketplaces are also going to include plans like the SIMPLE-IRA on their portals where ERISA would not apply.

Summary. Offering plans like the SIMPLE to small businesses has had little effect on coverage in the past, so efforts to expand visibility of these offerings through a marketplace is unlikely to expand coverage significantly. To date, data indicate that few small employers offer such plans, even if the plan is simple and has few administrative requirements.¹¹⁷ And numerous studies have shown that many low- and middle-income workers do not contribute to a retirement plan when offered one, although once auto-enrolled they tend to stay in.¹¹⁸ So leaving all the choice in the hands of employers and employees is likely to produce little additional saving.

Open MEPs may be a slightly different story only because they, unlike the SIMPLE or *my*RA, are strongly supported by the financial services industry.¹¹⁹ This support means that, if open MEPS were adopted, private companies would likely actively market them to small employers. Even if they make some inroads, however, voluntary take-up will likely not eliminate the coverage gap. And the risk is that many small and moderate-sized companies with plans could convert to an open MEP to reduce costs and fiduciary liability.

¹¹⁵ U.S. Department of Labor (2013).

¹¹⁶ State of Washington Legislature (2015) and State of New Jersey Legislature (2016).

¹¹⁷ The latest IRS data show that only 4 percent of households participate in a SEP, SIMPLE, or other form of employer-sponsored IRA (see Chen and Munnell 2017). And, as noted above, Treasury's recent decision to end the MyRA program was related to a lack of demand.

¹¹⁸ Beshears et al. (2010), Madrian and Shea (2001), Butrica and Karamcheva (2012), and Nessmith, Utkus, and Young (2007).

¹¹⁹ Kalamarides (2016).

INTRODUCING COMPULSION INTO THE U.S. SYSTEM. Given the difficulty in getting small employers to introduce employer-sponsored plans, many researchers and policymakers came to recognize that a major expansion of coverage was unlikely to happen on its own. Ideas coalesced around imposing a mandate on employers to automatically enroll their employees in some type of plan. This notion was originally conceived as a national initiative, but it soon spread to the states.¹²⁰

The National Proposals. In 2009, President Obama proposed auto-IRAs based on an idea introduced by researchers from the Heritage Foundation and the Brookings Institution.¹²¹ Under the initiative, employers with more than 10 employees and no retirement plan would be required to place 3 percent of an employee's salary in an IRA. Employees could choose between a Roth and a traditional IRA, but the Roth, which allows low-income workers who may need the money to withdraw their contributions without penalty, was the default. The auto-IRA contributions would qualify for the Saver's Tax Credit which could help very low earners find the money to save (see Box 3, on the next page). Additionally, the proposal provided a tax credit to help small businesses with implementation costs. As with auto-enrollment in 401(k)s, employees could opt out of the plan.

¹²⁰ See, for example, Iwry and John (2009) and Munnell, Belbase, and Sanzenbacher (2016).

¹²¹ Iwry and John (2009). In addition, the auto-IRA idea was embraced in 2008 by both major party presidential candidates.

Box 3. Expand the Saver's Tax Credit

Another way to boost participation rates and increase the total amount of money going into state auto-IRAs is to encourage use of the federal Saver's Tax Credit as a matching contribution.¹²² Research suggests that matching contributions have had such benefits for 401(k) plans.¹²³ 401(k)s rely on matches by employers, which are not part of the auto-IRA design, but the Saver's Credit, with some improvements, could serve the same purpose. The current Saver's Credit gives a tax break to low- and moderate-income taxpayers who save for retirement. Depending on a household's income, it can claim a credit for 50 percent, 20 percent, or 10 percent of the first \$2,000 contributed to a retirement account during the year. In theory, the Saver's Credit looks great but, in practice, it has design flaws that limit its effectiveness. The first issue is that it is nonrefundable, so it can reduce the required tax repayment to zero but not below. For example, if a couple had a tax liability of only \$750, their credit would be limited to that amount. Second, the Saver's Credit is often not usable for taxpayers with children, because it is applied after the non-refundable Child Tax Credit. However, these types of flaws can be remedied under proposed legislation, such as the Encouraging Americans to Save Act (S.2492). Similar to many previous bipartisan proposals, S. 2492 would make the credit refundable to a retirement savings account, expand coverage to middle-income households, and introduce a smooth phase-out of the credit. A recent analysis looked at how S.2492 could improve outcomes for workers in Connecticut not currently offered an employer-sponsored plan. The results show a big improvement, both in terms of the dollar size of the credit and the match rate (see Table below).

| Income quartile | Credit amount | | Match | Match rate | |
|-----------------|---------------|---------|-------------|------------|--|
| | Current law | S. 2492 | Current law | S. 2492 | |
| Lowest | \$34 | \$157 | 10% | 44% | |
| 2nd | 157 | 418 | 13 | 35 | |
| 3rd | 30 | 265 | 1 | 11 | |
| Highest | 4 | 43 | 0 | 1 | |

Box Table. Saver's Credits under Current Law and S.2492 for Connecticut Workers Not Offered an Employer-Sponsored Pension

ave been \$63.000 in 2014.

Source: Authors' calculations from U.S. Census Bureau, Current Population Survey (2015).

¹²² The Bipartisan Policy Commission's 2016 report suggests that another function of a retirement clearinghouse could be the direct disbursement of the Saver's Credit into recipients' retirement accounts. Presumably this arrangement could also be set up for the state auto-IRA programs.

¹²³ For more details on the effects of matching contributions on 401(k)s, see Madrian (2013). The effect on participation is relatively small compared to automatic enrollment. The largest effect is that the match threshold creates an anchor, so a high match threshold and a low match rate is likely more effective at encouraging individual contributions than a high match rate with a low match threshold. But by far the biggest effect is that the match means more money going into the account. In that sense, a non-contingent contribution may be just as effective (and more equitable) than a match. In the context of a government-funded match through the Saver's Credit, any assessment must consider both the benefits to the recipients and the costs associated with raising taxes to pay for the benefit. See also Engelhardt and Kumar (2007) and Choi, Laibson, and Madrian (2004).

In 2012, then-Senator Tom Harkin (who was chairman of the Health, Education, Labor, and Pensions Committee) proposed "Rebuilding Pensions: Promise Funds," which would create a government-mandated, privately-managed defined contribution pension program.¹²⁴ This plan would automatically enroll all workers whose employer does not provide an employer-sponsored plan meeting a minimum standard for generosity. The contributions would be invested in a commingled portfolio, thereby spreading the risks among all participants and relieving the individual of the burden of making investment decisions.¹²⁵ Payments from the plan would be in the form of an annuity, so that retirees would not have to worry about outliving their savings. Again, workers would be able to opt out.

In 2016, Congressman Joe Crowley (a member of the House Ways and Means Committee) proposed legislation that would direct employers with 10 or more employees that do not provide a retirement plan to auto-enroll their employees in a traditional IRA. Employers would be required to directly contribute 50 cents per hour into this account, with this amount increasing with wage growth. Participating small employers (less than \$5 million in gross receipts) would get a refundable tax credit for five years; equal to the value of their contributions for up to 10 employees. Employees, once enrolled, would contribute 3 percent of their pre-tax income, with employee contributions increasing gradually over time unless the employee opts out.¹²⁶ Despite numerous proposals aimed at closing the coverage gap, no legislation has been enacted at the federal level. Instead, the states have stepped into the breach.

The State Initiatives. Current efforts to set up state-sponsored retirement programs for uncovered private sector employees represent the culmination of work by several policy, labor, and consumer organizations, beginning in the late 2000s.¹²⁷ The first effort, which occurred in California, drew on specific proposals, not only by researchers, but also by the National

¹²⁴ Harkin (2012).

¹²⁵ Commingled funds are less expensive than the investment options available for IRAs. Investment costs, however, are only a small part of the costs of running an IRA system.

¹²⁶ The plan would moderate swings in the stock market by channeling some above-average returns in good years into a collective investment pool and distributing those monies to accountholders in bad years.

¹²⁷ The New America Foundation helped design California's first private sector retirement bill, a 401(k) linked to the state employee pension system, introduced in 2007. In 2009, the Economic Opportunity Institute proposed a system of "universal voluntary retirement accounts" in Washington State based on earlier work by Dean Baker. During this period, Mark Iwry of the Brookings Institution was also active in efforts to promote pilot auto-IRA plans in a number of states. Ultimately, political support from key public sector unions, AARP, and other stakeholder groups helped pass private sector retirement bills in several state legislatures.

Conference on Public Employee Retirement Systems (NCPERS).¹²⁸ The NCPERS plan reflected the recognition by public employees that the quality of their own retirement coverage could be at risk if their counterparts in the private sector lack access to a retirement system.

The California legislation enacted in 2012 – the California Secure Choice Retirement Savings Program – looked quite different from the hybrid pension proposal included in the first draft of the bill.¹²⁹ Most importantly, the vehicle moved from a cash-balance plan (a defined benefit plan that tracks balances on an individual account basis using credited contributions plus interest) to an IRA, which increased the likelihood that the program would not be subject to the reporting and fiduciary requirements of ERISA. The legislation retained both an employer mandate and language allowing for participant risk pooling and guarantees, if feasible without imposing liability on the state. At this point, California's governor has signed the final bill to get the program up and running in 2018.

Four other states – Connecticut, Illinois, Maryland, and Oregon – have also passed legislation following the auto-IRA model.¹³⁰ Connecticut completed its feasibility study and has passed final enabling legislation. Illinois has completed a feasibility study and plans to move forward in 2018. Maryland is at the earliest stage of the five states. Oregon has completed a pilot of its auto-IRA program and is in the process of rolling out the program in stages based on employer size.¹³¹

Other states, such as Massachusetts, are toying with the idea of having both an auto-IRA system and a state-run MEP, which would allow unrelated employers to offer 401(k) plans but shifts the administrative burdens and fiduciary responsibilities to a third party.¹³² While

¹²⁸ Two important studies were the Retirement Security Project's national auto-IRA (Iwry and John, 2006, 2009) and Teresa Ghilarducci's 2011 California Guaranteed Retirement Accounts (Rhee 2011). The original NCPERS (2011) proposal envisioned a cash-balance plan with voluntary contributions and a modest guaranteed return. The program would take advantage of the public sector's economies of scale to deliver investment results in a cost-effective manner and its ability to pool mortality risk over a large number of participants to provide annuities at retirement. ¹²⁹ State of California Legislature (2012).

¹³⁰ State of Connecticut General Assembly (2014), State of Illinois General Assembly (2014), State of Maryland General Assembly (2016), and State of Oregon Legislature (2015).

¹³¹ In the first stage, which started in November 2017 and will end in May 2018, the program will auto enroll workers employed at firms with more than 100 employees. The plan intends to reach all workers (in standard employment relationships) without access to a plan by the end of 2020 (Oregon Saves, 2017).

¹³² The system could be either directly run by the state or run by a third party overseen by the state. See Commonwealth of Massachusetts (2015).

employers cannot be required to adopt a MEP under ERISA, the MEP option may be seen as desirable because it has higher contribution limits than IRAs and allows employer matches.

Figure 20 shows where plan activity has taken place. The red and orange colors identify those states with plans underway, the stripes indicate states with active legislation, and the light grey those states with failed legislation. It should be noted that many of the states with active programs today had many failed pieces of legislation before an actual program was enacted. The message from the map is that state activity to cover uncovered workers is widespread.¹³³

Some involved in the state-based initiatives were concerned that a state-run auto-IRA program would trigger ERISA coverage. While ERISA offers many consumer protections, it also involves significant reporting and disclosure requirements and stringent conduct standards for plan fiduciaries. Several states indicated that if their auto-IRA programs would trigger ERISA coverage, they would not proceed. These concerns appeared to have been diminished in 2016 by a DOL rule that established a safe harbor whereby state-run payroll deduction programs with automatic enrollment would not trigger the creation of plans subject to ERISA by private sector employers.¹³⁴ In early 2017, however, Congress eliminated this rule, which makes the path ahead somewhat more uncertain. In any case, states that have adopted auto-IRA plans are moving forward; for example, Oregon has already begun to launch its program.

Even assuming successful implementation, state auto-IRA programs may have challenges.¹³⁵ For instance, in some cases, state programs may include provisions that make it difficult for employers who operate in multiple states, administering payroll-deduction contributions for some workers but not others. And employees who leave a state with a program and begin working in a state without one will lose access to automatic enrollment which could affect savings. Nevertheless, state-IRAs could help shrink the coverage gap in the absence of a federal auto-IRA program. The following section looks at international models to see the extent to which they use compulsion to ensure coverage and the extent to which they rely on employers as opposed to third parties to administer their systems.

¹³³ For additional details on specific states, see AARP (2016), Georgetown University Center for Retirement Initiatives (2016), and Pension Rights Center (2016).

¹³⁴ U.S. Department of Labor (2016).

¹³⁵ The Bipartisan Policy Center's Commission on Retirement Security and Personal Savings (2016) echoes this need to avoid a patchwork of state regulations. Beginning in 2020, it proposes a national minimum coverage standard that would require employers with 50 or more employees who do not offer a plan meeting certain thresholds to automatically enroll employees into a new Retirement Security Plan (administered by a third party).

INTERNATIONAL MODELS TO ACHIEVE BROAD COVERAGE. Other countries have used various degrees of compulsion to achieve broad coverage. These countries also vary in the extent to which the administrative burden falls on the employer. The following discussion looks at three countries: the United Kingdom, which is rolling out a nationwide auto-enrollment program; the Netherlands, which has achieved broad coverage without an explicit mandate and has dramatically reduced the burden on employers; and Australia, which has mandated that employers save on behalf of their employees and has also reduced the role of employers to that of a conduit.

United Kingdom. The United Kingdom is in the process of moving to a universal system for traditional employees through the introduction of an auto-enrollment mandate, now being phased in by firm size, as well as the introduction of the National Employment Savings Trust (NEST) as the plan administrator of last resort.

The United Kingdom entered the new century with a serious retirement income problem. Its government old-age pension benefits – among the least generous in the industrial world – were on track to become even less generous, with retirees increasingly dependent on means-tested benefits. The decline in government pensions was an especially serious problem for average- and low-wage workers, who typically have little or no retirement savings. To shore up future retirement incomes, the government in 2001 imposed a retirement savings mandate on employers, requiring all employers with five or more employees and no retirement program to *offer* workers a "stakeholder" retirement savings plan. Despite the mandate, the stakeholder initiative failed to gain traction.¹³⁶

The Pensions Commission, created in 2002 to conduct a thorough review of the nation's private retirement income system, concluded that retirement incomes would become "increasingly inadequate and unequal" unless the nation introduced significant reforms.¹³⁷ These reforms included an increase in the State Retirement Age, an increase in government pensions available at that age (which would sharply reduce dependence on means-tested benefits), and a

¹³⁶ With fees capped at 1.5 percent of assets for the first 10 years, and 1 percent of assets thereafter, financial services firms viewed the target market – average- and low-wage workers and small employers – as unprofitable. Marketing and set-up costs were high. Plan providers were also required to offer trustworthy advice, and advising participants who would likely be eligible for means-tested benefits was costly and risky. At the same time, the program did not attract much interest from workers: most stakeholder plans had no contributors. See Johnson, Yeandle, and Boulding (2010) and Pensions Commission (2005).

¹³⁷ Pensions Commission (2005).

revamped employer mandate. Rather than just requiring employers to *offer* a plan, the Commission called for requiring employers to automatically enroll their workers and make matching employer contributions.¹³⁸

In 2008, Parliament enacted such a mandate. When fully phased in, employers without a better plan will be required to auto-enroll their workers in a retirement savings plan in which workers contribute 4 percent of after-tax earnings, the employer provides a 3-percent match, and the government adds 1 percent as tax relief on the worker contribution.

The existing legal system retains a large role for the employer. The United Kingdom allows employers two main options for handling fiduciary and administrative responsibilities for their retirement plans. First, they can serve as an administrator and trustee for their own plan. Second, they can contract out the responsibility to an outside provider.

Employers that already had a plan prior to the reform must ensure it meets the new autoenrollment, contribution, investment, and fee standards of the 2008 legislation, but they retain the right to run their own plans and serve as the administrator and trustee. In this case, their administrative and fiduciary role is very similar to those of U.S. companies that sponsor 401(k) plans. Alternatively, they can hire an insurance company to serve as trustee and recordkeeper, which reduces their fiduciary responsibility.

Employers that did not have a plan prior to the reform are generally choosing "off-theshelf" products from one of several national pension providers, an industry that has blossomed due to the new government requirements. These providers include a government-supported plan – NEST – and competitors that have emerged, such as The People's Pension and Now: Pension. These third-party arrangements remove the fiduciary and administrative burden from employers, similar to MEPs in the United States.

In short, the mandate is encouraging employers to revisit their legal relationship to retirement schemes, and to look for structures (such as so-called "master trusts") that reduce or minimize their role. In effect, the U.K. mandate is creating a long-term incentive for the

¹³⁸ Pensions Commission (2005). The mandate required employers to auto-enroll workers from age 22 to the State Retirement Age (currently 65 for men and 60 for women, rising to 66 for both men and women by 2020) with earnings above the threshold for participation in the state pension program (£9,440 a year in 2013/14). See Thurley (2013).

establishment of independent institutions of retirement benefit provision, as happened in Australia.

The Netherlands. As in many other European countries, the Dutch pension system consists of three pillars: (1) the state pension; (2) supplementary collective pensions; and (3) individual saving products.¹³⁹

Because the state pension is quite modest, the amounts received through the employmentbased supplementary pensions are the heart of the Dutch system. Coverage under these arrangements is not always technically mandatory, depending on the industry/occupation of the worker, but it is essentially universal. As a result, this system is considered "quasi-mandatory."

The pension funds in the supplemental system consist of three types: (1) sectoral pension funds, which constitute approximately 75 percent of the pension assets in the Netherlands; (2) company pension funds; and (3) occupational pension funds, which are mandatory for specific groups of independent professionals.

The employment-based supplementary pension schemes involve an arrangement between the employer, the employee, and an independent external pension fund. The employer and employee agree upon the conditions of the pension, which are commonly included in individual employment agreements or in the collective bargaining agreement. After entering into a pension agreement with the employee, the employer delegates the execution of the pension agreement to a pension provider. The employer and the pension provider have an administrative agreement about the provisions of the plan (premium contribution, indexation). The pension provider can be a pension fund or an insurance company, which are both legally independent entities and are governed by their own independent boards.¹⁴⁰

¹³⁹ This discussion is based on a number of sources, but the chapter on the Netherlands in *Pensions and Insolvency – An International Survey* (Sixma and Veldhoen 2015) was especially helpful.

¹⁴⁰ The law provides for five types of governance models: the joint model, the independent model, and three mixed one-tier board models. In the joint model, the board consists of representatives from the three stakeholder groups: the employees, and the pension beneficiaries. The employee and beneficiary representatives together hold the same number of seats as the employer representatives. It is also possible to add one or two seats for independent members who do not directly represent the stakeholders in the fund. The supervision of the board is done by a permanent supervisory board consisting of independent members. For a sectoral pension fund, the supervisory board is mandatory; a company pension fund may instead opt for an annual review by a visitation committee. In the independent model, the board includes at least two independent professional board members, and supervision is structured in the same way as in the joint model. In the mixed models, both executive and non-executives have seats on the board, and the non-executive directors are charged with the supervision of the executive directors.

Two bodies regulate the Dutch pension system: the Dutch Central Bank and the Dutch Authority for the Financial Markets. The Central Bank examines the financial position of pension funds to assess whether they are financially healthy and whether they can be expected to fulfil their financial obligations in the future. The Authority for the Financial Markets establishes the required ratio of assets to liabilities.¹⁴¹ In the case of a funding shortfall, a pension fund must notify the Central Bank and submit a recovery plan.

The net result of the Dutch pension system is that virtually all employees are covered and the employer hands over all responsibility for retirement benefits to the pension fund and bears almost none of the administrative or fiduciary burden.

Australia. Australia has achieved high individual retirement savings and broad coverage at relatively little cost to the government and little burden on employers. The system consists of three pillars: the government's Age Pension program, a mandated Superannuation employer-funded savings account for each worker, and private savings.¹⁴²

The Superannuation program, created in 1992, is the heart of the Australian retirement system. The program requires that employers contribute 9 percent of earnings, rising to 12 percent by 2025, to a tax-advantaged retirement plan. Over 90 percent of employed Australians have savings in a Superannuation account. Most employees can select a Superannuation Fund, which are generally organized by financial services companies or by public or private employer or industry groups. The Funds typically give workers the choice on how their savings are invested, and, in many cases, allow workers to keep their Fund when they switch employers.

The employer is the initial fiduciary in the Superannuation program and is responsible for selecting a default Superannuation Fund if a pre-agreed industry or occupation standard does not apply. The Funds, including a Fund the employer might sponsor, are also fiduciaries and are

¹⁴¹ A pension fund must value its assets and liabilities at fair value, and promised benefits must be discounted at the risk-free interest rate.

¹⁴² The Means-Tested Age Pension provides a basic income to those with incomes and assets less than specified threshold levels. Singles can get a benefit equal to about 28 percent of the average male wage and couples about 41 percent, with benefits reduced or eliminated as incomes or assets rise above the threshold levels. Individuals must be 65 to qualify. Roughly half of retirees get a full benefit, a quarter get a partial benefit, and the remaining quarter receive no benefit because their income and/or assets are too high. The eligibility age will rise to 67 over the next decade. Voluntary saving, the final pillar in the Australian system, includes both additional contributions to a Superannuation Fund and saving outside these tax-advantaged Funds. Only 20 percent of eligible employees take advantage of additional savings options, and most of those who do are concentrated in the upper end of the income distribution. As mandatory superannuation contributions rise to 12 percent of earnings, voluntary saving may decline.

responsible for selecting the menu of investment options and a default investment option for those who make no choice. Overall the role of the employer is minimal, serving mainly as a conduit.

In short, many other countries have concluded that all workers need to be covered by a combination of public and private retirement plans that together provide adequate retirement income. The degree of compulsion adopted to achieve broad coverage varies from a mandate on employers to auto enroll their employees in the United Kingdom, to a social compact in the Netherlands, to an outright mandate on employers to contribute on behalf of their employees in Australia.

The other interesting aspect of these international plans is that the Netherlands and Australia have reduced the role of the employer to that of a conduit for funds from the employer to the third-party provider. The U.K. mandate also appears to be creating a long-term incentive for the establishment of independent institutions of retirement provision, as happened in Australia. The following describes proposals to reduce the employer's role in the United States.

REDUCING THE ROLE OF THE EMPLOYER. The dissatisfaction of employers with the provision of health and retirement benefits was clearly evident in 2007, when the ERISA Industry Committee (ERIC) – a membership organization representing the employee benefit plans of the nation's largest employers – put forth a proposal that would shift the responsibility for the provision of retiree and health benefits from the employer to a "New Benefit Platform for Life Security."

ERIC reported that employers often complain that they face complex regulations and escalating financial commitments and that health and retirement plans divert their attention from their business activities just when they most need to focus. If large employers feel burdened, small employers must feel overwhelmed. In testimony, Michael Stapley, President and CEO of Deseret Mutual and Chairman of the ERIC Task Force summarized the situation:

...Employers that today provide retirement, medical and similar life security benefits are under stress. In addition to increased national and global competition, U.S. employers face complex, inflexible, and often contradictory rules as well as exposure to litigation that has increased over time. In many cases, the administration of retirement, health, and other benefits has itself become a major enterprise within companies that often diverts their focus from competitive business challenges.¹⁴³

In 2014, the American Academy of Actuaries also suggested shifting responsibility away from employers in "Retirement for the AGES: Building Enduring Retirement Income Systems."¹⁴⁴ AGES is an acronym for the four principles of Alignment, Governance, Efficiency, and Sustainability. The Academy concluded that the roles of the stakeholders in the retirement system were not aligned with their skills.¹⁴⁵ Historically, employers have used retirement plans to manage their workforce – to attract talented workers, to motivate their workers to perform well, and eventually to ease them into retirement. Employers have established and administered the plans, selected the investment managers, provided educational material, and performed many fiduciary functions. Administering retirement programs, however, is complicated, and the legal and financial issues are also complex. Some larger employers may be able to perform these roles but, for many others, hiring and maintaining the expertise to administer and manage retirement programs can be a distraction from their core businesses. A better alignment of roles would enable employers simply to collect employee contributions to be invested in retirement plans administered by a third party.

Several proposals have been put forth for restructuring the U.S. retirement system in order to relieve the burden on employers and ultimately increase coverage.¹⁴⁶ This section presents two – one based entirely on the private sector – the ERIC proposal – and the other relying on a government plan – a proposal from the Center for American Progress (CAP).¹⁴⁷

ERIC Proposal. In 2007, ERIC proposed a new voluntary system that would involve establishing third-party Benefit Administrators – trusted intermediaries with expertise in designing, delivering, and managing retirement and health benefits. (Since ERIC's proposal predates the ACA, it includes health as well as retirement benefits.) These administrators could be banks, insurance companies, investment companies, or new entities created specifically for this

¹⁴³ For more detail, see ERISA Industry Committee (2009).

¹⁴⁴ https://www.actuary.org/files/PPC-Forward_AGES-Monograph_01-16-14.pdf

¹⁴⁵ American Academy of Actuaries (2014).

¹⁴⁶ Ghilarducci (2008), and James and Ghilarducci (2018 forthcoming).

¹⁴⁷ A white paper from State Street Global Advisers building on lessons from abroad also advocates the creation of collective investment platforms to lessen the burden on individual employers. See Reilly and Kahn (2016).

purpose. The entities would compete for employers' business and also for individuals who want to buy their benefits directly.

To ensure that every business would have access to at least two Benefit Administrators, the federal government would establish uniform services areas for retiree and health benefits. The government would also establish national standards for the Benefit Administrators so that individuals could make apples-to-apples comparisons. But the Benefit Administrators would be free to offer additional benefits, such as life insurance or group auto and homeowners insurance. Employers would have the option to contract with one or more of these providers, but could continue to manage their own benefits if they wanted. The competing Benefit Administrators and their affiliates would assume ERISA's fiduciary liability. The complex non-discrimination rules would be replaced with "safe harbor" designs to encourage broad-based availability of benefits.

The ERIC proposal spells out the type of retirement savings offerings that the Benefit Administrators would provide. Each Benefit Administrator would be required to offer three types of plans:

- Guaranteed Benefit Plan a cash-balance plan insured by the Pension Benefit Guaranty Corporation where the employer, and perhaps the employee, would make the contributions and the Benefit Administrator would establish the minimum guaranteed credit and manage the assets. Benefits would be paid as an annuity at retirement with no loans or guarantees before that time.
- Retirement Savings Plan a defined contribution plan similar to a 401(k) that would be financed by employers and employees and would be portable among competing Benefit Administrators.
- Short-Term Security Account an account available for specific purposes, such as uncompensated medical expenses or education.
- This proposed three-part structure could be combined with auto-enrollment to enhance participation.

In terms of the employers, the proposal would get the retirement and health plans off their books and relieve them of fiduciary liability, while creating a structured uniform system that could provide greater coverage and adequate benefits. The proposal would also make the benefits completely portable from one benefit administrator to another. Employers who want to offer generous benefits to compete for talent could continue to do so, but their job would involve simply transferring money to some type of new platform.

CAP Proposal. The Center for American Progress (CAP) has a proposal (initially introduced in 2012 and refined since then) that would provide all workers with access to a National Savings Plan (NSP) modeled on the TSP, the 401(k)-style plan for federal employees and members of Congress.¹⁴⁸ Workers without access to a retirement plan at their workplace would be automatically enrolled in the NSP, and independent contractors and the self-employed would have easy access with automatic direct deposit from their bank accounts.

The NSP would be run by an independent federal agency – either the Federal Retirement Thrift Investment Board, or a similar organization. This board would contract with private sector companies to provide recordkeeping and investment services and to monitor the performance of these companies. The investment options, similar to the TSP, would be limited to five core funds and life-cycle funds that offer age-appropriate combinations of those funds.

Unlike the TSP, the NSP would be based on the IRA, rather than the 401(k).¹⁴⁹ The default option would be a Roth account, but a traditional option also would be available. The authors of the plan would like the NSP to have the same income eligibility and contribution limits as current 401(k)-style defined contribution plans, not the lower IRA limits.¹⁵⁰ The higher limits would enable meaningful saving for middle and slightly higher earners and ensure that employees were not auto-enrolled in a plan in which they were ineligible to participate.

The initial default contribution rate would be 3 percent, but since participants tend to stay where they are put,¹⁵¹ the NSP default would automatically increase contributions by 1 percent per year until the rate reached 6 percent, a rate in line with the median contribution rate typically

¹⁴⁹ Unlike the auto-IRA model being adopted by the states, employers would be permitted to make contributions to their employees' accounts. If the employer decides to contribute, the NSP would require that the contributions be universal – either the same flat dollar amounts or the same percentage of pay for each employee.

¹⁴⁸ For more details, see Madland, Rowland, and Davis (2016), Madland (2012), Davis and Madland (2013), and Davis, Kazzi, and Madland (2010).

¹⁵⁰ The IRA annual contribution limit is currently \$5,500, while participants in 401(k) plans can put aside \$18,000 of their own money each year, with their employers able to contribute an additional \$35,000. These amounts are indexed to inflation. Savers age 50 and older also can contribute additional "catch-up contributions," which cannot exceed \$1,000 for IRA savers or \$6,000 for those in 401(k)s (Internal Revenue Service 2015a and b).

¹⁵¹ Research from Vanguard shows that 46 percent of automatically-enrolled retirement plan participants remained at their default contribution rate three years after enrollment.

reported by Vanguard.¹⁵² Both the initial default and the auto-enrollment ceiling could be increased in the future.¹⁵³

The authors assume that the NSP will have fees of 0.25 percent, consistent with the fees available in the largest private market plans and the United Kingdom's auto-enrollment-based plan.¹⁵⁴

To encourage savers to think about their balances as a stream of payments rather than a pile of assets, the NSP would provide estimates of monthly income on plan statements, and individuals would be defaulted into a lifetime-income stream upon retirement with the ability to opt out. They would also be able to annuitize a portion of their accumulations.¹⁵⁵

Summary. Transferring the sponsoring and administration of retirement plans to third parties – as would be done in the ERIC and CAP approaches – could solve several problems. One is coverage; the uncovered could be defaulted into plans run by these third-party entities and, although some might opt out, many would stay and contribute at least a small amount. The second problem is leakage. Workers who switch jobs could keep their third-party 401(k) plan at their new employer, eliminating the cashing out of balances upon termination. The third problem is costs. With an appropriate regulatory environment, third-party administration could lead to more standardization in plan design and fee disclosures and offer economies of scale that could bring down costs for small and mid-sized companies. Indeed, at least one private sector startup – 401k4USA – is developing a third-party platform that would take many of the responsibilities of running a 401(k) off employers. Currently, the firm is looking for clients and funding.¹⁵⁶

¹⁵² Utkus and Young (2016).

¹⁵³ 401(k) plans, however, typically include an employer contribution, which brings the median total contribution rate to about 10 percent. Even this level is on the low end of recommendations of many financial advisors, who suggest contribution rates anywhere from 10 percent to 15 percent.

¹⁵⁴ NEST charges investors 0.3 percent of assets annually and a 1.8 percent one-time contribution charge. The contribution charge goes to paying back government loans to get the plan off the ground and is designed to be a temporary expense. The current TSP fee is 0.029 percent, but the government currently subsidizes TSP in a number of ways. For example, non-vested agency contributions are currently used to partially pay down TSP administrative costs when employees leave their positions early. Moreover, NSP is likely to incur new costs as it serves a wider audience with much less experience with retirement plans (National Employment Savings Trust 2015).

¹⁵⁵ To help alleviate savers' fears, the default annuitization could follow a "trial" model (see Gale et al. 2008) where the default annuities would extend only for a specified trial period, after which individuals could choose whether to continue the monthly payments. The board also could have savers automatically purchase deferred annuities over time (see Iwry and Turner 2009).

¹⁵⁶ A brief overview of 401k4USA is available at: http://www.digital.nyc/startups/401k4usa

Of course, potential drawbacks exist as well. In a third-party arrangement, employers give up some flexibility over the design details and administration of the retirement plan in favor of choosing from a set menu of options. The reason third-party platforms like those found in the United Kingdom and Australia can offer employers inexpensive plans with limited legal liability is that they rely on several template plans that reduce the decisions made by the employers. The employers would be able to determine their match and might sign off on a contribution rate and vesting schedule, but they would leave the default contribution rate, investment lineup, and investment monitoring up to the trust. For some employers, this situation might be desirable.

SUMMING UP THE OPTIONS. As noted at the beginning of this section, countries have the ability to achieve any degree of coverage under their retirement plans that they wish. The outcome depends on policymakers' tolerance for compulsion. Table 3 (on the next page) sums up the options for closing the coverage gap for traditional workers in the United States, beginning with the most modest initiatives and ending with the Australian requirement that employers contribute to a retirement plan on behalf of their employees. In tandem with narrowing the coverage gap, some proposals would move the United States away from the current employer-based system. More extensive changes of this sort would require a longer timeframe to implement.

| Goal | Option |
|--|--|
| Improve participation among workers eligible for 401(k)s | • Mandate that all 401(k) plans automatically enroll all new employees immediately and non-participating employees periodically |
| Enhance voluntary system | Publicize availability of federal plans designed for small business, such as SEP IRAs and SIMPLEs Expand marketplaces like those in New Jersey and Washington if they prove successful Enact legislation to facilitate the establishment of open MEPs Expand the Saver's Tax Credit |
| Establish plans with auto- enrollment for employees without coverage | Impose a federal mandate on employers without a plan to auto enroll their workers in an IRA; or Revise ERISA to enable a federal mandate on employers to auto enroll their employees in 401(k)s (or open MEPs) like in the United Kingdom Enable states to mandate all employers without a plan to auto enroll their workers in an IRA; or Revise ERISA to enable states to mandate all employers without a plan to auto enroll their workers in an IRA; or Revise ERISA to enable states to mandate all employers without a plan to auto enroll their workers in open MEPs Promote efforts to move administrative burden from employers to third-party platforms |
| Require employer contributions along with coverage of employees | Impose a federal mandate that all employers must contribute to a retirement plan on behalf of their employees, as in Australia Combine mandatory coverage with shift in responsibility from employers to third-party platforms |

Table 3. Options to Expand Coverage by Retirement Plans

Introducing Broader Options to Cover Self-Employed and Contingent Workers

Even if all traditional workers had coverage through their employers, the self-employed and the growing number of contingent workers would be left out. Covering the self-employed and contingent workers in supplementary plans, however, is in its infancy even in countries that have aimed for universal coverage.

Most workers in non-standard employment are not enrolled in a retirement plan. While these workers could go out and open up their own IRA, the evidence indicates that they do not. In fact, an industry survey found that fewer than one in six Americans have spent two hours or more within the past year planning for an IRA investment.¹⁵⁷ Data from the Investment

¹⁵⁷ TIAA-CREF (2014).

Company Institute show that only 14 percent of households contributed to an IRA in 2014 (see Figure 21), and a recent study found that fewer than 10 percent make significant consistent contributions.¹⁵⁸

Moreover, workers with alternative work arrangements are likely not going to be picked up by the state savings initiatives underway in California, Connecticut, Illinois, Maryland, and Oregon (except perhaps for those at temp agencies). Those initiatives impose a mandate on *employers* that are not providing a plan to automatically enroll their workers in an IRA. The people with alternative work arrangements typically do not have an employer. Nationwide, in 2014, only 65 percent of those not participating in a retirement plan – those who work for an employer that does not offer a plan – would be picked up by the state initiatives as currently constructed (see Figure 17). The self-employed account for 14 percent of all uncovered workers. Other routes for covering more of the uncovered exist, such as new technology (see Box 4, on the next page), but it will not happen without some special effort.

Although the size of the contingent workforce today suggests it may already be valuable to develop administrative arrangements to provide these workers with retirement plans, future interest also depends on whether the increased size of this group is a one-time event or the beginning of a trend. The answer depends importantly on why the shift is occurring. On the supply side, alternative work arrangements are more common among older and more highly educated workers, and the workforce has become older and better educated over time. But this factor explains only a fraction of the increase.¹⁵⁹ An alternative supply side factor could be that people simply prefer more flexible work arrangements, and these arrangements are more feasible with the increase in health insurance options that are not tied to an employer. But the increase in contingent workers in the last decade seems like a very large response to the availability of health insurance outside the workplace. On the demand side, employers may prefer these new arrangements because they do not have to provide benefits to these workers. Or more importantly, employers may be responding to technological change, which standardizes job tasks and makes it more feasible for them to hire and monitor contingent workers.

¹⁵⁸ Iams, Dushi, and Lichtenstein (2015).

¹⁵⁹ Katz and Krueger estimate it accounts for only 10 percent of the increase.

Box 4. Technology to the Rescue?

Recently, several companies that primarily hire contingent workers have been exploring the use of technology or apps to help these workers save for retirement. For example, Lyft is offering its drivers the ability to establish an IRA and receive financial education through the financial technology firm Honest Dollar.¹⁶⁰ And Uber recently announced a similar arrangement with the firm Betterment that will first be rolled out in New Jersey, Boston, Chicago, and Seattle before being launched nationwide. To help convince Uber drivers to sign up, Betterment is reducing its normal fees – no fee for the first year that drivers use the system and then a maximum charge of 0.25 percent of assets under management, compared to its standard charge of 0.35 percent for portfolios with less than \$10,000 in assets.

Under either arrangement, drivers have flexibility in how they save: they can choose a predetermined amount each month or a percentage of each payment; they can also choose to save only when a payment is over a certain amount. Or they can make their own saving decisions as they go along, with the firm texting them to promote saving and sending reminders if a deposit is not made on schedule.

More sophisticated tools are also available to encourage saving. Financial firms like Digit offer smartphone applications that can check a participant's bank account for any money not needed for current expenses and automatically transfer the extra money into a savings account. Another method is to give workers the option of automatically splitting their paycheck between a checking account and a retirement savings account with either a set amount or a percentage of income directed to savings. Honest Dollar is seeking a patent for a product that would allow individuals to save for different goals and receive regular updates on their progress towards each goal. These types of easy, automated approaches could help contingent workers make a habit of saving, just as traditional workers are able to do through employer payroll deduction.

Connecting workers with their savings accounts has become very easy. Those with preexisting IRAs or other accounts can simply connect to the account in the same way that they direct payments to their checking accounts. Those without such an account would have to set up a new account. Honest Dollar advertises that it can connect an entire firm's employees to accounts that it creates in 90 seconds or less. These new approaches could have significant potential, so it will be interesting to see how the Lyft and Uber experiments work out.

¹⁶⁰ This discussion is based on material in Gale, Holmes, and John (2016) as well as newspaper articles, including Marte (2015).

All these explanations suggest the trend will likely continue. The only argument for a one-shot event is that the dislocation caused by the Great Recession forced workers to accept other arrangements when traditional jobs were not available. If the underlying supply and demand factors – rather than the Great Recession – are the key drivers, however, the prevalence of the contingent workers should remain steady or increase. More information will become available when the DOL releases the results of a new survey conducted in 2017.¹⁶¹

International Efforts to Cover Non-traditional Workers

The international discussion of pension coverage for workers in non-standard employment usually focuses on the self-employed. This categorization overstates the number of workers in non-standard employment, because many of the self-employed are doctors or lawyers, who know precisely what they will be doing next week or next year. It also excludes employees of temp agencies who technically have an employer but do not know where they will be working in a month's time. Nevertheless, the treatment of the self-employed in the retirement savings system suggests that most industrialized countries have not found a way to ensure that these workers will have an adequate retirement income.

Because retirement systems are multi-tiered, it is useful to look at how the self-employed are treated under the respective government plans before considering their status in workplace arrangements.

THE SELF-EMPLOYED IN GOVERNMENT PLANS. Self-employed workers make up a small but significant minority of the workforce in many countries in the Organisation for Economic Cooperation and Development (OECD). Moreover, transitions into and out of self-employment have become increasingly common for a larger group of workers.¹⁶² The self-employed tend to have less stable income and their personal income is often difficult to distinguish from business revenues. Therefore, many countries treat the self-employed as a separate group.

The approaches to pension provision for the self-employed in OECD countries fall into three main groups. The first group is countries with non-contributory basic pension schemes. These schemes generally cover the entire population including the self-employed. To

¹⁶¹ A release date has not yet been scheduled. Any updates about the release will be available at: <u>https://www.bls.gov/cps/lfcharacteristics.htm.</u>

¹⁶² Choi (2009).

supplement this basic pension, most countries also have government earnings-related plans financed by contributions. Australia, Japan, the Netherlands, and the United Kingdom do not require compulsory participation of the self-employed in the earnings-related scheme (although participation *for employees* in these schemes is mandatory in Australia and quasi-mandatory in the Netherlands). Canada, Finland, Iceland, Norway, and Sweden have mandatory earningsrelated schemes for the self-employed.

The second group consists of countries with an earnings-related pension scheme, financed by contributions, that covers both salaried employees and the self-employed within the same scheme. Countries in this group are Austria, the Czech Republic, Hungary, Korea, Portugal, the Slovak Republic, Switzerland, Turkey, and the United States.

The third group of countries has special separate schemes for the self-employed as a whole or for individual groups of self-employed (some of which are mandatory). These countries include Belgium, France, Germany, Greece, Italy, Luxembourg, Poland, and Spain.¹⁶³

The overall findings for the self-employed and government-provided pensions are threefold. First, in the majority of OECD countries, the self-employed are covered by the same pension schemes as those of employees. Second, while employees share the contribution burden with their employers, the self-employed in most cases pay the full pension contribution from their own income. Third, the self-employed get benefits that are the same as, or similar to, the benefits of employees.

THE SELF-EMPLOYED IN WORKPLACE PLANS. While the self-employed are generally included in government plans, their participation in workplace plans tends to be voluntary. This situation is very similar to the United States, where the self-employed are covered by Social Security – required to pay the combined employee/employer rate – but are not covered automatically by any type of supplementary plan. The specifics for Australia, the Netherlands, and the United Kingdom are informative.

In Australia, the self-employed are automatically covered by the government's meanstested Age Pension program but are not required to make Superannuation payments – although they are encouraged to make voluntary tax-deductible contributions. Given that most retirement income will come from the money accumulated in the Superannuation accounts, those selfemployed workers who do not participate will be at risk in retirement.

¹⁶³ European Commission (2015).

In the Netherlands, all workers – both the employed and self-employed – are eligible for the minimal state pension. In terms of the occupational pension schemes, they are quasimandatory for employees in the sense that they are determined by industrial-relations agreements and most workers participate. For some self-employed, such as doctors and lawyers, participation is actually mandatory in the occupational pension schemes.

In the United Kingdom, traditionally both tiers of the government pension program have included the self-employed. The first tier was aimed at providing a minimum level of protection to everyone, and the second tier was designed to provide further income more related to the individual's earnings. In terms of the new auto-enrollment initiative, the self-employed are not included. They can purchase a retirement plan from NEST or one of the competitors, but the decision is totally voluntary. Given the low participation rates associated with voluntary enrollment, many self-employed workers are likely to end up with little more than the government pension.¹⁶⁴

Given the lack of any model for the self-employed, one option for the United States would be some form of "auto-enrollment" for workers in non-standard employment.

Options for the Self-Employed in the United States

Workers in work arrangements without an employer pose a problem for expanding retirement savings coverage, because efforts like the auto-IRA typically target workers with employers not offering plans. Indeed, independent contractors represent over half of workers in alternative work arrangements and, by definition, these workers do not have an employer and, therefore, fall through the cracks of the options discussed above.¹⁶⁵ And the problem has grown more pressing because the share of workers labeled as independent contractors rose by nearly one-third from 1995-2015, from 6.4 percent to 8.4 percent (see Figure 22).

If the United States had a mandatory system, such as Australia, it could require people who had not contributed the requisite percentage of earnings through an employer to pay a comparable amount to the government when they pay their taxes. This contribution could be forwarded to an account maintained by the government and returned when the individual retirees. As noted above, Australia has not taken this path with its self-employed.

¹⁶⁴ Cribb and Emmerson (2016).

¹⁶⁵ Katz and Krueger (2016).

The United States does not have a mandatory retirement savings system and instead relies on automatic enrollment when the employer choses to adopt the provision. To mirror the system for employees, any plan for the self-employed would need to have three characteristics: (1) automatic enrollment into a retirement savings plan; (2) the ability for individuals to opt out of the savings arrangement; and (3) a mechanism to re-enroll workers who opt out. The first feature is needed to overcome inertia that can prevent workers from saving on their own. The second feature is needed to ensure that these self-employed workers do not face a more stringent requirement than their traditionally employed counterparts, who are able to opt out of plans. And the third is designed to ensure that workers who do opt out are periodically nudged until, hopefully, they pick up the saving habit.

To facilitate automatic enrollment, the Individual Mandate of the ACA, which was recently eliminated, provides some guidance on an approach that could be used to provide incentives for self-employed workers to save for retirement. For example, the ACA's Individual Mandate taxed households \$58 per adult month without health insurance and \$29 per child month.¹⁶⁶ The mandate was enforced when an individual filed their taxes and reported whether they had health coverage throughout the year. Documentation was provided if needed by the insurance marketplaces or by individual health plans or Medicaid. Failure to have coverage during any month of the year triggered the penalty.

Conceptually, this structure could be extended to saving. At the end of the year, selfemployed workers could be asked if they saved for retirement in the prior year and, if not, penalized through a tax.¹⁶⁷ Appropriate savings vehicles for these workers already exist, including low-cost IRAs, such as those offered by Vanguard. Much of the documentation for enforcing such a mandate also already exists, since IRA contributions are already tracked for tax purposes. And such a tax, if approved by Congress, would likely be viewed as constitutional given that the ACA's Individual Mandate was upheld under Congress's authority to levy taxes.¹⁶⁸ It is unclear why an individual mandate on saving would be different.

¹⁶⁶ Patient Protection and Affordable Care Act (2010).

 ¹⁶⁷ Practically, a months-per-year requirement could be difficult for contingent workers if they do not work in many months. An alternative is to require them to contribute a specified percentage of their average monthly earnings.
 ¹⁶⁸ National Federation of Independent Businesses et al. v. Sebelius, Secretary of Health and Human Services et al. (2012).

Allowing these workers to opt out requires a little more creativity. One option would be to require savings for only a few months out of the year. For example, self-employed workers may need to demonstrate that they contributed to a retirement account three months out of the year, allowing them to "opt out" at any time during the rest of the year. Re-enrollment could be built into this structure relatively easily. For example, after the first year of self-employment, workers may only be required to show they contributed to an IRA in one month of each year. This approach would have the effect of getting them back into the habit of savings if they opted out.

While this type of solution represents just one potential approach, it provides a framework for thinking about how to reach a group of workers that is left behind under most proposals to close the coverage gap.

Interestingly, one proposal does exist that combines a savings mandate for all U.S. workers with third-party administration. This proposal from Teresa Ghilarducci, an economist with the New School, and Tony James, the President and CEO of Blackstone, would establish Guaranteed Retirement Accounts (GRAs) for all workers.¹⁶⁹ The GRAs would require contributions of 3 percent (half by the worker, half by the employer), with a tax credit designed to offset the cost of the worker contributions for those below the median income. The investments would be pooled and managed professionally by fund managers that individuals could choose from a national marketplace, and account balances would be paid as annuities at retirement. The responsibility of employers would essentially be limited to making the required contribution and handling the payroll deduction for the accounts. Those who are self-employed would be responsible for both the employer and employee contribution.

Clearly, the challenge of covering the self-employed and contingent workers is more complicated than that of traditional workers. But, reaching this growing part of the workforce is a part of the puzzle to be solved if the goal is to provide reliable access to retirement savings plans for everyone.

Summing Up the Options

Table 4 (on the next page) sums up the options related to covering the self-employed and other contingent workers in a supplementary 401(k)-type system.

¹⁶⁹ James and Ghilarducci (2018 forthcoming).

| Goal | Option |
|---|--|
| Provide coverage under an individual mandate | Require individuals to contribute a percentage of earnings |
| Provide coverage in current U.S. voluntary system | Encourage innovative efforts to bring retirement plans to contingent workers (e.g. Betterment plan for Uber) Create an auto-IRA arrangement using tax code |

Table 4. Options for the Self-employed and Other Contingent Workers

Conclusion

Many American workers are not building up retirement savings on a regular basis. This situation raises concerns because, for any given claiming age, Social Security will provide less relative to earnings in the future than it has in the past. This decline in Social Security replacement rates occurs as the Full Retirement Age moves to 67, Medicare premiums take a larger share of the benefit, and more people pay income taxes on their benefits. Social Security does provide low earners with higher benefits relative to earnings, but these workers often claim early and receive reduced monthly amounts. Since Social Security alone is insufficient to maintain most workers' pre-retirement living standard, they will be increasingly reliant on a retirement savings plan.

Retirement savings plans in the private sector are mainly provided through an employer on a voluntary basis. And this voluntary system is falling short for many workers on two counts: 1) those with a plan often have only modest balances; 2) half the private sector workforce does not participate in a plan at any given time.

For the half of workers who *do* participate in a plan at their current job, portability between plans can be difficult, money often moves from the generally lower-cost workplace system to the generally higher-cost "retail" system of IRAs, and leakages from both workplace plans and IRAs reduce balances at retirement.

Among the half of workers without a plan at their current job, most are with an employer that does not offer a plan, while others work for employers that offer a plan but either choose not to participate or are not eligible to participate. And an increasing number of workers – such as, contractors and Uber drivers – do not have a traditional employer-employee relationship, so they are also part of the group that lacks coverage.

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To provide information on potential ways to improve and expand retirement saving in employer plans, this report assessed options for enhancing the current employer system and expanding coverage among both traditional and non-traditional workers.

The current defined contribution system could potentially be improved along three dimensions. The first is enhancing portability by minimizing procedural barriers to moving money between employer plans, which could reduce the number of small and lost accounts. Key barriers here include the lack of a requirement that plans accept incoming rollovers and the lack of standards for timely and efficient plan-to-plan transfers when people switch jobs.

The second dimension is protecting transfers from the workplace system to the advisororiented retail component. While participants may value the retail market's broader array of investment alternatives, the ability to consolidate their assets, and the advantages of tailored financial advice, they also may face higher fees and potential conflicts of interest among financial advisors.

The third dimension is reducing leakage from both workplace plans and IRAs, which, on average, can cut balances at retirement by about 25 percent. Although the current system imposes a 10-percent penalty tax on pre-retirement withdrawals on top of income taxes, this provision may not be an effective deterrent for many participants.

Even if policymakers were able to solve all the problems in the defined contribution system, a large coverage gap remains. At any moment in time about half of private sector workers are not participating in an employer-sponsored retirement plan. That pattern means that some workers never gain coverage during their work lives and others have only intermittent coverage. Either situation poses a problem because Social Security alone is not enough to enable most workers to maintain their pre-retirement standard of living. Notably, the coverage situation has not improved since the late 1970s.

In theory, any degree of coverage for traditional employees is achievable. It depends on the extent to which a country introduces compulsion into pension arrangements and somewhat on the locus of pension arrangements – employer-based or centered on third-party platforms. At one end of the spectrum is the United States with an entirely voluntary, employer-based system that has large coverage gaps. At the other end are Australia and the Netherlands, where mandates result in near universal coverage, and the employer plays a minimal role.

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In the United States, the causes of the coverage gap are twofold. First, many employers – particularly small employers – do not offer a retirement plan, partly due to high costs but more likely for non-financial reasons such as workers' preference for cash wages. Second, some employees who work for an employer with a plan either choose not to participate, often through inertia, or are not eligible because they have not worked for the employer long enough, work too few hours, or are in a type of job that is not covered by the plan. As a result, reducing the coverage gap involves both expanding access to employer-based plans and increasing participation in existing plans.

Two types of federal and state initiatives have aimed to close the coverage gap for traditional workers: (1) efforts to reduce barriers to adopting plans; and (2) laws that require all workers to have access through their employers. At the federal level, efforts to reduce barriers have focused on lowering the financial, administrative, and legal costs of offering a plan. These efforts are reflected in products designed for small businesses and regulations facilitating multiple-employer plans. States have also attempted to make it easier for small businesses to offer retirement plans: Washington and New Jersey are creating retirement plan marketplaces that include a curated list of plans suitable for small businesses. However, past efforts to increase coverage through simpler products or better markets appear to have had little effect.

In contrast, efforts to expand coverage by moving away from the voluntary model and imposing a mandate on employers have been effective in other countries such as the United Kingdom. Even within the voluntary system, 401(k) plans that automatically enroll workers – with the ability to opt out – have boosted participation rates. Along these lines, U.S. policy experts developed an idea that would require employers without a plan to automatically enroll workers in an IRA. This proposal has not been adopted at the federal level, but several states are moving forward with auto-IRAs. A more comprehensive approach to expanding coverage might involve shifting responsibility for the provision of retiree benefits from the employer to a third-party platform.

Even if all traditional workers had coverage through their employers, the self-employed and the growing number of contingent workers would be left out. Covering both groups in supplementary plans, however, is in its infancy even in countries that have aimed for universal coverage. One step in that direction may be creating some type of plan with auto-enrollment for workers without an employer.

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In short, a changing retirement landscape may require today's workers to accumulate more savings, but barriers exist for accumulating and managing money in defined contribution plans, and many do not participate in any form of employer-provided retirement program. A number of changes have the potential to make existing plans work better by enhancing portability and safeguarding small accounts, protecting transfers from the workplace to IRA system, and curtailing leakage. Coverage could be expanded substantially within the existing financial infrastructure, but more ambitious approaches may be required to relieve the burden on employers and to cover the self-employed and the growing number of contingent workers. For these more ambitious approaches, policymakers need to decide how much compulsion is desirable in the U.S. retirement system and the optimal role for employers.

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Tables and Figures

| Account balance (\$2012) | Withdrew money | Rolled into an IRA | Left in plan | Other | Total |
|-----------------------------|----------------|-----------------------|--------------|-------|--------|
| ≤\$5,000 | 57.5% | 18.9% | 23.6% | 0.0% | 100.0% |
| \$5,001-\$20,000 | 37.1 | 28.5 | 32.5 | 1.9 | 100.0 |
| \$20,001-\$50,000 | 10.7 | 41.6 | 45.4 | 2.3 | 100.0 |
| \$50,001-\$100,000 | 17.5 | 37.4 | 29.8 | 15.3 | 100.0 |
| > \$100,000 | 11.5 | 43.0 | 28.3 | 17.3 | 100.0 |
| Total | 26.6% | 34.1% | 32.1% | 7.2% | 100.0% |

Table 5. Disposition of DC Plan Assets When Individuals Leave Employer, 2010-2012

Source: Authors' calculations from University of Michigan, Health and Retirement Study (2010-2012).

Table 6. Primary Reason for Most Recent Rollover to IRA, 2014

| Rea | son | Percent |
|-----|--|---------|
| 1 | Did not want to leave assets with former employer | 19% |
| 2 | Wanted to consolidate assets | 16 |
| 3 | Wanted more investment options | 21 |
| 4 | Wanted same/different financial services provider | 18 |
| 5 | Wanted to preserve tax treatment | 12 |
| 6 | Was told by financial adviser to rollover | 8 |
| 7 | Easier than rolling over to new employer's plan | 4 |
| 8 | Wanted same investments as in former employer's plan | 2 |

Source: Investment Company Institute (2016).

Table 7. Attributes of Pension Registries in Four Countries

| Attribute | Denmark | The Netherlands | Australia | Belgium |
|---|--|---|---|--|
| What sources of retirement income are included? | National, workplace, and personal | Workplace and national | Workplace | Workplace and national |
| How is it financed? | Pension providers voluntarily | Per-participant fee on pension providers | Government general revenue and pension industry tax | Government general revenue |
| What was impetus for registry? | To help individuals track multiple accounts and plan for retirement | To help individuals track multiple accounts and plan for retirement | To help individuals track multiple accounts and encourage consolidation | To provide government information for tax and social policy and find lost accounts |

Source: U.S. Government Accountability Office (2015).

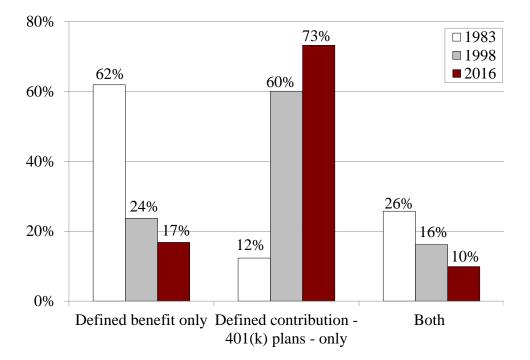
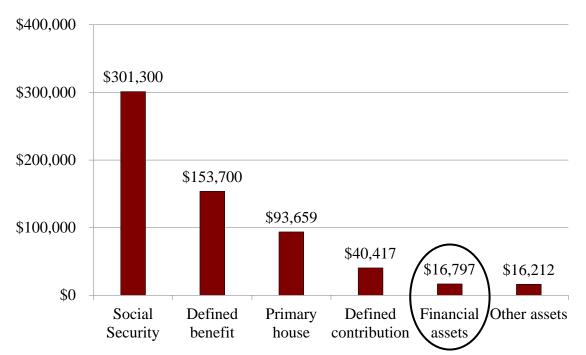


Figure 1. Workers with Pension Coverage by Type of Plan, 1983, 1998, and 2016

Source: Authors' calculations from U.S. Board of Governors of the Federal Reserve System, *Survey of Consumer Finances* (1983, 1998, 2016).

Figure 2. Wealth of Typical Household with Head Ages 55-64, 2016



Notes: Amounts are for the mean of the middle 10 percent based on net worth. Data are not conditional of having the asset.

Source: U.S. Board of Governors of the Federal Reserve System, Survey of Consumer Finances (2016).

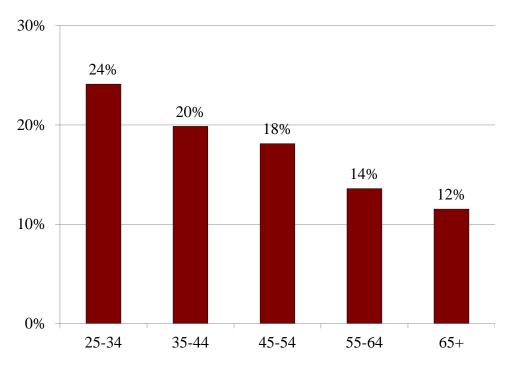
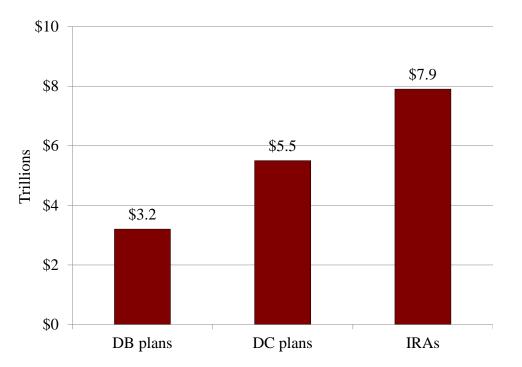


Figure 3. Percentage of Workers Who Change Jobs Each Year by Age Group, 2008-2013

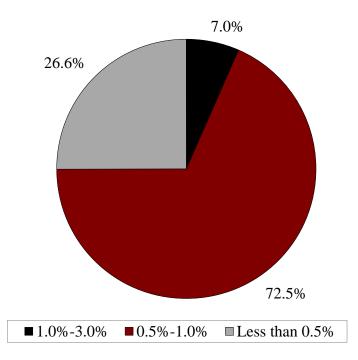
Source: Authors' calculations from U.S. Census Bureau, Survey of Income and Program Participation (2008 panel).

Figure 4. Total U.S. Private Retirement Assets, by Type of Plan, 2016



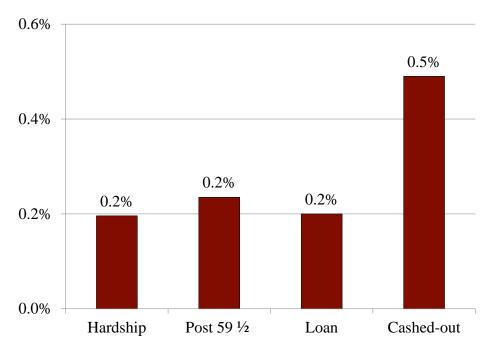
Source: U.S. Board of Governors of the Federal Reserve System, Financial Accounts of the United States (2017).

Figure 5. Distribution of Participants in Defined Contribution Plans by Average Fees as Share of Assets, 2013



Sources: Authors' estimates from U.S. Department of Labor, *Form 5500 Private Pension Plan Bulletin* (2013) and BrightScope and Investment Company Institute (2014).

Figure 6. Vanguard 401(k) Leakages as Percentage of Total 401(k) Assets by Type of Leakage, 2015



Source: Authors' depiction based on Vanguard (2016).

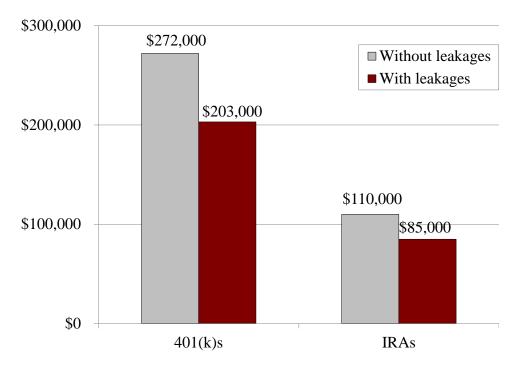
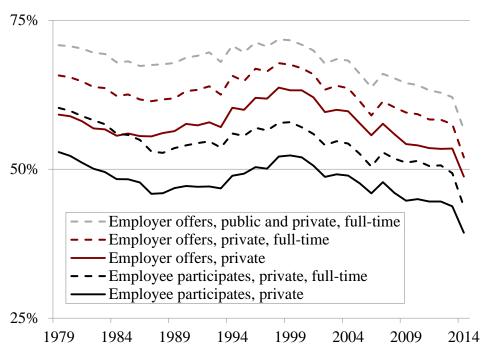


Figure 7. Estimated Impact of Leakages on 401(k) and IRA Assets at Age 60

Note: The data show assets with and without leakages based on assumptions for a prototypical worker. *Source:* Munnell and Webb (2015).

Figure 8. Pension Sponsorship and Participation in the Private Sector, Ages 25-64, 1979-2014

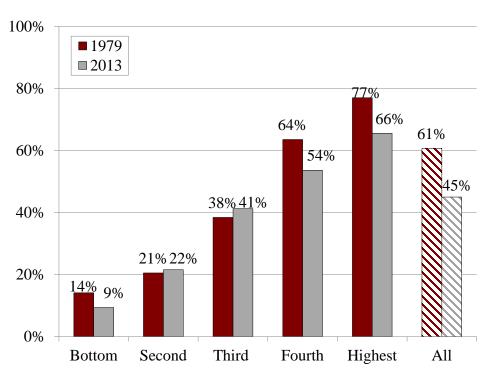


Note: The Figure includes 2014 data, but 2013 data are emphasized in the report because of the inexplicable dip in 2014.

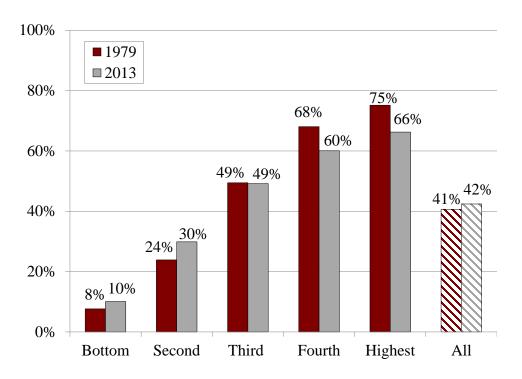
Source: Authors' calculations from U.S. Bureau of the Census, Current Population Survey (1980-2015).



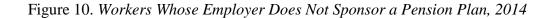


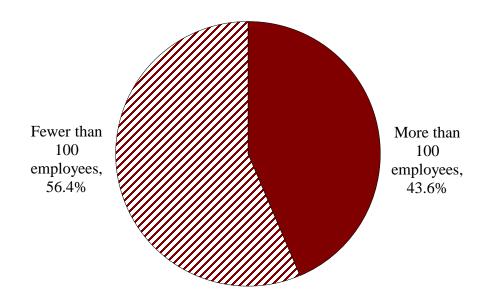


b. Female



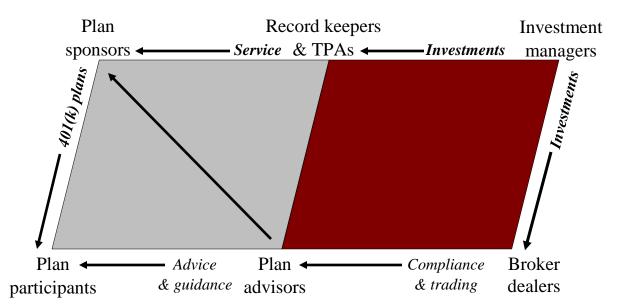
Source: Authors' calculations from U.S. Bureau of the Census, Current Population Survey (1980, 2015).





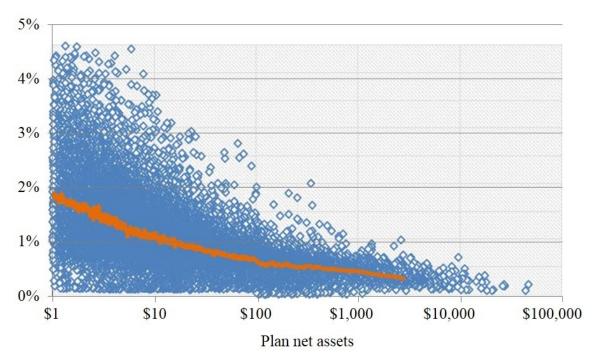
Note: Figure shows full-time, full-year, civilian, non-farm private wage and salary earners ages 25-64. *Source:* Authors' calculations from U.S. Bureau of the Census, *Current Population Survey* (2015).

Figure 11. Players in the 401(k) Industry and Functions that They Perform



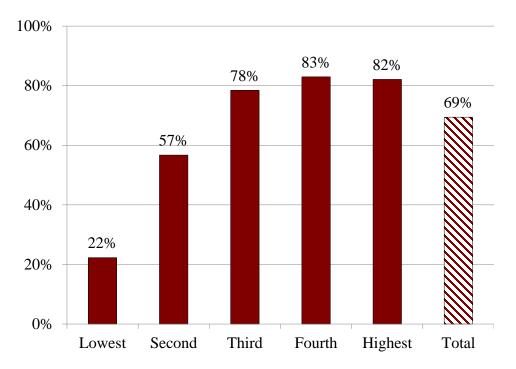
Note: Each industry player provides services. The arrows indicate who receives specific services. *Source:* Barstein (2012).

Figure 12. 401(k) Plan Cost as Percentage of Assets



Source: Alfred (2015).

Figure 13. Percentage of Households (Head Ages 63-73) with Assets from an Employer-Sponsored Plan, by Income Quintile, 2012





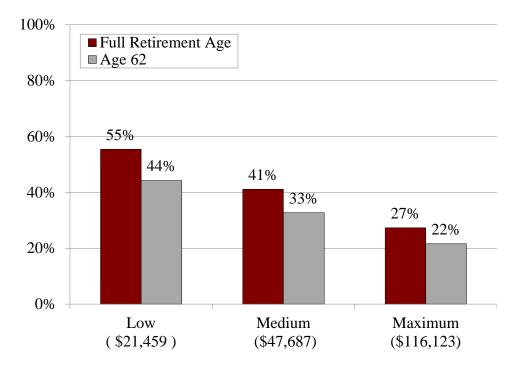
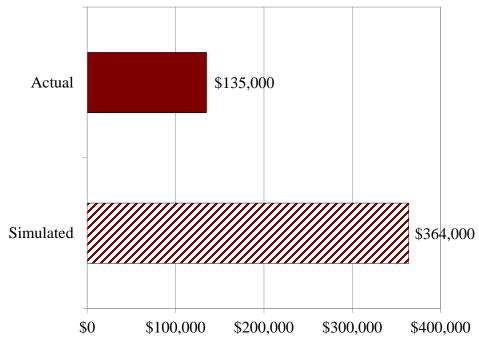


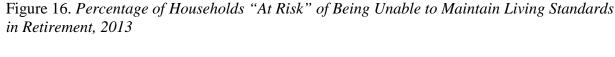
Figure 14. Social Security Replacement Rates in 2016, by Earnings Level

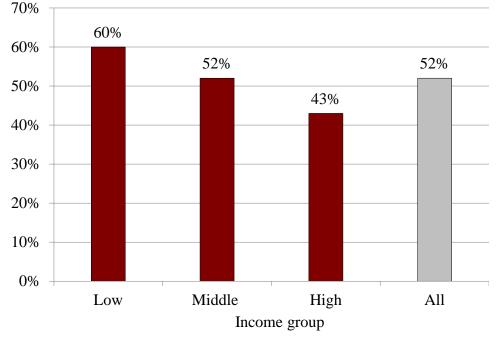
Note: Replacement rates are the ratio of benefits to the average of the highest 35 years of wage-indexed earnings for a hypothetical worker. The low earner is assumed to earn 45 percent of the medium earner, and the maximum earner is assumed to always earn the taxable maximum. *Source:* Clingman et al. (2016).

Figure 15. Median 401(k)/IRA Balances for Working Households Ages 55-64 with 401(k) Plans and Simulated Accumulations, 2016



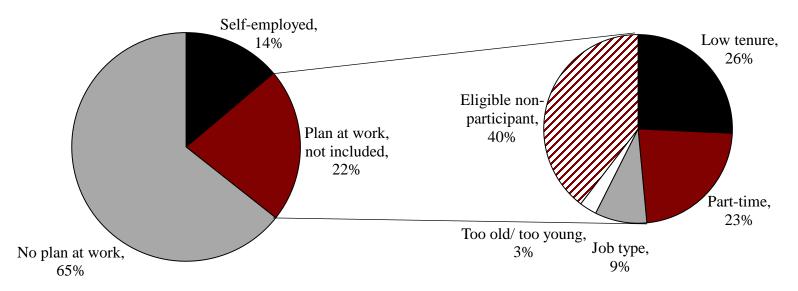
Note: Simulation assumes a worker starting at age 25 in 1981 (about when 401(k)s started, but were not yet widespread) with median earnings, who contributed a steady 6.0 percent with an employer match of 3.0 percent. Assets are split 50/50 between stocks and bonds and are assumed to earn real stock and bond returns of 6.6 percent and 2.3 percent, respectively, and real wages are assumed to grow at 1.1 percent per year. *Sources:* Authors' calculations from U.S. Board of Governors of the Federal Reserve System, *Survey of Consumer Finances* (2016); and authors' estimations.





Note: "At risk" is defined as a household that has an estimated retirement income replacement rate that is more than 10 percent short of its target rate. *Source:* Munnell, Hou, and Webb (2014).

Figure 17. Share of Uncovered Workers by Reason Uncovered, 2014



Sources: Authors' analysis from U.S. Census Bureau, *Current Population Survey* (2015) (for pie chart on the left) and U.S. Census Bureau, *Survey of Income and Program Participation* (1996, 2004, and 2008 panels) (for pie chart on the right).

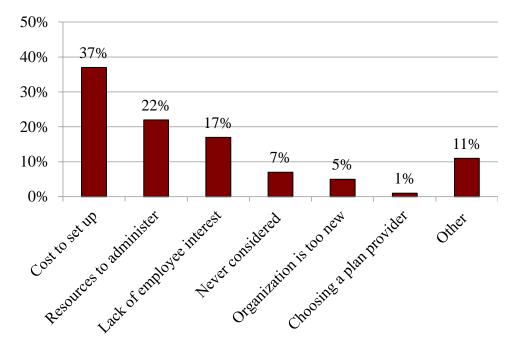
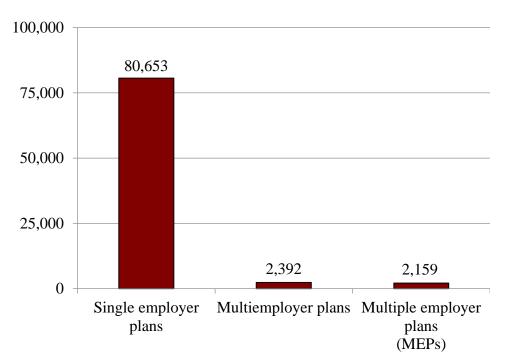


Figure 18. Reasons Cited by Small Employers as the Most Important for Not Offering a Retirement Plan, 2017

Source: The Pew Charitable Trusts (2017).

Figure 19. Retirement Plan with 100 or More Participants by Type, 2014:



Note: Participants include active workers, separated workers, retired workers who are not receiving benefits, and plan beneficiaries.

Source: Authors' calculations from U.S. Department of Labor, Form 5500 Database (2014).

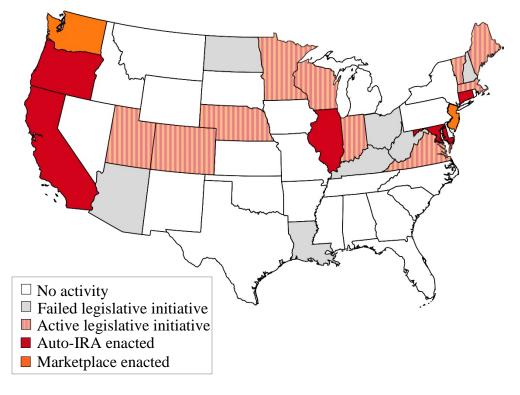
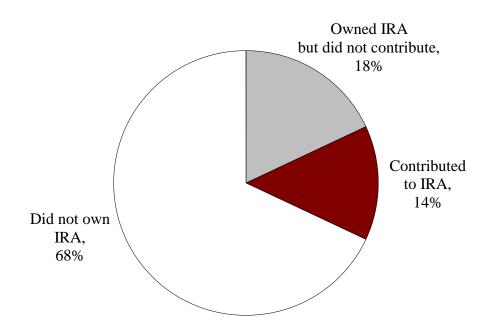


Figure 20. State Retirement Security Activity, as of June 2016

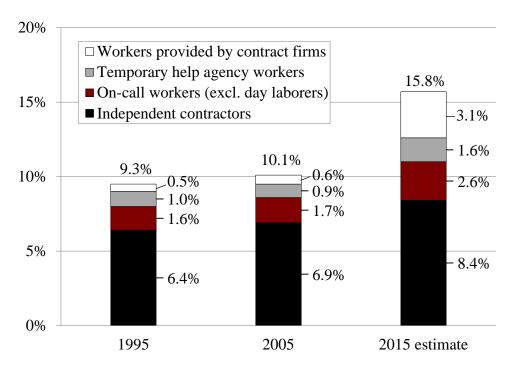
Source: Authors' analysis.

Figure 21. Percentage of Workers by IRA-Contribution Status in Tax Year 2014



Source: Investment Company Institute (2016).

Figure 22. Percentage of All Workers in Alternative Employment Arrangements by Type



Source: Katz and Krueger (2015).

2023 RETIREMENT CONFIDENCE SURVEY



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2023 RCS Overview

33rd Annual Retirement Confidence Survey (RCS)

The RCS is the longest-running survey of its kind, measuring worker and retiree confidence about retirement, and is conducted by the Employee Benefit Research Institute (EBRI) and Greenwald Research.

The 2023 survey of 2,537 Americans was conducted online January 5 through February 2, 2023. All respondents were ages 25 or older. The survey included 1,320 workers and 1,217 retirees — this year included an oversample of roughly 944 completed surveys among caregivers (598 workers and 346 retirees).

Data were weighted by age, sex, caregiver status, household income, and race/ethnicity. Unweighted sample sizes are noted on charts to provide information for margin of error estimates. The margin of error would be \pm 2.8 percentage points for workers, \pm 2.9 retirees, and \pm 3.3 for caregiver respondents in a similarly sized random sample.

Please note percentages in the following tables and charts may not total to 100 due to rounding and/or missing categories. Any trend changes or differences in subgroups noted in text are statistically significant; if no trend changes are noted, there were no significant differences.

Suggested citation: Employee Benefit Research Institute and Greenwald Research, 2023 Retirement Confidence Survey, *EBRI Chartbook* (Employee Benefit Research Institute, April 27, 2023).

2023 RCS Sponsors

EBRI and Greenwald would like to thank the 2023 RCS sponsors who helped shape this year's survey.

| American Funds / Capital Group | Mercer |
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| BlackRock | Nationwide |
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| FINRA | PIMCO |
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Americans' optimism that they will have enough money to live comfortably throughout retirement declines.

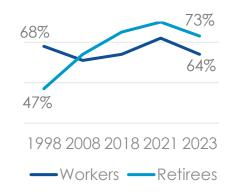
Compared with 2022, both workers' and retirees' confidence have significantly dropped and returned to levels last seen in 2018. The last time a decline in confidence of this magnitude was observed was in 2008 during the global financial crisis.

Sixty-four percent of workers feel at least somewhat confident, with only 18% feeling very confident. While retirees' confidence is slightly higher than workers', still less than three-quarters feel at least somewhat confident, with only 27% feeling very confident (Figure 1, Figure 2).

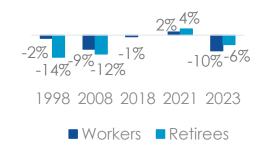
Among those who do not feel confident, 4 in 10 workers and a quarter of retirees state it is due to having little to no savings. Inflation also has a large impact on Americans' certainty, with 29% of workers and 42% of retirees stating this is the reason for their lack of confidence (Figure 3, Figure 4).

Americans believe the elevated inflation rates the United States has seen are not going away any time soon, with roughly 8 in 10 workers and retirees reporting they are concerned inflation will remain high for at least the next 12 months. Additionally, threequarters of Americans are fearful that the U.S. economy will go into a recession over the next year (Figure 5, Figure 6).

Retirement Confidence



Change in Very Confident



Both workers and retirees report high concerns about inflation and its impact on their savings/spending.

The effects of inflation are heavy on Americans' minds, as 84% of workers and 67% of retirees are concerned that the increasing cost of living will make it harder for them to save money (Figure 7, Figure 8). Four in ten workers and 3 in 10 retirees are *not* confident their money will be able to keep up with inflation in retirement, a significant increase compared with the one-third of workers who felt this way last year (Figure 9, Figure 10).

Americans' budgets are in question, as 73% of workers and 58% of retirees are concerned they will have to make substantial cuts to their spending due to inflation (Figure 7, Figure 8). Threequarters of workers report that they are concerned their salary will not be able to keep up with inflation (Figure 7), while half of retirees report that their overall spending is higher than expected (Figure 11), a significant increase over last year (36%). The share of retirees who report their retirement lifestyle is worse than they expected is slowly growing. Twenty-two percent feel it is worse now compared with 17% in 2020, just before the pandemic (Figure 12). 4 in 10 workers 3 in 10 retirees are not confident their money will be able to keep up with inflation in retirement



are concerned they will have to make substantial cuts to their spending due to inflation

Workers' debt levels are on the rise and are negatively impacting their ability to save for retirement.

Over 4 in 5 Americans feel knowledgeable about managing their day-to-day finances and 7 in 10 feel knowledgeable about managing savings and investments (Figure 13). While confidence in their financial knowledge remains high, workers' debt problems appear to be worsening.

Significantly up this year, over 6 in 10 workers report their debt is a problem. However, consistent with last year, 34% of retirees report the same (Figure 14).

Nearly half of workers and a quarter of retirees agree debt is negatively impacting their ability to save for or live comfortably in retirement. Additionally, half of workers and one-third of retirees believe their non-mortgage debt is having a negative impact on their ability to save for emergencies (Figure 15). However, surprisingly, two-thirds of workers and three-quarters of retirees still feel they have enough savings to handle an emergency or large expense.



agree debt is negatively impacting their ability to save for or live comfortably in retirement

While Americans try to prepare for retirement, decreases in retirement accounts have caused concern.

Half of Americans have tried to calculate how much money they will need to save to have a comfortable retirement (Figure 16). And at least 7 in 10 workers and retirees say they have personally saved money for retirement (Figure 17). However, Americans' retirement savings have taken a hit this year. Forty percent of workers and 58% of retirees report that their retirement account balances have decreased over the past 12 months (Figure 18, Figure 19).

Of those who have seen a decrease in their retirement account balances, one-third report their balances decreased by 1% to 10% and half report they have decreased by 11% to 25%. Three-quarters of those who experienced a decrease of any amount are concerned about their retirement account balances (Figure 18, Figure 19).

Additionally, down from last year, 59% of workers are confident they will have enough money to last their entire lives (Figure 9). Perhaps in response to market volatility — 74% of workers worry the stock market will be increasingly volatile and unpredictable (Figure 5) — significantly more workers this year switched to more conservative investments in their workplace retirement plan (16% vs. 9%) and contacted their workplace retirement plan provider for advice (12% vs. 7%) (Figure 20).





worry the stock market will be increasingly volatile and unpredictable

Understanding of retirement plan investment options is lacking for some, and many don't consider their plan provider a go-to source for retirement planning information and advice.

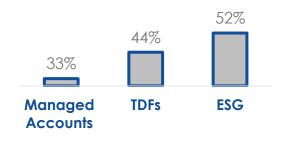
Many workers feel they understand the investment options their workplace retirement plan offers. Seven in ten workers are confident they can choose the right investment options for their situation. However, about 4 in 10 admit they don't understand target date funds (TDFs), 3 in 10 workers don't understand managed accounts, and half do not understand environmental, social, and governance (ESG) investment options (Figure 21).

Many workers aren't using professional sources of information and advice that can help improve their investment know-how. A large portion of workers (40%) turn to their family or friends when seeking information about retirement planning, while only 2 in 10 turn to their workplace retirement plan provider (Figure 22).

A third of workers and 4 in 10 retirees say they use a personal financial advisor for retirement planning information and advice (Figure 23), and financial advisors are the most trusted source for both workers and retirees (Figure 24). Half of workers who do not currently work with an advisor believe they will in the future (Figure 23).

Overall, about 2 in 5 workers and 1 in 5 retirees say they do not know who to go to for good financial or retirement planning advice (Figure 25).

Workers don't understand...





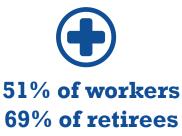
use a personal financial advisor for retirement planning information and advice

Americans' confidence in Social Security remains mostly unchanged, but worker confidence in Medicare has declined.

About two-thirds of workers are confident they will have enough money to take care of their medical expenses during retirement (Figure 9). However, workers' confidence in Medicare has significantly decreased, with just half who feel at least somewhat confident it will continue to provide benefits of equal value to those received today (Figure 26).

Retirees' confidence in Medicare remains unchanged from last year, with 7 in 10 reporting they feel confident in Medicare providing consistent benefits (Figure 27). While 38% of retirees report health care expenses are higher than they expected them to be when they first retired (Figure 11), 77% of retirees feel confident they will have enough money to take care of their medical expenses during retirement (Figure 10).

Both workers' and retirees' confidence in Social Security remain unchanged as well, as half of workers and 7 in 10 retirees feel at least somewhat confident that Social Security benefits will continue to be of at least equal value to the benefits provided today (Figure 28, Figure 29).



are confident Medicare will provide consistent benefits



38% of retirees say health expenses are higher than

expected

10

Key Findings

While workers are confident they know how much to withdraw from their retirement savings, they tend to overestimate the role many income sources will play.

Down from last year, fewer than two-thirds of workers are confident they know how much to withdraw from their savings and investments in retirement. Retirees' confidence in their knowledge remains steady, with a quarter being very confident (Figure 30).

When it comes to describing their asset goals, half of retirees report they try to maintain their asset levels; fewer than last year aim to grow their assets (Figure 31). Additionally, two-thirds of retirees report their financial priority in retirement is income stability over maintaining wealth. Workers share this sentiment, as almost threequarters say they would prioritize income stability as well (Figure 32).

Workers' expectations of the role different income sources will play in retirement differ from what retirees report. Income sources that workers are more likely to expect than what retirees report having include personal retirement savings (78% vs. 69%), IRAs (75% vs. 57%), work for pay (73% vs. 23%), products that guarantee monthly income (54% vs. 28%), and financial support from family and friends (42% vs. 14%). In contrast, workers are less likely to expect Social Security to be a source of income in retirement, which almost all retirees report is a source (Figure 33). 65% of retirees prioritize income stability

Work for Pay in Retirement

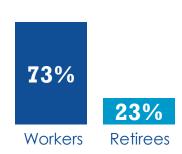


Figure 1 Only about two-thirds of workers are confident in having enough money to live comfortably in retirement, a significant decrease compared with 2022.

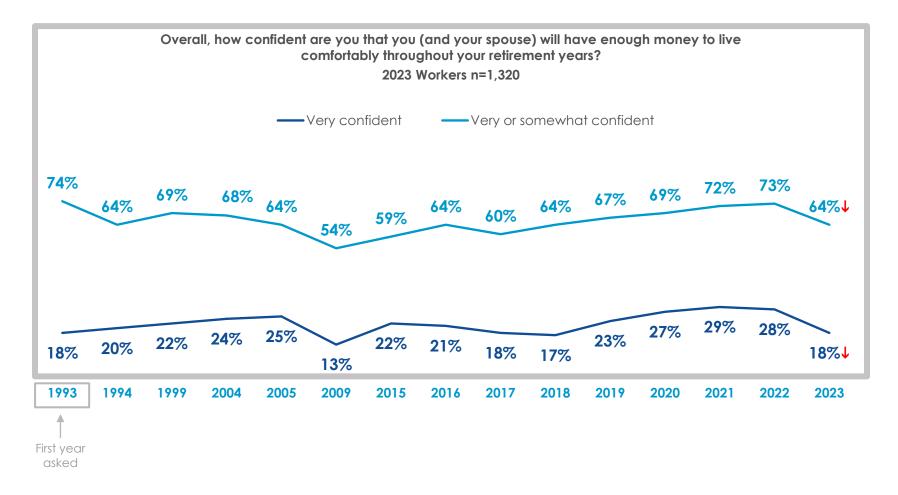


Figure 2 Almost three-quarters of retirees are confident they will have enough to live comfortably in retirement; this is a significant decrease from 2022.

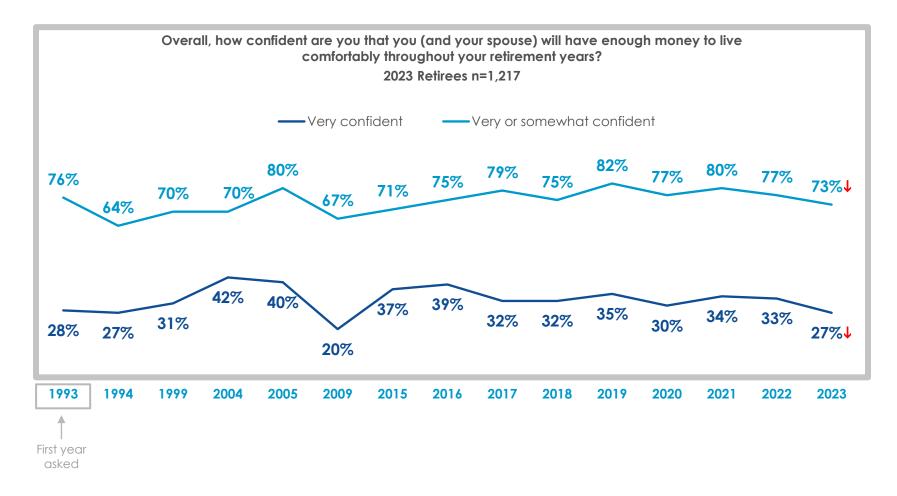
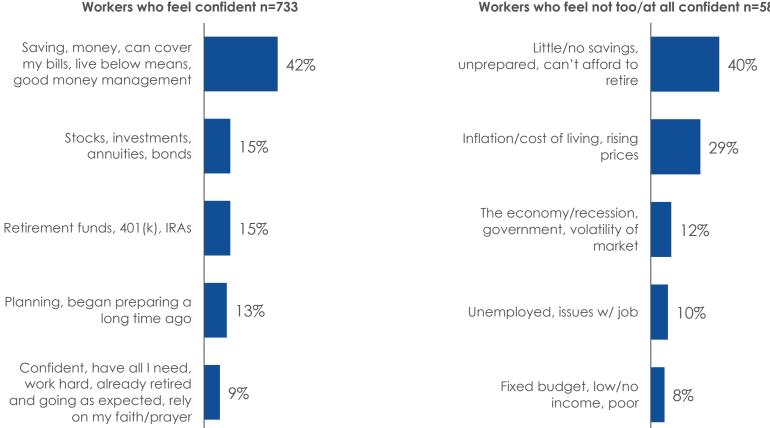


Figure 3 Four in ten workers who do not feel confident state it is due to having little to no savings, and a third state it is due to inflation.

What specifically has made you feel [confident/not confident] about your ability to live comfortably throughout retirement?

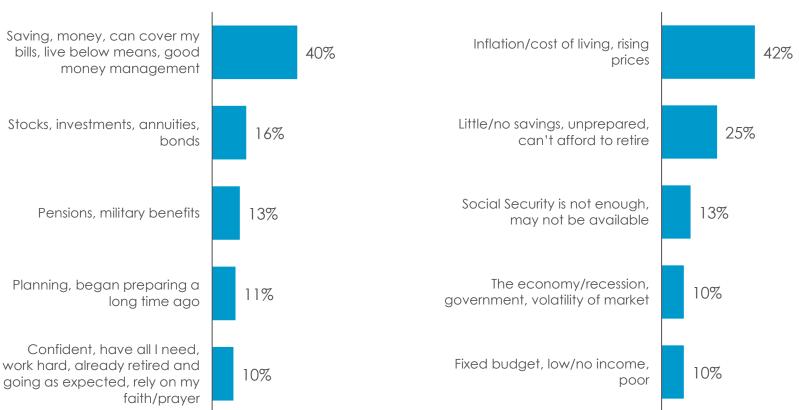


Workers who feel not too/at all confident n=587

Figure 4 Four in ten retirees who do not feel confident state it is due to inflation, and a quarter state it is due to having little to no savings.

Retirees who feel confident n=912

What specifically has made you feel [confident/not confident] about your ability to live comfortably throughout retirement?



Retirees who feel not too/at all confident n=305

Figure 5 Almost 9 in 10 workers are concerned inflation will stay high for another year. Eight in ten workers are also concerned about a recession in the next year.

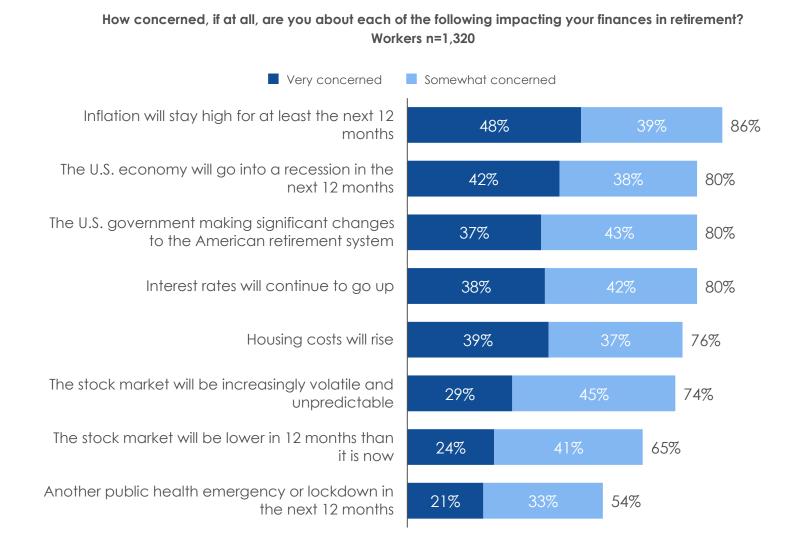
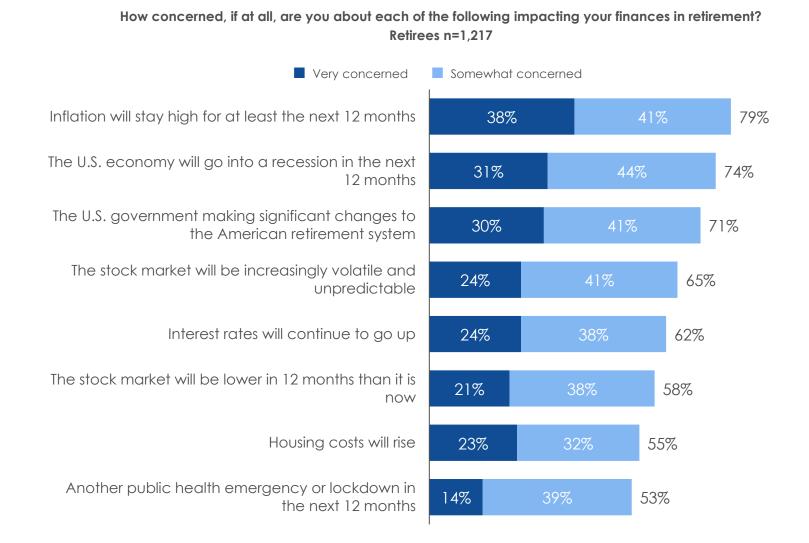


Figure 6 Eight in ten retirees are concerned inflation will stay high for another year. Retirees are least concerned about having another public health emergency.



Not previously asked

Figure 7 More than 8 in 10 workers are concerned that the increasing cost of living will make it harder to save money for retirement.

Workers n=1.320 Very concerned Somewhat concerned Increasing cost of living will make it harder for you to 43% 41% 84% save as much money as you want Your salary and any other work compensation will 38% 37% 75% not keep up with inflation (n=902) You will have to make substantial cuts to your 31% 42% 73% spending because of inflation Your investments will lose value over the next 12 29% 39% 68% months A health event that would prevent you from working 22% 33% 55% (n=902) Having to provide care for a loved one who has a 22% 52% 29% health condition or disability You may lose your job in the next 12 months (n=902) 15% 22% 37%

How concerned, if at all, are you personally about each of the following potential scenarios impacting your retirement?

Figure 8 Like workers, the top concern of retirees, cited by two-thirds, is that the increasing cost of living will make it harder to save money.

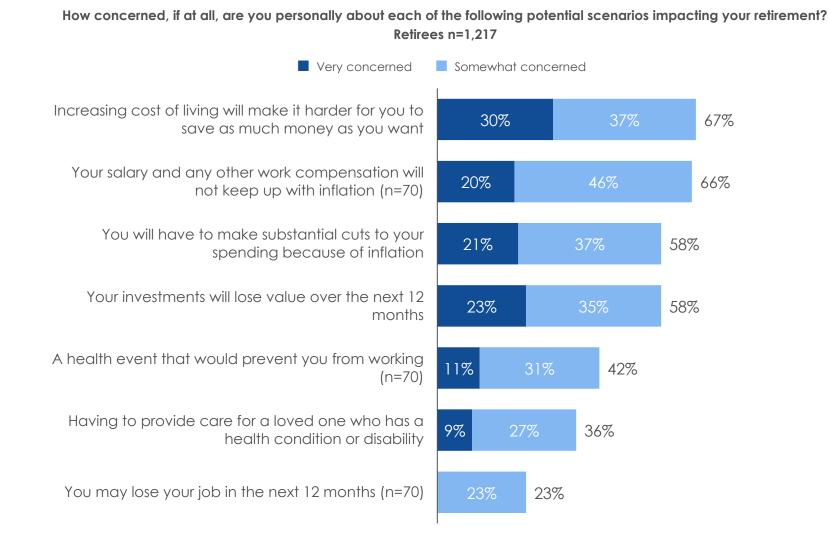


Figure 9 Workers' confidence in having enough to cover basic expenses remains high, while their confidence in being able to keep up with inflation has decreased.

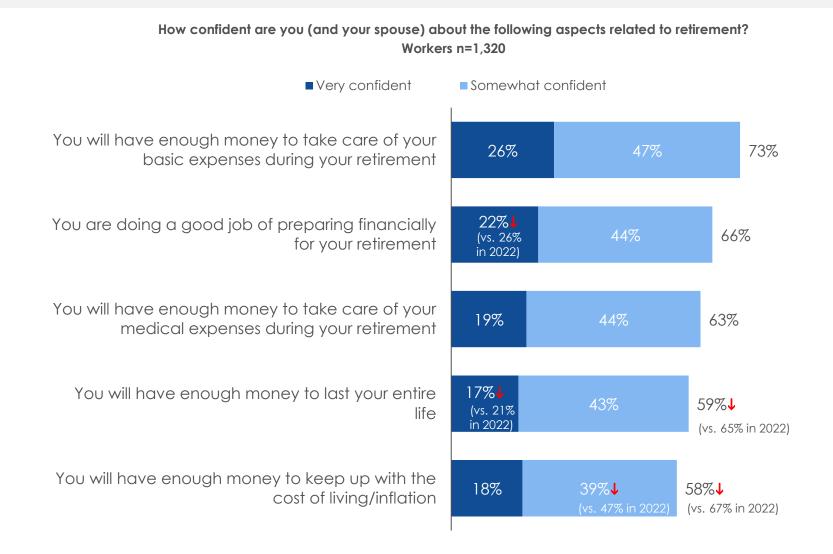


Figure 10 Retirees remain confident that they will have enough money to take care of their basic expenses during their retirement.

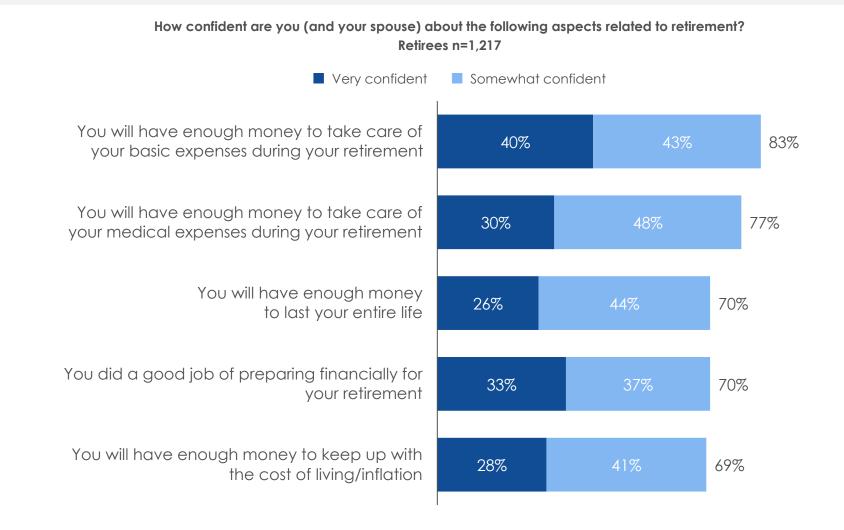


Figure 11 Up from last year, retirees report that their overall spending is higher than expected. This is also true regarding taxes and travel expenses.

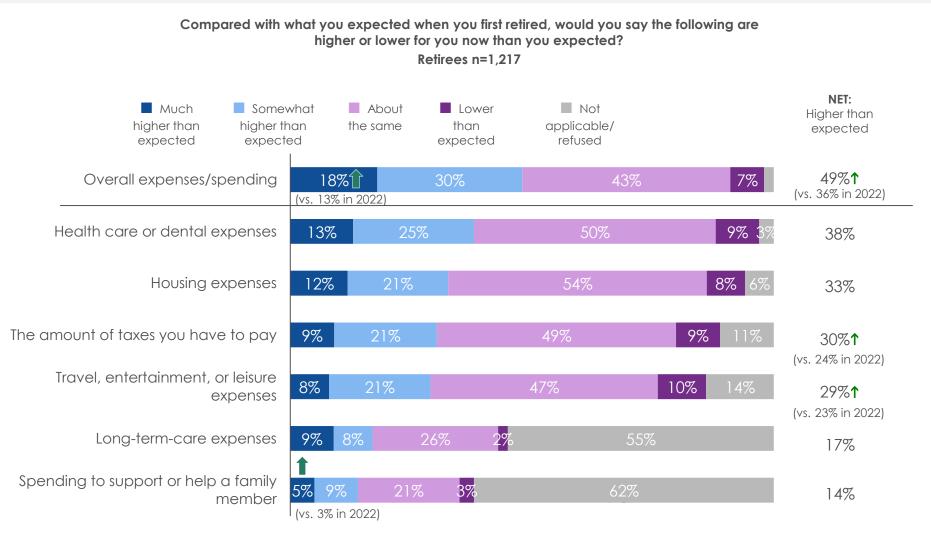
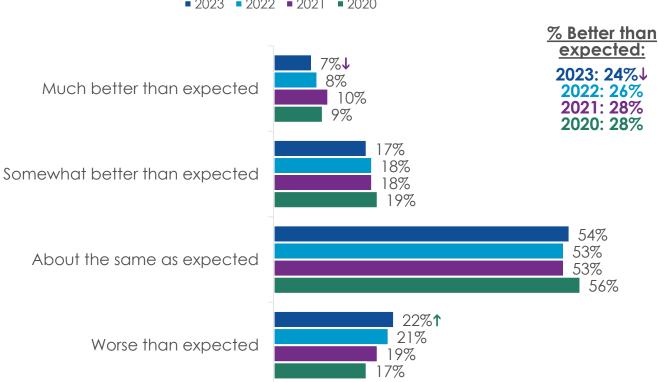


Figure 12 Consistent with last year, more than half of retirees say their lifestyle in retirement is about what they expected it would be before they retired.

How does your overall lifestyle in retirement now compare to how you expected it to be before you retired? For example, are you traveling, spending time with family or volunteering as much as you expected? Retirees n=1.217



■ 2023 ■ 2022 ■ 2021 ■ 2020

Figure 13 Four in five feel knowledgeable about managing day-to-day finances, and 7 in 10 feel knowledgeable about managing savings and investments.

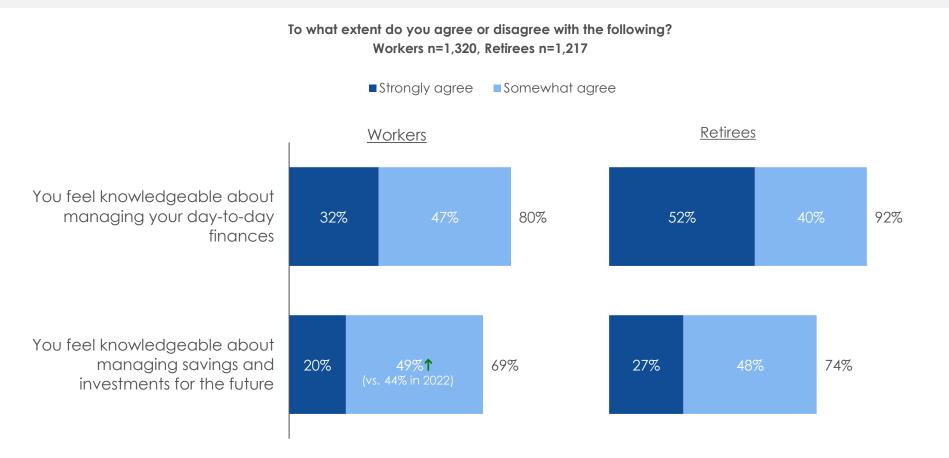


Figure 14 Significantly higher than last year, almost two-thirds of workers believe their debt is a problem. Retirees' debt has remained consistent.

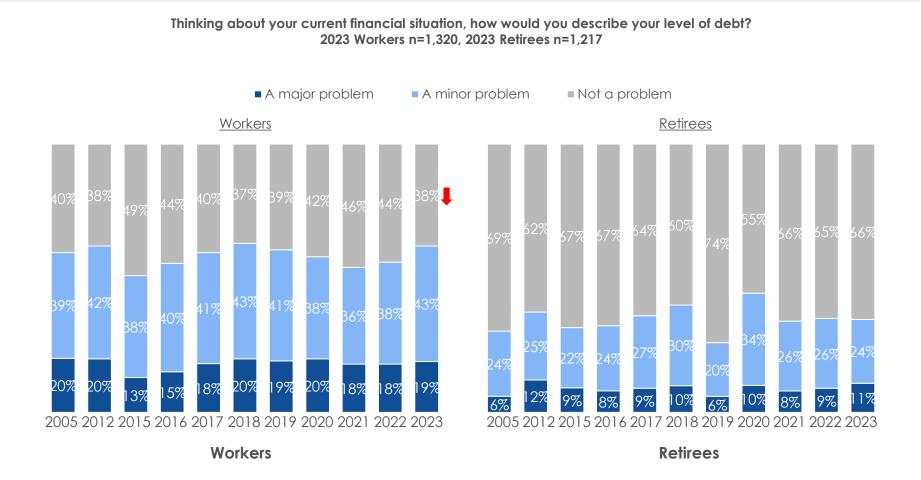


Figure 15 Over half of workers say non-mortgage debt has negatively impacted their ability to save for emergencies. Significantly fewer retirees, one-third, concur.

To what extent is your non-mortgage debt having a negative impact on your ability to do the following?

Saving for Emergencies

2023 Workers n=1,320, Retirees n=1,217

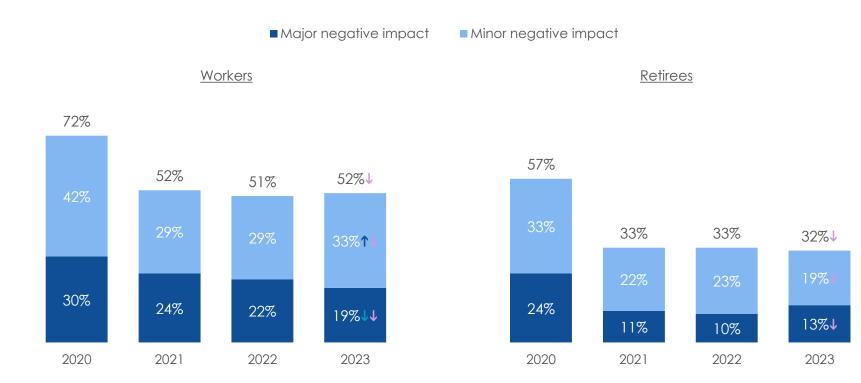
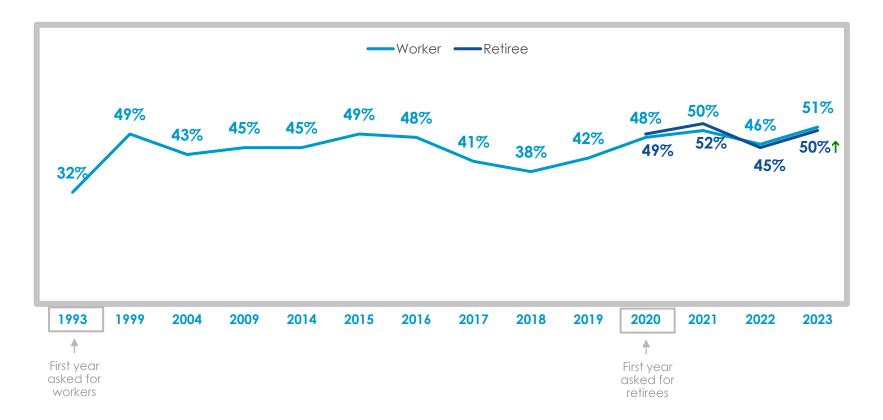


Figure 16 Half of workers and retirees have tried to calculate how much money they will need in retirement. This is a significant increase for retirees from last year.

Have you (or your spouse) tried to figure out how much money you will need to have saved by the time you retire so that you can live comfortably in retirement? / To prepare for retirement, did you (or your spouse) try to figure out how much money you needed to have saved by the time you retired so that you could live comfortably in retirement? 2023 Workers n=1,199, 2023 Retirees n=1,146, Percent Yes



Figures and n-sizes from all years presented exclude those who answered 'Don't know' or refused to answer ↑=Significantly higher than previous year,

Figure 17 A majority of workers and retirees consistently report that they have personally saved money for retirement and are currently saving.

Have you/did you (or your spouse) personally save(d) any money for retirement? Workers, n=1,320 31% First year asked Yes (1994): 58% 69% Retirees, n=1,217 No 22% First year asked (1994): 53% Yes 78%

Are you (or your spouse) <u>currently</u> saving for retirement/ the future? Workers/spouse who have saved for retirement/ all retirees

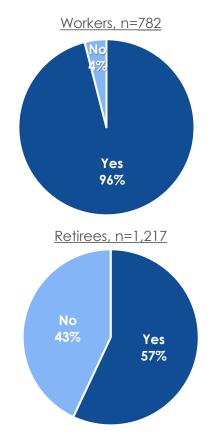
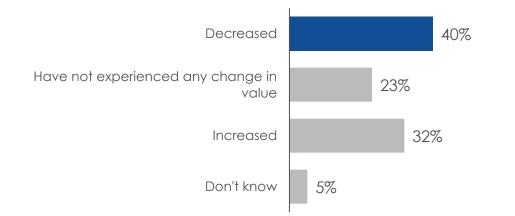
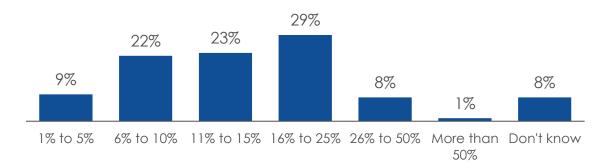


Figure 18 Two in five workers report their retirement account balances have decreased over the last 12 months. Of these, three-quarters are concerned.

How have your retirement account balances changed in value over the past 12 months? Workers who have saved for retirement n=782



By approximately what percent did your retirement account balances decrease? Retirement account balances decreased in value over the past 12 months; Workers n=332



How concerned are you about this decrease in your retirement account balances? Retirement account balances decreased in value over the past 12 months; Workers n=332

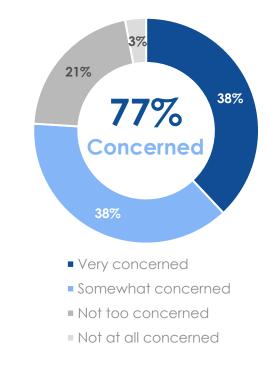
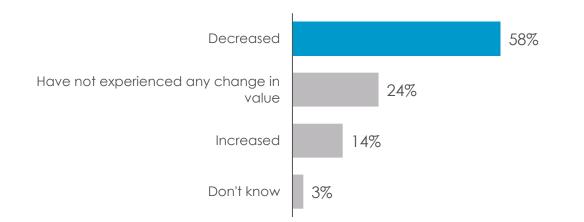
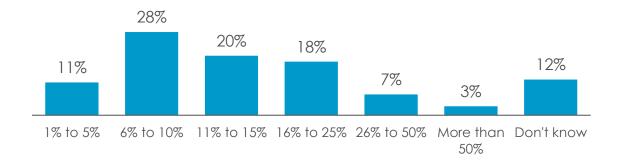


Figure 19 About 3 in 5 retirees report a decrease in their retirement account balances over the last 12 months. This decrease has concerned three-quarters of retirees.

How have your retirement account balances changed in value over the past 12 months? Retirees who saved for retirement n=961



By approximately what percent did your retirement account balances decrease? Retirement account balances decreased in value over the past 12 months; Retirees n=573



How concerned are you about this decrease in your retirement account balances? Retirement account balances decreased in value over the past 12 months; Retirees n=573

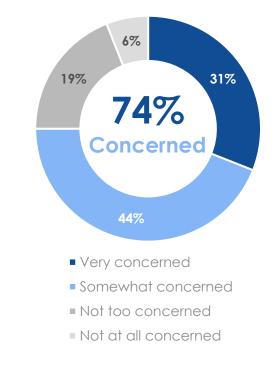


Figure 20 Of those who made plan changes, nearly 2 in 5 increased the amount they contribute. Up from last year, 16% switched to more conservative investments.

Which, if any, of the following have you done in the past year with your workplace retirement plan? Workers who made changes to their workplace retirement plan n=657

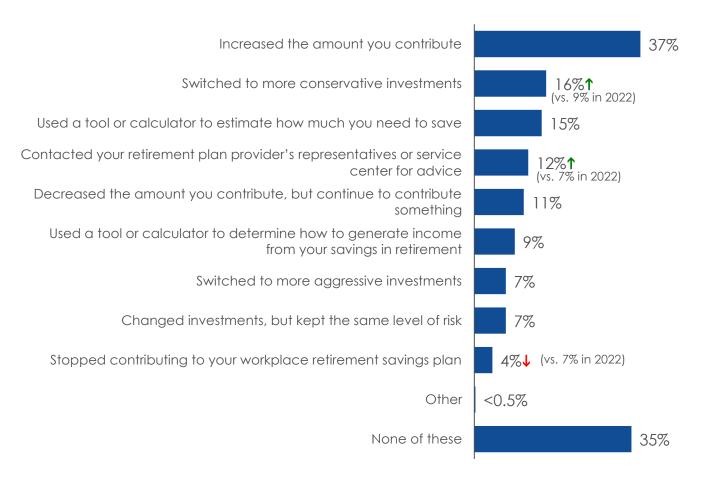


Figure 21 While most workers understand the following investment options at least somewhat well, they feel least knowledgeable about ESG investment options.

How well do you understand the following workplace retirement plan investment options? Workers offered an employer-sponsored retirement savings plan n=657

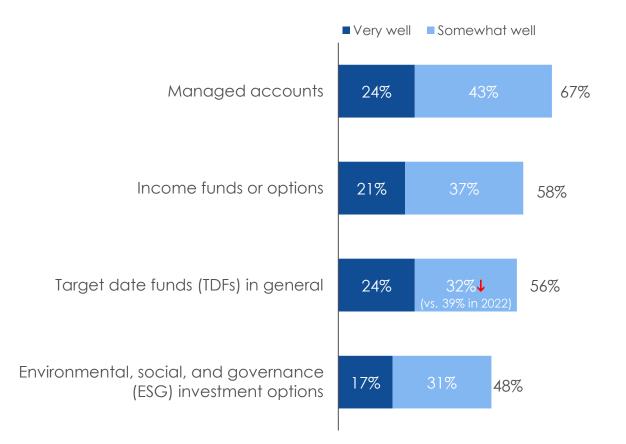


Figure 22

More workers this year use family and friends, their own research, a financial advisor, their employer, or representatives from their workplace retirement plan provider as sources of information.

Which of the following people or groups do you use as a source of information for retirement planning?

Workers n=1,320

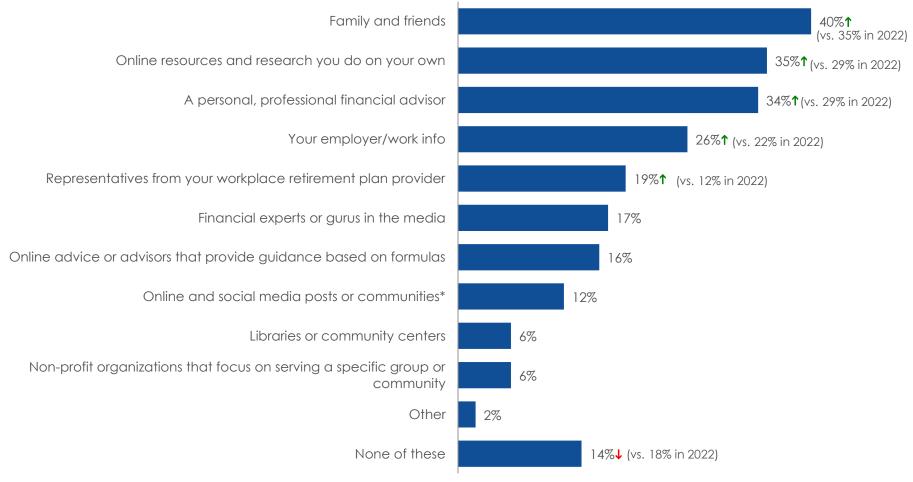


Figure 23 Over 1 in 3 workers and retirees currently work with a financial advisor. Up from last year, half of workers expect to do so in the future.

Do you currently work with a professional financial advisor? Do you Workers n=1,320

Do you think you will work with a professional financial advisor in the future? Workers not currently working with an advisor n=925

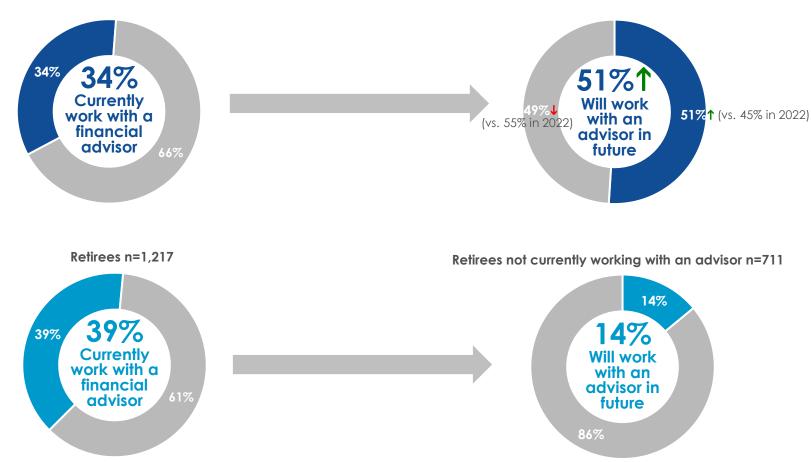


Figure 24 More than a quarter of workers and about a third of retirees trust their personal financial advisor the most.

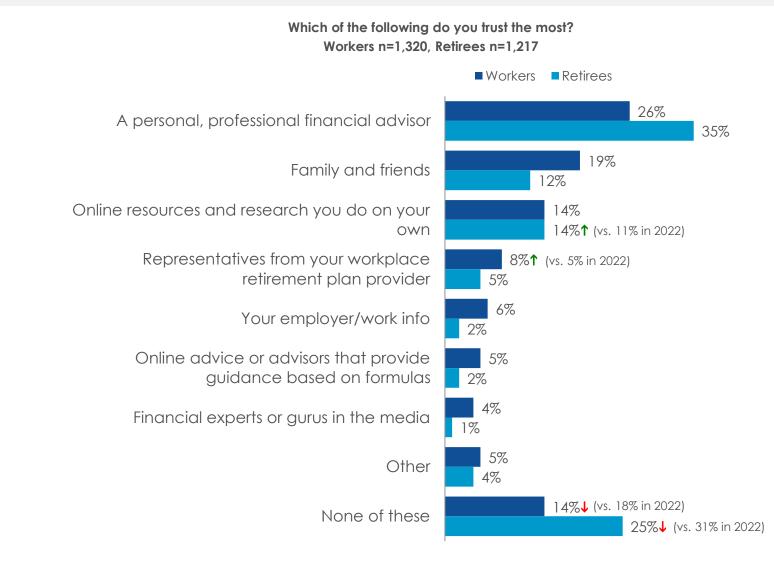
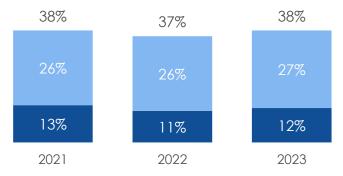


Figure 25 Nearly 4 in 10 workers suggest they do not know where to go for financial or retirement planning advice — more than the 2 in 10 retirees who feel the same.





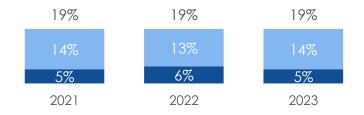


Figure 26

A significant decrease from last year, just half feel at least somewhat confident Medicare will continue to provide benefits of equal value to those received today.

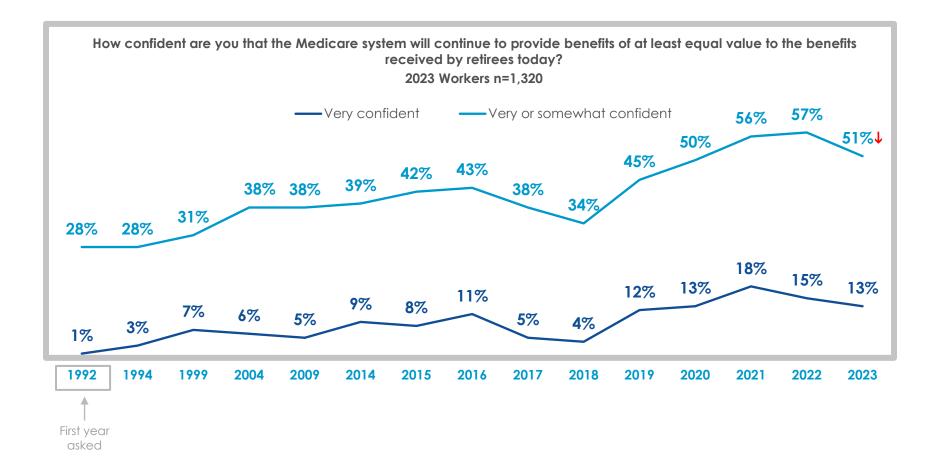


Figure 27 Compared with last year, retirees' confidence in consistent Medicare benefits remains steady, with about 7 in 10 who are very or somewhat confident.

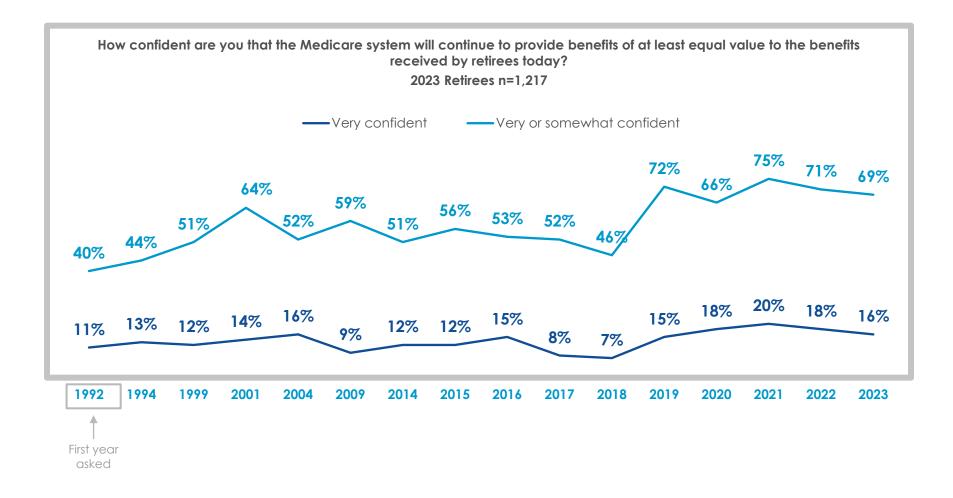


Figure 28 Nearly half of workers are confident that Social Security benefits will at least maintain their value in the future, comparable to the 2022 level.

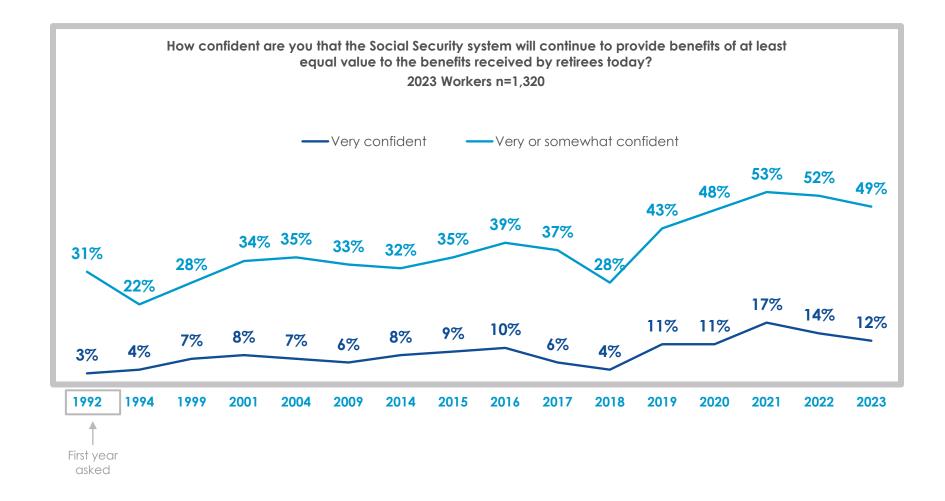


Figure 29 Retiree confidence in Social Security remains steady, with 7 in 10 who are at least somewhat confident in the system.

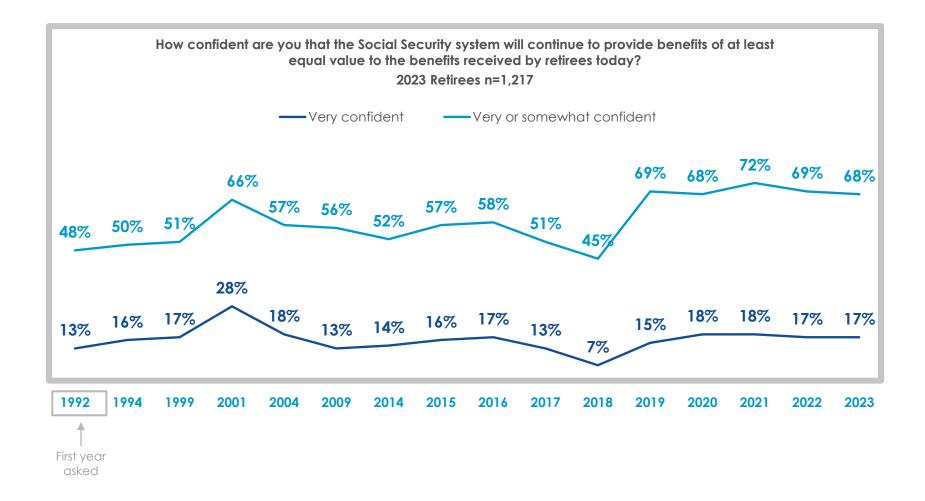


Figure 30 Down from last year, fewer than two-thirds of workers are confident they know how much money to draw from their retirement savings.

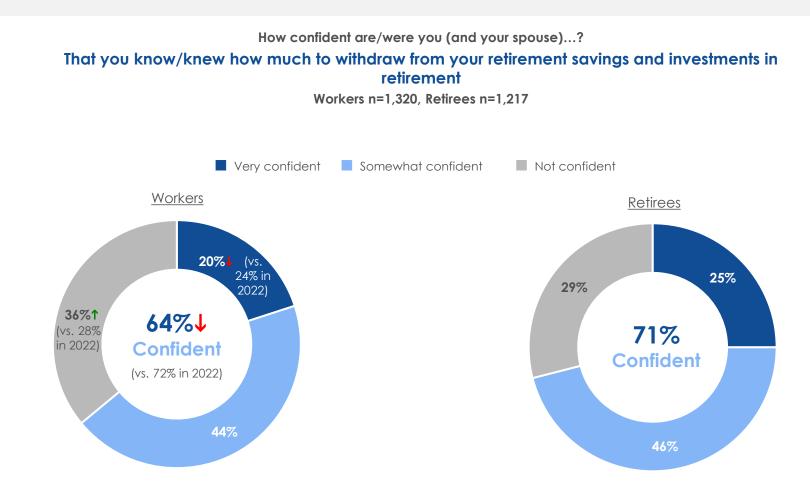
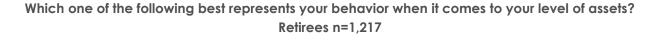


Figure 31 Down from last year, fewer than 1 in 3 retirees aim to increase their current level of assets. Up from last year, 7% of retirees are spending down.



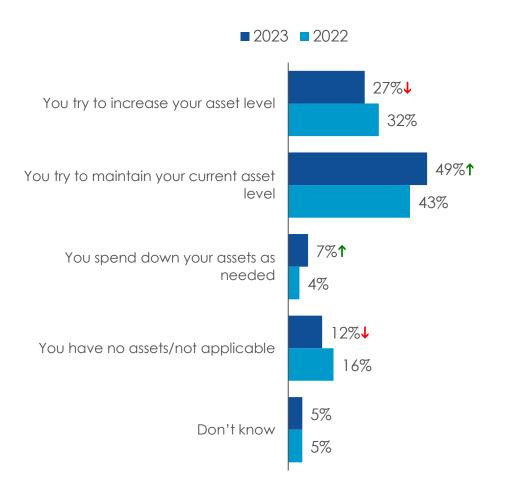


Figure 32 Nearly 3 in 4 workers and 2 in 3 retirees prioritize income stability.

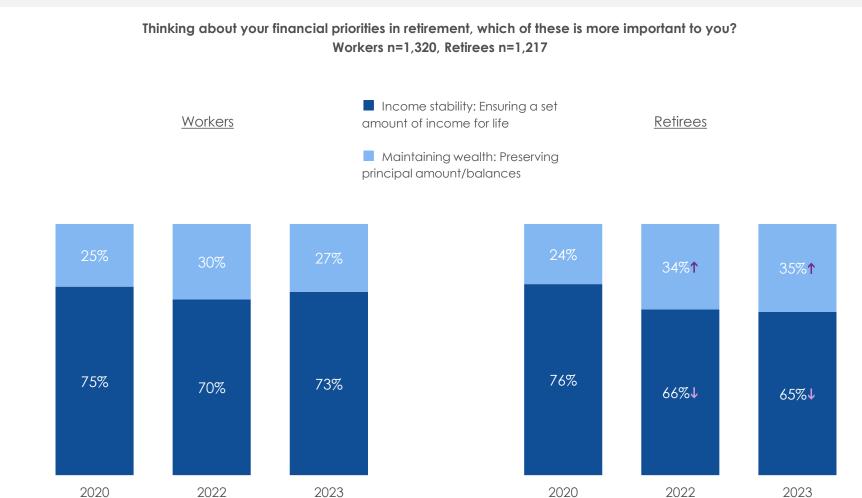


Figure 33 More than 8 in 10 workers expect their workplace retirement savings plan to be a source of income in retirement, whereas just half of retirees report it is.

To what extent (do you expect each of the following to be/is each of the following) a source of income in retirement?

Workers planning to retire n=1,153, Retirees n=1,217

Net: Major/Minor Source of Income

