NO QUICK FIX

CLOSING A PUBLIC PENSION PLAN LEADS TO UNEXPECTED CHALLENGES





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EXECUTIVE SUMMARY

Most public employees working in the United States today have access to a defined benefit (DB) pension plan to help them prepare for retirement. In the immediate aftermath of the Great Recession, most states implemented reforms to their pension plans to ensure long-term sustainability of the plans, and no state completely closed its pension plan, although North Dakota is a more recent exception. This report focuses on five states that, either before or after the Great Recession, closed or significantly changed their public pension plans. One of these states eventually decided to reopen its closed plan.

This report finds consistent patterns across these five states. Costs have risen markedly for plan sponsors since closing these plans. As the demographics within the plan change, cash flow is affected and negative cash flow increases. This report documents some ways in which these states have attempted to address growing negative cash flows, but those efforts have mostly proven to be temporary fixes rather than long-term solutions that address fundamental challenges.

The workforce impacts also are a notable consequence of these plan closures or changes. Each state examined in this report has experienced challenges with employee turnover in recent years. The power of pensions to retain employees becomes clear when the data are contrasted between participants in the different types of plans.

Finally, the retirement security of public employees is imperiled by the high degree of "leakage" found in the defined contribution (DC) plans that replaced pension plans. While the data varies across the states studied, the evidence on the whole suggests that many workers are cashing out their DC plan balances when leaving their employer, which means that money will not grow into a nest egg for retirement.

The report's key findings are as follows:

• Among the states studied, employer costs increased significantly after closing a pension plan. In some states, poor funding practices preceded the plan closure, with improved funding discipline only after closing the plan. Even 26 years after one of these plans was closed, employer costs remain high. In contrast, the ongoing contributions of new active members combined with sound funding practices show strong results.

- In the closed plans, cash flows have become more negative over time as demographics shift and the plan begins to spend down its assets. The Michigan State Employees' Retirement System plan is furthest along in this regard, as the plan pays a growing share of its assets as benefit payments. Despite higher costs and larger contributions, the plan's high negative cash flow throughout the Great Recession forced more plan assets to be sold at a discount while markets took time to rebound.
- Despite claims that younger workers will be attracted to savings-based plans, including cash balance and DC plans, the available retention data shows poor retention in the new plans or tiers. Workforce management has become a challenge in many of these states with closed plans.
- Many workers are cashing out their DC plan account balances when leaving a public sector job, and the evidence indicates those dollars are unlikely to be used for producing retirement income. The available data suggests that DC plans are failing to help many workers accumulate sufficient retirement savings.
- The West Virginia Teachers Retirement System, which was closed and then reopened, shows that reopening a closed pension plan is a viable option that can reverse many of the harmful trends documented in this report if reopening is combined with contribution discipline. In West Virginia, pension plan costs have stabilized and the funded status continues to climb.

INTRODUCTION

The years immediately following the Great Recession, or Global Financial Crisis (GFC), of 2007-2009 were anxious economic times. Many were rightly concerned about the future state of the economy and how long a recovery from the depths of a deep recession might take. Some people, seeing the dire state of the overall economy, expressed concern about the health of state and local public pension plans throughout the United States. Nearly every state, in the wake of the Great Recession, made changes to one or more of their pension plans. However, no state completely closed their public pension plan in the immediate aftermath of the GFC.

This report examines several states that, both before and after the Great Recession, closed or significantly changed their public plans—and one state that eventually reopened its closed plan. This report sheds light on the experiences of these states and reveals that closing or significantly changing their pension plan increased costs while worsening the recruitment and retention of public employees and imperiling the retirement security of these workers.

The overwhelming majority of public employees across the U.S. have access to a defined benefit pension plan, either as their primary plan, as one option within a defined benefit (DB) pension or defined contribution (DC) choice structure, or as part of a hybrid DB-DC plan.¹ Few states have completely closed their pension plans, and most states that did are considering legislation to return to a pension plan.

The states and plans featured in this report include:

- Michigan: the State Employees' Retirement System (SERS) plan
- Alaska: the Public Employees Retirement System (PERS) and Teachers Retirement System (TRS) plans
- Kentucky: the five plans under the Kentucky Public Pensions Authority (KPPA), which are:
 - » Kentucky Employees Retirement System (KERS) non-hazardous
 - » Kentucky Employees Retirement System (KERS) hazardous
 - » County Employees Retirement System (CERS) nonhazardous

- » County Employees Retirement System (CERS) hazardous
- » State Police Retirement System (SPRS)
- Oklahoma: the Public Employees Retirement System (PERS)
- West Virginia: the Teachers Retirement System (TRS)

A common feature of the experience of all of these plans is the critical importance of adequate funding. Whether a lack of adequate funding leads to the decision to close or significantly change a pension plan, or whether poor funding results from the closure of the plan, the consistent theme that emerges is how important it is for plan sponsors to routinely make the full required contributions to fund these plans.

Another common experience is the struggle to recruit and retain public employees that results from the decision to close a pension plan. All of the states examined in this report now are dealing with workforce challenges, with Alaska being a particularly noteworthy example. Turnover rates are much higher for new hires after pension plans are closed. For some of the pension plans that closed more recently, the data capture increased turnover rate in real time.

Finally, all of these pension plans have experienced, or likely will experience, higher negative cash flow as a result of their closure that leads to a spend-down period. In some of these states, such as Michigan, where the SERS plan has been closed for more than a quarter of a century, they are having to sell assets to make benefit payments. This action makes a downturn in the markets more damaging because fewer investments are held until markets rebound.

The story of these five states is one of going against the national trend. Rather than abandoning their pension plan, other states implemented strategic plan changes in response to the crisis of the Great Recession.² Other states reduced benefits, increased contributions, or suspended cost of living adjustments (COLAs)—or all three.³ Public plans in some states made adjustments such as tightening amortization periods, lowering discount rates, or updating mortality assumptions. Crucially, though, these other states gave plans time to recover losses from the Great Recession,

and the plans eventually did as the markets recovered. For many plans, funding levels now are at the highest level in years, and these funded statuses are built on a more secure foundation stemming from plan changes.

One of the lasting legacies of the post-recession period for public pension plans seems to be a firmer commitment to adequate funding. Data from the National Association of State Retirement Administrators (NASRA) shows that from fiscal year (FY) 2012 to FY 2022, the number of public plans receiving their full annual required contribution increased noticeably.⁴ Research from the Pew Charitable Trusts found public plans to be on more secure financial footing now than in the past and many of the adjustments made following the recession led to this.⁵ The importance of adequate funding will be emphasized throughout this report. The plans discussed in this report that have improved their funding discipline have seen corresponding improvements in funded status, cash flow, and asset ratios, along with other areas.

All told, the pension plans analyzed in this report are outliers from the typical public plan. Just as there are outlier plans that have a long history of poor funding and consequently find themselves in challenging financial situations, these plans represent another type of outlier— those that have moved sharply away from the DB pension model. This report examines the consequences of those decisions.

I. MICHIGAN STATE EMPLOYEES' RETIREMENT SYSTEM

Background on Closing DB Plan to New Hires

Throughout December 1996, Public Act 487 worked its way through the Michigan legislature. The bill proposed to close Michigan's SERS DB pension plan to new hires after March 31, 1997. Tier 2 employees—those hired on or after April 1, 1997—would be put into a DC plan.

The bill was presented as a means to offer "advantages some people feel DC plans offer to both employers and employees."⁶ The House Fiscal Agency predicted the bill would "stabilize and, ultimately, significantly reduce retirement costs for the state."⁷

Following passage by the legislature, the governor signed the bill on New Year's Eve, 1996.

Despite the fact that the legislation did not close the teachers' plan or plans covering local government workers, it represented a radical change among public sector retirement offerings. While differing views existed, many thought this DB to DC switch would start a trend that other states would follow. This would not be the case.

At the time of its closure, the Michigan SERS pension plan was one of the best funded in the nation, holding 109 percent of the resources needed to meet its benefit obligations, according to the plan actuary. The state senate fiscal analysis stated that the fiscal impact of the switch to the DC plan was "indeterminable."⁸ The analysis noted





that early retirement provisions were expected to save \$25 million per year (assuming the positions remained vacant in the future). The bill required future savings be directed to prefund retiree healthcare costs, meaning the cost impact of the pension plan closure would be tracked.

In the 26 years since the SERS pension plan was closed, the plan has changed in material ways. Today, the DC plan for state employees continues to be an outlier among the benefits offered to public workers nationwide. This section of the report examines how the DB to DC decision has played out in terms of retirement costs, funding, demographics, and other aspects of plan operations.

Michigan SERS Funding and Costs Since Closing the DB Plan

The first, and most consequential, change in the funding condition of the SERS plan is the increase in unfunded obligations. While the perception in 1996 was that the plan had more resources than were necessary, it is clear now that the plan was harmed by the back-to-back market events that hit in 2001 and 2008, just as all investors were.

Following the DB to DC switch, the plan now is deeply underfunded. Today, the unfunded actuarial liability (UAL) stands at more than \$6.1 billion (**Figure 1**), representing 69 percent of the resources that are needed to pay future benefits.

A portion of this decline in funded status is attributable to the legislature's lack of commitment to full funding, with 91 percent of contributions made since 2001, which represents contributions of \$9.3 billion versus \$10.2 billion in cumulative Actuarially Determined Employer Contribution (ADEC)⁹ payments over this period (**Figure 2**). While the cumulative shortfall of contributions was almost \$1 billion, that doesn't explain the roughly \$6 billion UAL that has existed since 2011. In the years immediately following the plan closure, when the state demonstrated less funding discipline, annual required contribution amounts were much lower than at present.

This funding decline poses the question of why SERS seems to have benefited significantly less than other plans in the Public Plans Database (PPD) when markets rebounded from the 2008 crash.¹⁰ One cause seems to be that once the global financial crisis set in, SERS was facing a much higher level of negative cash flow than other PPD plans, as discussed further below. While the markets faced a steep and prolonged slump from 2008 through 2013, the SERS pension plan was forced to sell more securities to pay benefits following the DB to DC switch. Though the plan was fairly well funded in FY 2007 (86 percent), the plan faced benefit payments that ranged from 7.3 to 12.6 percent of assets during these years. Including the contributions made to the plan, the negative cash flow ranged from 4.2 to 7.6 percent. This meant that more assets had to be sold at a discount and more losses were realized when the assets were not held through the market rebound. In short, a higher proportion of actual assets had to be sold at a loss relative to other plans in the PPD, where negative cash flows averaged 2.8 percent over the same period of time. This real loss of plan assets directly led to an increase in unfunded liabilities within the plan.

Figure 3 shows how employer costs, for both the DB and DC plans, have risen while the funding ratio of the closed



DB plan has fallen. Increased contributions can improve the funded status of a plan as other states in this report have demonstrated, but the dynamics of a closed plan are fundamentally different than those of an open plan.

Total SERS retirement costs for both employees and employers have increased dramatically over the years (**Figure 4**). Employer DB costs remain a significant portion of total retirement costs, more than 26 years after the plan's closing. However, employee contributions towards Tier 1, the pension tier, are declining as fewer active workers remain in that tier today.

In addition, the yellow and gray bars show how the Tier 2 costs have increased as most active employees are now in the DC plan. All-in-all, retirement costs have increased from \$169 million in 1998 to \$1.3 billion in 2022, or 7.8 times higher. This is far from predictions that closing the DB plan would save the state money from retirement costs.

Despite the steady increase of higher DB plan contributions, the funding ratio has fallen from 109 percent to 69 percent. Part of this is due to the consequences of the Great Recession and adopting more conservative plan assumptions, but it remains a larger decline than was realized among all plans included in the PPD.

As mentioned above, the plan actuary tracks the savings or additional costs from the establishment of Tier 2. In 2021, the state paid an additional \$46.6 million because Tier 2 was created, contributing to a total of \$303.3 million in higher costs since 1998.¹¹

Cash Flow Changes

Spending down plan assets is a dynamic that closed plans eventually face, though often many years into the future. In 2001, SERS was paying benefits equal to 4.5 percent of assets, with minimal contributions of 1.1 percent of assets. This left the plan responsible for making payments equal to 3.4 percent of assets if investment markets were flat throughout the year (**Figure 5**).

Despite much higher contribution levels in 2022 (5.2 percent of assets), the negative cash flow has increased



Figure 4: Total Retirement Costs of MI SERS DB & DC

to 5.7 percent because benefit payments are now equal to 10.9 percent of assets. This becomes a complicating factor, as even a modest decline in investment returns during the year could necessitate selling a significant portion of plan assets while asset prices are low. For instance, if investment markets declined by 5.8 percent at the outset of a plan year, and stayed at that level, the plan would have to sell 11 percent of assets during a down market. Obviously, a steeper market decline would have an even greater impact on this dynamic as the plan would be forced to sell more assets at a steeper discount.

This trend is in stark contrast to the broader cash flow pattern seen across the public plan universe. While negative cash flows increased for all plans in the PPD following the Great Recession (as the value of assets fell), the trend reversed among open plans and those plans are now back to about two percent negative cash flow-where it stood in 2001. Additionally, all plans have experienced increased retirements as the Baby Boomers have reached retirement

age, so some of this increase in liabilities is a demographic bubble that has been anticipated for many years.

This dynamic is part and parcel of investing, and it demonstrates why financial planning experts advise younger workers, who can hold assets through down market events and experience the eventual rebound, to invest differently than retirees are advised to do. It also could explain why the SERS plan hasn't rebounded as much as other plans in the PPD following the Great Recession, despite having 10year annualized returns that exceed the other plans in the dataset (9.1 percent versus 8.6 percent).¹²

Membership Changes

Another aspect to understand is how the membership of the closed DB pension plan has changed over time (Figure 6). As expected, active workers with a DB pension have declined steadily. But even 26 years after the plan was closed, there remain thousands of workers accruing benefits in the DB



plan. Meanwhile, the total number of plan beneficiaries has only fallen from just over 90,000 in 2001 to a bit less than 70,000 in 2022.

The high ratio of those receiving benefits, compared to those working, contributes to the larger negative cash flows that were noted above, along with the diversion of retirement contributions to the DC plan. This cash flow imbalance has grown and will continue to exist for many decades into the future.

Retirement is an extraordinarily long-term project compared with most human endeavors. The relationship between a plan and its members can span 75 years. Nevertheless, it is common to hear discussions that sound as though closing a plan is simply a matter of achieving 100 percent funding and turning it off. A more informed conversation would include a discussion of whether it will be easier to meet existing obligations with a plan that has more balanced cash flows, what actions can help produce cost stability for employers, and what workforce implications might arise without the competitive advantage of offering a pension.

It became conventional wisdom across corporate boardrooms that closing pension plans and moving to selfdirected savings plans was favorable in terms of cost, risk, and workforce maintenance for the employer. One major difference to note is that corporate pensions were almost always completely funded by employer contributions, so the move to a 401(k) plan also meant shifting most of the cost of retirement onto workers. In contrast, it is hard to look at the experiences of Michigan's SERS plans and see proof of concept in the public sector.

A Look at Turnover and Retirement Dollars

Unfortunately, few retirement systems produce an experience study that examines the workforce quit rates for DC plans, as such an analysis is not needed to fund the plan. This contrasts with DB plans, which need to project payroll in order to properly fund the plan. This makes direct comparisons of the quit rates of workers in the DB and DC plans nearly impossible. However, the experience study that was produced for Michigan SERS is used to examine both the pension and other post-employment benefits (OPEB) trends, so there are some aspects that can provide insights.

For instance, the actual rates of termination for those employees with less than five years of experience (virtually all DC plan participants) has far surpassed the expected rates of termination, while the rates for those workers with more than five years track closer to past experience.¹³ The prior withdrawal assumptions would have anticipated 3,949 terminations among those with less than five years of service. Instead, the plan experienced 6,396 quits. This result is notable because there are often claims that a DC plan will be more attractive to younger workers and those hired in the future. The experience from these four years of data suggests that just over half of those hired are reaching the five year mark (53 percent).¹⁴ It will be interesting to see if this trend has improved or worsened when the next experience study comes out, which is likely to be in 2024.

The comparisons that can be made among those with five or more years of service are much murkier, given that it



combines workers covered by both the DB and DC plans. And, at this point, those remaining in the DB plan have been working in the plan for a very long time. The data indicate the age-based turnover rates for the DB plan are less than two percent for all ages, and that the OPEB rates (blended DB and DC) are higher.¹⁵ But, almost all of the DB workers had been working for 16 or more years during the years studied.

Finally, it is worth noting that the 2012-2017 DB plan experience study looked at what percentage of the vested

benefits were retained by the plan (not cashed out) after workers stopped working in the system. Retained dollars will be used to produce future retirement income, as intended. The study found that 91 percent of people leaving kept their retirement dollars in the retirement system instead of cashing out.¹⁶

This is far from the predictions that closing the DB plan would save the state money from retirement costs. Despite the steady increase of higher DB plan contributions, the funding ratio has fallen from 109 percent to 69 percent.

II. ALASKA PUBLIC EMPLOYEES' RETIREMENT SYSTEM AND TEACHERS' RETIREMENT SYSTEM

The state of Alaska closed both of its statewide DB pension plans effective June 30, 2006. All new hires since July 1, 2006 have joined DC plans, rather than either the Public Employees' Retirement System (PERS) or Teachers' Retirement System (TRS) pension plans. The decision to close the pension plans has led to immense workforce challenges in a state that already is difficult to staff.

History of Decision to Close Plans

The Alaska legislature passed legislation in 2005 that closed the two statewide pension plans the following year. Since that time, it's become clear that the move to a DC plan did not improve the funded status of the pension plans, a real concern when the legislation was passed. Furthermore, there is growing evidence the state is finding it more difficult to retain a quality workforce following the closure of the DB pension plans.

When the legislature passed the law that closed the DB plans and created the DC plans, the governor claimed the legislation would "slow down the state's increasing liability."¹⁷ Instead, the past 17 years have revealed a much more complicated outcome for the state.

Much of the political momentum behind closing the pension plans was driven by the state's unfunded liability, including the liability related to post-employment healthcare. In 2005, the state faced a combined \$4.1 billion unfunded liability for pension benefits in PERS and TRS. The underfunding of these plans was caused by a variety of factors, including poor funding decisions by elected officials, stock market declines, and significant actuarial errors.

In an extraordinary circumstance, the state's actuary made inaccurate actuarial projections and eventually attempted to hide the mistake from the state. The firm had recommended the state contribute less to the plans than what was actually needed. This error alone contributed to \$2.5 billion of the state's unfunded liabilities.¹⁸ The state of Alaska sued in December 2007, seeking \$2.8 billion in damages. Ultimately, the actuarial firm and the State of Alaska settled for \$500 million.¹⁹

By the time Alaska received the settlement in 2010, the damage had already been done. Governor Frank Murkowski used the unfunded liability to push for the closing of the pension plans, and he succeeded. The problem Alaska faced in 2005 was a funding problem, but closing the pension plans did not improve funding nor did it reduce existing



Figure 7: AK PERS - Contributions Average 102% of ADEC Since 2001, Including Large Contribution in 2015



Figure 8: AK TRS - Contributions Average 126% of ADEC

obligations. In fact, in the years following the closing of the DB plans, the Alaska legislature continued to underpay the ADEC.

Since the DB plans were closed in 2005, the state of Alaska alternated between underpaying and overpaying the ADEC. As the charts below show, Alaska underpaid the ADEC in PERS in 10 of the 18 years from 2005 through 2022 (Figure 7), and in eight of those years it underpaid the ADEC in TRS (Figure 8). These poor funding practices belie the claim that the state acted in 2005 to address underfunding in the pension plans.

Moreover, closing the pension plans has made it more difficult for the state to manage the existing unfunded liability because new employees no longer pay into the system. As a result of the ongoing underfunding, the state decided to make a one-time \$3 billion contribution to the closed pension plans in 2014. Despite this significant infusion of the state's financial resources, the combined unfunded liability for pension benefits was higher in 2022 (\$6.8 billion) than it was in 2005 (\$4.1 billion). Closing the plans did not reduce the unfunded liability. Alaska managed to improve the funded status of both plans modestly -- from 65.7 percent to 68.1 percent in PERS and from 60.9 percent to 78.2 percent in TRS -- but this is due almost entirely to the \$3 billion contribution. Meanwhile, the unfunded actuarial accrued liability for pension benefits has increased in both plans since 2005.

Examining Current Workforce Trends

Pensions always have been designed to help with workforce management, including recruiting, retaining, and retiring workers. For instance, plan provisions provide significant incentives to retire at different ages, often depending on the type of work being performed. Pensions also have been a tool to achieve higher retention among employees, as long careers are rewarded. Thus, when Alaska moved away from offering pensions to public employees, the state began down a path where few other states had gone. So, it is worth examining how workforce behavior has changed over time, as it may inform decision makers considering the adoption of similar policies in other states.

Alaska has unique circumstances, including the largest land area of any state (roughly 2¹/₂ times the size of Texas) and a population slightly larger than Vermont and the District of Columbia. In addition, the physical separation from the lower 48 states imposes additional challenges when it comes to recruiting workers. These characteristics make providing quality services to Alaska's citizens more difficult. Given that, it is still possible to compare the behavior today between DB and DC plan participants, see how behavior has changed over time, and look at the differing outcomes between Alaska and its nearest neighboring states.

Teacher retention has become a problem in Alaska in recent years. While there are likely many contributing factors, turnover is significantly higher among those in the DC plan, higher than it was in the past, and higher than in other states. As a result of these classroom challenges, Governor Dunleavy issued a directive in 2020 to create a Teacher Retention and Recruitment Workgroup. This workgroup commissioned NIRS to conduct research on teacher recruitment and retention in Alaska and to publish a report. That report was released in April 2023 and is publicly available.20



Teachers are not the only group of public employees experiencing high rates of turnover. The Alaska Department of Public Safety (DPS) has experienced similar challenges. In a report to the state legislature, DPS officials cited the lack of a DB pension as one of the primary obstacles to recruiting and retaining new state troopers.²¹ Over the six year period from 2011 through 2017, the Alaska DPS saw a noticeable increase in the number of non-retirement separations from service.²² Seventy-two percent of those who left went to work for a different public safety department often in a state that offers a pension. Given that it costs \$190,000 and takes 12 to 18 months to train and certify a new state trooper, Alaska has strong incentives to retain experienced officers.²³ The department identified the ability to offer a DB pension to law enforcement officers in Alaska as a "critical need."

Teachers and state troopers are high profile examples, but worker shortages are pervasive throughout Alaska's state government. Nearly one in five Alaska state jobs were vacant in 2023.²⁴ Most departments throughout the state government are experiencing significantly greater vacancy rates than pre-pandemic levels. They are finding that recruitments are taking longer and are less likely to result in a hire.²⁵ Recruitment incentives are being used to address the most critical public needs. For example, the Fairbanks City Council amended the incentive bonus program for the Fairbanks Police Department to increase the bonus from \$20,000 to \$60,000 with a \$5,000 finder's fee to encourage city employees to assist in the recruitment process.²⁶ And residents of Anchorage waited weeks for snow removal following winter storms due to a shortage of snowplow drivers.²⁷ These examples illuminate the depths of the workforce challenges facing the state.



The Plan Actuary uses select and ultimate rates. For those in their first five to seven years, the rates at the left side of the chart are applied. For those past these early years, the assumption is age-based. The aged-based rates are considered the 'ultimate termination rates.'

The findings from the *Alaska Teacher Recruitment and Retention Study* are relevant to the issues discussed here. That report began by comparing the workforce trends among those covered by the DB and DC plans, which made it possible to see how behavior differed among those in each plan. In addition, while Alaska's unique circumstances may limit the utility of comparisons with other states, that report also examined how much service plans expect to receive from newly hired teachers and that data for select states appears in **Figure A3** in the appendix.

Using data from actuarial valuation reports, **Figure 9** shows the change in the number of workers, grouped by years of service, for both TRS and PERS. The first two categories, zero to four years and five to14 years of service, are almost all DC plan participants. Those with 15 or more years of service are almost all DB plan participants.

The two TRS plans combined had eight percent fewer members in 2021 compared to 2005. However, headcounts in the DB and DC plans have moved in opposite directions during this period. Teachers with zero to four and five to 14 years of experience fell by 11 percent and 18 percent respectively in the TRS plans, meaning a total decline of 1,052 TRS participants with fewer than 15 years of service compared to 2005. In contrast, the number of teachers with 15 or more years of service has increased substantially (by 11 percent). The state is still benefiting from the higher levels of retention in the DB plan, but this advantage will decline over time.

Headcounts fell less for those with fewer than 15 years of service in the PERS plans, while overall PERS membership increased by 0.3 percent (or 91 people). Again, the increase in long-serving DB participants is offset by fewer hires remaining in the DC plan.

This data suggests two points. First, worker retention during the early years of employment has dropped significantly between 2005 and 2021. Second, it is quite possible the workers hired into the DB plan in the years just before it closed may have been more likely to stay than those hired into the DB plan in earlier years. These observations are backed up by the changing assumptions that Alaska's plan actuary has developed over time. At the outset, the DB and DC plan turnover assumptions were the same. As new

Figure 11: Retention of Female Teachers (TRS): DB & DC Plans Based on Ultimate Termination Rates



Figure 12: Retention of Male Teachers (TRS): DB & DC Plans Based on Ultimate Termination Rates



information was received, these assumptions changed as they began to recognize observed behaviors.

Figure 10 shows the increase in turnover assumed among TRS DC plan participants relative to TRS DB participants, separately for males and females. On the chart, if the line is at zero, it means quit rates are the same, while 100 percent means turnover is expected to be twice as high in the TRS DC plan.

Turnover is significantly higher across the board, with the largest differences showing up in the age-based rates that are used after the first six years. The difference in turnover is lower during the first five years (before vesting), though the DC plan again generally has higher turnover. And, it is notable that the plan actuary can no longer update the select rates for the DB plan because it has been closed for many years.

Interestingly, there is a noticeable difference between men and women. Among the ultimate termination rates in the valuation report, women in their prime working years (ages 30 to 50) have turnover that averages 135 percent higher in the DC plan. Meanwhile, the difference among men is an astounding 278 percent, which indicates that the retention incentives of the DB plan are driving the behavior of men more than women. During these prime working years, men show lower quit rates than women in the DB plan, but higher rates in the DC plan.

These findings are consistent with the theory that offering a DB plan will improve retention. Unfortunately, it is rare to have turnover data for both DB and DC covered workers who work side-by-side at the same employer, under the same management and in the same buildings. Thus, it is difficult to isolate plan type as a variable to be studied to make these types of comparisons.

The charts below (**Figures 11** and **12**) compare retention rates in the TRS DB and DC plans, based on the actuarial assumptions that were developed specifically for these plans by looking at actual experience over time. These charts illustrate the retention of teachers for a group of 100 30-year-olds who just reached vesting, separately for males and females.

The charts show that, once vesting is reached, the DB plan's power to retain becomes clear. Among 100 male teachers vesting at age 30 in the DC plan, only seven are expected to be working at age 55. This is far short of the 40 that are expected to work the entire 25 year period in the DB plan. The difference among women who vest at age 30 is smaller, but still significant as 3.5 times more women (38) are expected to remain in the DB plan at age 55.

Another way of thinking about the cumulative difference is to add up the projected service between the two plans. Below is a summary of that data for all Alaska plans.

Teachers:

- 100 Male teachers: 104% more service projected in DB plan (1,914 versus 935 years)
- 100 Female teachers: 64% more service projected in DB plan (1,792 versus 1,093 years)

Peace Officers:

- 100 Male Peace Officers: 67% more service projected in DB plan (2,048 versus 1,225 years)
- 100 Female Peace Officers: 74% more service projected in DB plan (1,636 versus 942 years)

General Employees:

- 100 Male General Employees: 52% more service projected in DB plan (1,377 versus 902 years)
- 100 Female General Employees: 51% more service projected in DB plan (1,352 versus 895 years)

The appendix includes a chart laying out this data for all groups and a chart showing the assumed turnover rates for men and women separately for the TRS DB and DC plans.

Who Is Leaving and Why?

As one would expect, workers leave both the legacy DB plans and the current DC plans each year; however, the reasons people are leaving each system are quite different. In total, 28,592 workers left PERS and TRS employment in the past five years (2017-2021). These data are broken down by plan and the reason workers left in **Figure 13**.

That figure shows the vast majority of workers leaving the TRS (70 percent) and PERS (63 percent) DB plans retired, passed away, or became disabled. This is more a matter of expected life events than simply quitting their jobs. These events typically are not considered human resource failures, and the DB plan provisions likely play a vital role in retirement decision-making.



In contrast, 99 percent of workers leaving the DC plans are quitting. Only one percent are leaving for retirement, death, or disability. Some of this stark contrast can be explained by the age of the participants themselves, as a new tier should have younger workers and fewer retirements. One would not expect many retirements from a plan that has only been in operation for 17 years. Nevertheless, the overwhelming number of DC plan participants who are quitting reinforces the idea that those plans lack the retention power of the DB plans.

If the workforce management goal is to reduce turnover in Alaska, then it makes sense to focus on the workers who are quitting. In both the TRS and PERS systems, the number of workers quitting (excluding retirements, deaths, and disabilities) from the DC plans is between 4.5 to 4.7 times greater than the number quitting from the DB plans. In the future, it is expected that the number of workers quitting (not including retirements) from the DB plan will continue to decline as more workers retire from the plan and the number of active workers who could quit will be even smaller. In both sheer numbers and current trends, increasing the retention of those hired into the DC plans would be the most beneficial to improving overall retention outcomes, especially considering that the active worker DB population will continue to decline if the plans remain closed.

Plan Costs and Funding Levels

Costs for funding the closed pension plans have increased significantly over the past 17 years. The lack of new hires joining the plans reduces the contributions coming from active employees. This sharp reduction in active member contributions, combined with the maturing of the plans' populations and the impact of the Great Recession, have contributed to these increased costs, as they have in Michigan's SERS plan as well.

In 2015, the Alaska legislature made very large contributions to both the PERS and TRS plans. As shown in the charts below (**Figures 14** and **15**), these sizable contributions had a noticeable impact on the cash flow and funded status of these plans, but they did not mitigate rising costs. Plan costs have continued to rise in both plans even after those large contributions were made.









The previous edition of this report focused solely on the costs associated with the closed DB plans.²⁸ This report includes the costs of both the DB and the DC plans because those represent the true costs to both employees and employers of providing these retirement benefits (**Figures 16** and **17**). The costs associated with the DC plans have risen over time as a greater percentage of active employees are participating in those plans. However, the DB contributions from employers have also increased due to the rising plan costs discussed above.

The state of Alaska has been inconsistent about making its full ADEC payments in the years since the plans were closed. While the average percentage of the ADEC contributed to both plans has been above 100 percent for the period from 2001 - 2022, that is largely due to the massive contributions made in 2015. Otherwise, the percentage of the ADEC would have averaged below 100 percent.

The large contribution to the TRS plan moved its funding ratio above the national average and kept it there for several years, but lately those two trend lines have been converging. For PERS, the major contribution did not move the funding ratio of the plan above the national average, although it did improve the funding ratio, which had already been trending upward. In fact, the funding ratio for PERS has been below the national average for every year since 2001.

Plan Cash Flow

As discussed above, there are a few basic reasons why experts advise retirees to invest differently than younger workers. The biggest factor is timing. If one is not going to spend a dollar of savings for 30 or more years, there is a high probability that equities will outperform bonds over that time. However, if one needs the money next year, the same investment mix looks much riskier.

For pension plans, there are almost always dollars being contributed and dollars being paid out. Plan demographics play a role in whether a plan has a positive cash flow (more contributions than benefit payments) or negative cash flow (benefit payments exceed contributions). More mature plans tend to have a more negative cash flow relative to their less mature peers.

Closing a DB plan accelerates the maturation process. Workforce changes can as well, but to a lesser extent. For instance, if a state is hiring more teachers due to population growth, that impacts plan maturity by making the plan younger. If a state is hiring fewer teachers due to declining needs, this would have the opposite effect. Typically in the public sector these workforce changes are mild compared to a full plan closure, as public services are always needed.



When thinking about the level of negative plan cash flows, it is reasonable to think of a retiree spending down their dollars. A certain portion will be needed this year, and some resources will be invested for many years in the future. Short term market fluctuations are not as relevant to dollars that will be needed far off in the future. Down markets have a significant impact for the dollars that are needed this year, because a falling stock price means the retiree needs to sell more shares to produce the same dollar of proceeds. It is important to think of this as a sliding scale, not an on/off switch. The degree of negative cash flow matters as well.

Below are a few ways to look at cash flow data for the two closed Alaska DB plans.

Figure 18 shows the level of negative cash flows in the two Alaska DB plans, as well as the Michigan SERS plan and all public plans in the PPD. The yellow line, representing the plans in the PPD, declined from a negative two percent cash flow in 2001 to below three percent during the Great Recession. There are a few things causing this, including Baby Boomers retiring and increasing benefit payments, as well as increased contributions to plans following the recession. However, the yellow line did not change dramatically over this 20 year period, and by 2020 it was back to where it was in 2001 as noted above.

In contrast, the negative cash flow of the MI SERS plan (the gray line) fell from negative 3.5 percent in 2001 to negative 6.5 percent in 2020. There are a few ways to think about this. First, if the plan earns 6.5 percent investment returns and all other actuarial assumptions are accurate, one would

expect assets to end the year roughly at the same level as the beginning of the year. Second, if there is a bad year, for instance a negative 10 percent return, then the plan would be selling a considerable portion of assets to make benefit payments. And, the selling would occur when stock prices are down, as discussed in the section above.

The Alaska plans are trailing MI SERS as they move towards a higher negative cash flow, which is an expected consequence of closing a DB plan. It is also important to note that the massive contributions, particularly to the TRS plan, have helped the plans delay reaching the higher level of negative cash flows.

Figure 19 shows benefit payments as a share of assets. Again, in a closed plan this would be expected to grow. The gray line, representing MI SERS, has increased much faster than other plans in the PPD. This plan has been closed to new entrants for more than 26 years now and is moving quickly to a spend-down stage. Alaska's plans also are seeing benefit payments as a share of assets rise more quickly than other plans. In fact, for a number of years the TRS plan had benefit payments as a share of assets that were higher than the closed MI SERS plan. Following the Great Recession, the MI SERS plan became the plan with the highest relative benefit payments. Meanwhile, the large contribution to the Alaska TRS plan is again visible in this chart, as the larger asset base moved the blue line from being close to the same trajectory as the MI SERS plan toward a more normal level.

Given the trend toward higher negative cash flow, it is likely that the closed TRS and PERS plans would have worse



experiences during negative market shocks in the future. The driving force would be not just how much markets might decline from peak to trough, but how long prices would remain low (and how many benefit dollars might go out during the down market).

If these plans were reopened to new hires, one would expect a more balanced cash flow going forward. This was the case in West Virginia, as will be discussed in the section below. If there is another period of serious market turmoil in the coming decades, reopening the plans may very well make financing the obligations that were earned by those hired before July 1, 2006 more manageable.

The Employees in the Defined Contribution Plans Are Likely to Experience Greater Financial Insecurity in Retirement

The average account balance in the PERS Tier IV retirement plan, i.e., the DC plan, is \$43,974, among the 48,541 participants.²⁹ In the TRS Tier III plan, also a DC plan, 10,915 teachers have an average balance of \$80,872. This doesn't reveal too much about the retirement security of these workers, as the average balances include workers of various ages and years of service. However, it is important to have a sense of how account balances translate to income. For instance, financial advisors often start this conversation by explaining the "four percent rule," which assumes that a lump sum can produce inflation-protected retirement income equal to four percent of assets under most market conditions.³⁰ Thus, \$100,000 would be expected to provide income of \$4,000 per year, with increases equal to inflation each year of retirement.

In 2023, the Alaska Retirement Management Board (ARMB) directed their investment consulting firm, Callan, to conduct a study of the Managed Account Service provided to the DC plan participants in Alaska. As a result of the Callan study on the managed accounts program, there are data on account balances that are broken down by age groups.³¹ While this does not represent a full career within the DC plans, the data indicate that the average account balance among the 1,147 workers aged 60-64 had reached \$210,003, with a median account balance of \$143,362. Using the "four percent rule", this would translate into mean annual income of \$8,400 and median annual income of \$5,700 among those turning age 65 in the next few years. Unfortunately, this study only examines those with account balances.

In contrast to the findings of the Callan analysis, a recent presentation from the Alaska Department of Administration to the Senate Finance Committee projected that PERS Tier IV participants with 30 years of service would have over a million dollars saved after 30 years, with annual income equal to \$77,338 (or 7.6 percent of assets, which is nearly double what the 'four percent rule' would recommend). For TRS DC plan participants, the projection showed an account balance after 30 years of \$1.2 million and annual income of \$91,740 (again 7.6 percent of the account balance). In these projections, retirement security seems much more assured. But there are a number of reasons to be doubtful about projections that assume ideal conditions, i.e., all workers start young, work a full career, and never cash out or borrow from their accounts, including:

- Entering the DC Plan at a Later Age: As NIRS illustrated in *The Growing Burden*, the experience of people who join a DC plan mid-career often is that they never have an opportunity to reach the point where investment returns should provide substantial growth near the end of a career.³² It is worth looking at how many people are hired mid-career and considering their outcomes, as it is likely a significant share of the workforce.
- Annuity Conversion: Offering an annuity conversion in a DC plan can be a very useful retirement strategy. However, the utilization of annuities is often low and costs vary over time.
- **Cashouts:** As discussed above, the available data on cashouts in primary public sector DC plans is a sign of weakness. With roughly 40 percent of contributions being lost to cashouts each year, one would expect DC plan assets to grow more slowly than DB plan assets.
- Social Security Offsets (GPO/WEP): GPO/WEP provisions still apply to DC plan retirees, despite these retirees not participating in a pension. This impact is potentially very harmful to workers who spend a few decades in a job covered by Social Security, then move to a teaching position that is not covered by Social Security–as their Social Security benefit will be reduced when they claim their benefits. In fact, the worst outcomes might very well face workers on this split-career path, with the non-Social Security DC plan participation occurring during the later years of a career.

Leakage again appears to be a major factor preventing DC plan assets from growing more rapidly. The data show that disbursements from PERS Tier IV, which totaled \$111.9 million, were equal to 50 percent of contributions (\$222.7 million) throughout the 12 months ending on June 30, 2023.³³

In the TRS Tier III plan, disbursements (\$33.1 million) were equal to 42 percent of contributions (\$77.6 million) over the same period.

Of those distributions, some were not due to workers quitting, e.g., required minimum distributions (RMDs), buying service credits, qualified domestic relations orders (QDRO's), death benefits, and other causes. However, 76 percent of distributions in the PERS DC plan, and 75 percent in the TRS DC plan were for "Separation of Service."

Another fraught element of the DC plan recently came to light during an ARMB presentation when Callan offered their analysis of the effectiveness of the managed account program discussed above. The most significant issue was that 10,337 participants (holding nearly \$1.6 billion in assets) were using the managed account service, which has significantly higher fees, but few of the participants had provided the customization that is required for the managed account program to function as intended. The program relies on eight different inputs: Adjusted Retirement Age, Pensions, Retirement Need, Social Security, Spouse, Outside Accounts, Constrained, and Life Expectancy. Only five participants provided information on all eight data points, while another 52 provided seven items. In contrast, 6,633 participants provided either no information or just one item. And, most of those providing one piece of data simply confirmed the 'adjusted retirement age' default of age 65.

This has proven to be a problem because the managed account program relies on these inputs to measure saving progress and make asset allocation adjustments. Without these inputs, the model fails to customize properly. In this case, it seems the missing information has led to lower allocations to equity positions during a decade when equities did well, costing participants money both from higher fees and lower returns which is one of the inefficiencies of DC plans compared to DB plans.³⁴

These findings are consistent with the theory that offering a DB plan will improve retention. Unfortunately, it is rare to have turnover data for both DB and DC covered workers who work side-by-side at the same employer, under the same management and in the same buildings.

III. KENTUCKY PUBLIC PENSIONS AUTHORITY

In March 2013, the Kentucky General Assembly passed Senate Bill 2, which established a new tier of benefits for plans in the Kentucky Retirement Systems (KRS). Public employees hired since January 1, 2014, participate in a cash balance hybrid plan instead of the DB pension plan that public employees used to join. The move to a cash balance hybrid plan was part of a larger package to improve the funding of KRS. As has been the case in the other states examined in this report, the change in plan design did little to improve the funding level of the plans. The adoption of the cash balance hybrid plan was still significant in a state that has a history of underfunding its pension plans.

In a cash balance plan, each employee accrues a pay credit that is deposited by the employer into a "notional account" each year. In addition, a specified annual interest credit accrues on the account balance. A cash balance plan acts like a defined benefit plan in that investments are pooled and collectively managed, the benefit amount is guaranteed in retirement, and there is a lifetime income option. A cash balance plan "looks" like a defined contribution plan, however, in that an employee's notional account grows each year with salary credits and interest credits.

The former KRS consisted of five different pension plans: Kentucky Employees Retirement System (KERS) NonHazardous; KERS Hazardous; County Employees Retirement System (CERS) Non-Hazardous; CERS Hazardous; and the State Police Retirement System (SPRS). In 2020, the governance structure of these five plans was changed to establish the Kentucky Public Pensions Authority (KPPA). The KPPA provides professional services to systems and consists of two independent boards serving KRS as well as CERS (Hazardous and Non-Hazardous). KRS continues to administer KERS (Hazardous and Non-Hazardous) and SPRS.

While all fall under the umbrella of the KPPA, each of these plans serves different groups of public employees, and all of these plans have struggled with low funding levels in recent years.

Funding was Already an Issue Before New Tier was Created

On June 30, 2013, just a few months after SB 2 passed, KERS NH had a funded ratio of 23.15 percent (**Figure 20**). It is no wonder, then, that the General Assembly was concerned about the funded status of the plan. But the cause of the underfunding was hardly a mystery. From fiscal year 2006 through fiscal year 2014, KERS NH employers contributed roughly half or less of the ADEC, as shown in **Figure 21**. This





chronic underfunding, coupled with the crippling effects of the global financial crisis, gutted the funded status of KERS NH.

In fiscal year 2004, KERS NH was funded at 85.1 percent. By fiscal year 2018, the funded status was down to 12.88 percent. While all the KPPA plans had experienced a drastic decline in funding since the early 2000s, KERS NH has always had an even lower funded status than the other plans. In fiscal year 2004:

- KERS Hazardous was funded at 98.4 percent;
- CERS Non-Hazardous at 105.1 percent;
- CERS Hazardous at 88.8 percent; and
- SPRS at 88 percent.

By fiscal year 2018, these four plans had also seen their funded status drop:

- KERS H to 55.5 percent;
- CERS NH to 52.7 percent;
- CERS H to 48.4 percent; and
- SPRS to 27.1 percent.

A large part of the reason why these plans have maintained a higher funded status than KERS NH is that their employer contributions have been more consistent, although SPRS has also experienced deep underfunding by the state.

Unfunded Liability Has Continued to Rise

As the funded status has declined, the unfunded liability increased dramatically. In 2011, the unfunded liability in KERS NH was \$7.5 billion. By 2018, that number had nearly doubled to \$13.7 billion. By 2022, the funded status decreased slightly to \$13.5 billion. Interestingly, the actuarial accrued liability only increased modestly over that time period, until the plan began to change assumptions in 2014. The significant increase in the accrued liability by 2018 was due almost entirely to the decision by the KRS board to lower its discount rate (the assumed rate of return on investments) quite drastically over four years. The discount rate for KERS NH was reduced from 7.75 percent in 2014 to 7.5 percent in 2015, to 6.75 percent in 2016, and to 5.25 percent in 2017. (SPRS also uses a 5.25 percent discount rate; the other three KPPA plans use a 6.25 percent discount rate.) Given the way actuarial liabilities are calculated, lowering the discount rate will always increase a plan's liability. One reason for this change is that the plan adopted a more conservative investment strategy that recognized the need to reduce volatility and prioritize solvency given the low funding levels.



Another driver of the increasing unfunded liability since 2011 has been a significant drop in the value of plan assets. KERS NH was cash flow negative in six of the seven years from 2012 through 2018, meaning that the amount of benefits paid out each year exceeded the amount of contributions made by members and employers. An extremely low funded status coupled with a negative cash flow means that even a year of good investment returns will do little to improve the funded status of the plan. KERS NH had positive cash flow from 2019 through 2020 and KERS as a whole continued to report improved cash flow from 2021 through 2022.³⁵ Figure **22** displays the changing cash flow trend as contributions have increased in recent years.

As discussed elsewhere in this report, negative cash flow, in and of itself, is not necessarily a problem. Most mature public pension plans will have some amount of negative cash flow. The difference here is that a well-funded plan can recover from a market crash more quickly when investment returns rebound because the plan has more assets (relative to liabilities) to invest, even if that plan is also experiencing negative cash flow. Large negative cash flows can be caused by both closing plans and/or severe underfunding, and in Kentucky, the combination of a large negative cash flow and historical underfunding has generated a particular problem for plans already struggling with solvency concerns.

However, it would be misleading to blame the underfunding on investment returns. As the financial markets recovered unevenly from the financial crisis, KPPA and its plans experienced strong years as well as some years that fell short of expectations. The KERS NH plan achieved positive returns of 22.6 percent for fiscal year 2021, but just one year later, the plan had a negative return of -5.2 percent.³⁶ Despite these ups and downs, the system has still managed to achieve investment returns similar to its assumed rate of return over the five year period ending in fiscal year 2022.³⁷ However, with relatively few assets in the plan, the impact of investment returns on improving funding status is limited.

A major accomplishment of SB 2 was committing to full payment of the ADEC beginning in 2015. This was not achieved in 2019 and 2020, when contributions were at 98 percent and 91 percent, respectively. However, between 2015 and 2018, and again from 2021 to 2022, KERS received 100 percent or more of the ADEC each year. Due to the already low funded levels, the funding ratio has not yet rebounded, although it improved to 22 percent in 2022. KPPA currently anticipates reaching full funding in 2049.³⁸

Addressing Workforce Challenges in Kentucky

Kentucky has experienced challenges in retaining public employees in recent years. **Figure 23** shows the decline in the number of active workers in KERS over time. In the most recent experience study, actual terminations were significantly higher than what was expected based on past



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Kentucky has experienced challenges in retaining public employees in recent years. **Figure 23** shows the decline in the number of active workers in KERS over time. In the most recent experience study, actual terminations were significantly higher than what was expected based on past experience. In fact, for the KERS Non-Hazardous, KERS Hazardous, and SPRS plans, actual terminations were 145, 189, and 198 percent of expected quits respectively.³⁹ In the CERS Non-Hazardous and Hazardous plans, terminations reached 143 and 135 percent of expected terminations.⁴⁰ As a result, the plan actuary has proposed increasing the assumed rates significantly.

Given these new tiers are relatively young, it makes sense to look at those who were hired in recent years. Among the five plans, **Table 1** shows the percentage of workers expected to remain on the job after five years, based on the actual quit rates in the past experience study. **Figure 24** shows the actual termination rates in each of the first five years of service.

These high termination rates, especially in the KERS hazardous plan, make it difficult for public entities in Kentucky to maintain an adequate workforce to deliver public services. While it is unlikely that the switch to the cash balance hybrid plan is solely responsible for these high termination rates, it seems clear from the data that the new tier does not have the same retention effect of the old DB tier.

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Table 1: Recent Turnover ExperienceUnder KPPA

Plan/Tier	Percent Reaching 5 Years	Years Until Half of New Hires Leave
KERS Non-Hazardous	31%	2.5
KERS Hazardous	17%	l year, 4 months
CERS Non-Hazardous	35%	2.5
CERS Hazardous	55%	>5
State Police Retirement System (SPRS)	64%	>5



IV. OKLAHOMA PUBLIC EMPLOYEES RETIREMENT SYSTEM

Oklahoma has five primary statewide defined benefit pension plans for public employees: the Public Employees Retirement System (OPERS), the Teachers' Retirement System (TRS), the Police Pension and Retirement System (OPPRS), the Firefighters Pension and Retirement System (FPRS), and the Law Enforcement Retirement System (OLERS). Each of these plans operates separately, with their own boards of directors/trustees, executive directors and staff, and investments. Each of these plans operates as a DB pension plan, except for OPERS, which is partially closed and has most new active members participating in a DC plan. This section will examine the history and experience of that partial plan closure.

House Bill 2630, the "Retirement Freedom Act," passed during the 2014 Oklahoma legislative session and took effect on November 1, 2015. This legislation closed the DB pension plan within OPERS to most new hires. New employees still able to join the DB plan include: correctional officers, probation and parole officers, and fugitive apprehension agents who are employed by the Department of Corrections, as well as district attorneys, assistant district attorneys, or other employees of the district attorney's office. Additionally, any employees of a county, county elected officials, county hospital, city or town, conservation district, circuit engineering district, and any public or private trust in which a county, city, or town participates and is the primary beneficiary are still able to join the pension plan. The legislation survived a court challenge and has been in effect for the past eight years.

Unlike other states discussed in this report, HB 2630 neither completely closed the DB plan (as in Alaska and Michigan) nor did it create a new benefit tier within an existing plan (as in Kentucky). This has left OPERS in the unusual position of managing a partially closed plan, which creates its own unique set of challenges.

Oklahoma's legislators should be given credit for improving the funded level of the plan in recent years. Looking at the actuarial funded ratio from the late 1980s forward, OPERS had not been funded near or above 100 percent until recently. From 1988 through 2008, the plan had fluctuated between 70 percent and just over 90 percent funded.⁴¹ Following the



Great Recession, that funded level dipped below 70 percent. The funding level did not stay there for long, however, and the actuarial funded ratio moved above 80 percent before HB2630 was passed. The funded level continued to rise over the past decade, and the plan is now more than 100 percent funded (**Figure 25**).

Two decisions by the legislature have contributed to this improved funded status. First, the passage of HB 2132 in 2011 removed the assumption of a cost of living adjustment (COLA) from OPERS. Second, there are excess contributions from the DC plan that go into the DB plan. Employers participating in OPERS contribute 16.5 percent of pay into the system. This contribution goes entirely into the DB plan for employees still participating in that plan. For contributions on behalf of employees in the DC plan, the employer match of 6 percent or 7 percent goes to the DC plan, and the balance of 9.5 percent or 10.5 percent goes to the DB plan (see below for more detail on the funding of the DC plan). These decisions, combined with an improvement in funding discipline, as shown in **Figure 26**, have resulted in the higher funding ratio of the plan.

Closing a pension plan can create the appearance of cost savings in the short term, especially if that closure is coupled with increased funding. No new liabilities will accrue in a closed pension plan since it has no new participants. Thus, the additional funding goes toward paying down the UAL already present in the plan, which improves the funded ratio. This can be achieved without closing the plan though. Open public pension plans routinely over-contribute to pay down their UAL more quickly. Over time, the lack of new contributions combined with the shifting demographics within the closed DB plan, will force the plan to make a choice: either change its investment strategy and invest more in low risk, low return investments so the plan can maintain enough liquidity to pay benefits and reduce the volatility of the plan surplus, or face greater risk by continuing to invest the same way. As discussed earlier, the closed Michigan SERS plan already faces this challenge of selling assets to pay benefits (**Figure 27**).

While OPERS remains open to new hires in certain employee classifications, it still has experienced a marked decline in its active member population since the DB plan's partial closure in 2015, which is lowering the ratio of active to retired members (**Figure 28**). Managing the plan will become more challenging as the demographics become more unbalanced, and benefit payments begin to represent an ever larger portion of plan assets.

The partial closure of the OPERS DB plan also has shed light on the failings of the DC system. Most new hires since November 1, 2015, have joined a DC plan called Pathfinder. Employees are required to contribute a minimum of 4.5 percent of their pre-tax salary to this DC plan, which is matched by a six percent contribution from their employer for a minimum total contribution of 10.5 percent. If the employee contributes more than 4.5 percent but less than seven percent to the DC plan, the employer



contribution remains at six percent. However, if the employee elects to contribute seven percent or more, then the employer contribution increases to seven percent for a total contribution of at least 14 percent. The employer contribution never rises above seven percent, regardless of the employee's contribution.

Unfortunately, the evidence thus far shows that many employees are not keeping their money in the DC plan. Data from OPERS indicates that, since the inception of the DC plan, 88 percent of participants, upon terminating employment, have withdrawn their funds and not rolled them over to another retirement account.⁴² This means that the withdrawn funds are taxable and subject to a ten percent early withdrawal penalty. This level of cashing out is more than double the average across all DC plans found in one study, and higher than what is seen in the MI SERS DC plan.⁴³ This high level of leakage from the plan directly undermines the retirement security of separating OPERS members, who will not see this money grow into a nest egg for their retirement. In contrast to the 88 percent cashing out when they leave the DC plan, 96 percent of those terminating under the DB plan keep their retirement resources in the retirement plan. Cashouts and the success of utilizing retirement resources for retirement income is discussed further in the final section of this report.

Additionally, OPERS data show that 80 percent of DC plan assets are held in the default investment option, rather than the participant making an active investment selection.⁴⁴ The default option is the Vanguard Balanced Index Fund, which has had a strong return of 27.54 percent over the past five years (as of 11/22/23).⁴⁵ It may be the case that DC participants view the Balanced Fund as a good investment option and are following the default because they prefer it. It could also be the case, as other research has suggested, that plan participants are simply going with the default option without giving it much thought. If the latter is true, then DC plan participants are fortunate that the default option is one that has delivered solid returns for investors in recent years. Still, even if participants have been able to achieve good investment returns by sticking with the default investment option, that is not translating into retirement preparedness due to the incredibly high rate of cashouts at separation.

As in other states that have closed their pension plan or changed their plan design, employers in the OPERS system have struggled to recruit and retain employees under the DC plan. State employee turnover in Oklahoma was 21 percent in fiscal year 2022.⁴⁶ For FY21, the average total compensation for state employees was nearly 17 percent below the competitive market.⁴⁷ As in other states, this has led to a legislative effort in Oklahoma to reopen the partially closed DB pension plan. A couple of different pieces of legislation have advanced through the Oklahoma legislature in recent sessions.⁴⁸ While neither bill ultimately was passed by the legislature and sent to the governor, the political debate around reopening the DB pension plan is ongoing.



Figure 28: OK PERS - Membership By Type Shows Declining Actives Since 2015



V. WEST VIRGINIA TEACHERS' RETIREMENT SYSTEM

West Virginia closed the Teachers' Retirement System (TRS), a DB pension plan, on June 30, 1991. New teachers hired starting July 1 of that year joined a DC plan called the Teachers' Defined Contribution Retirement System (TDCRS). It took only a decade for the state to begin studying the impact of this switch as the weaknesses of the DC plan became readily apparent.

Participants in TDCRS are required to contribute 4.5 percent of their salary to the plan, while the employer contributes 7.5 percent, for a total contribution of 12 percent. Employer contributions only become partially vested after six years of service, and employees do not become fully vested until 12 years of service.

Policymakers in West Virginia learned fairly quickly that teachers participating in the DC plan were not saving enough to produce adequate income in retirement. Furthermore, the funded status of the then-closed DB plan continued to decline. The legislature decided to examine the impact of reopening the pension plan to future hires.

The state found that if it returned to the DB plan, it could provide equivalent benefits at half the cost of the DC plan.⁴⁹ The state legislature passed a bill that reopened the DB pension plan to first-time hires beginning on July 1, 2005. Initially, only teachers hired after the date of reopening were allowed to join the DB plan. (Those who had been in the plan before it had closed remained in the plan.) Three years later, the state allowed teachers participating in the DC plan to switch to the reopened pension plan; 15,152 members of TDCRS, or more than 78 percent, did.

Today there are 3,634 active members remaining in TDCRS, but that number declines each year. The average account balance is \$181,067, which is a healthy account balance, but it is important to remember that the last newly-hired teacher joined the plan more than 18 years ago, so the remaining active members have mostly had 20 years or more of service during which to save. Additionally, contributions are mandatory and total contributions are at a fairly high level of 12 percent. Given these facts, a decent account balance should be expected. But if a teacher retired from TDCRS and followed the four percent rule, that average balance would generate a monthly retirement income of only \$603.

When West Virginia reopened the pension plan in 2005, the funded status of the plan was just 25 percent. The state has made steady progress improving the funded status in the years since (**Figure 29**). After reopening the plan, the state made sizable catch up contributions to the DB plan in 2006 and 2007 in addition to regular required contributions. The state did this by securitizing payments received from the national tobacco settlement, an innovative use of dedicated

Figure 29: WV TRS - Employer Costs and Funding Ratio Since 2001





revenues.⁵⁰ By 2008, the plan improved its funded status to 50 percent. In 2022, the plan climbed to 76 percent funded.

West Virginia TRS offers a contrasting lesson to the states that closed their pension plans and have left them closed. Aside from a small dip during the financial crisis, West Virginia has been steadily reducing the unfunded liability in TRS each year. The unfunded liability decreased from \$4.1 billion on July 1, 2008 (just before the effects of the recession began) to \$2.7 billion on July 1, 2022. During this period, the actuarial accrued liability increased—because new members are joining the plan and earning benefits but the unfunded liability decreased because the value of assets increased at a faster rate than the accrued liability. The state also contributed more than the ADEC nearly every year during this period.

West Virginia TRS clearly demonstrates the importance of sound funding practices. When evidence showed that the DC plan was not working, the state followed the data and reopened the DB pension plan rather than pushing ahead with the DC plan. Importantly, West Virginia committed to full funding after reopening the DB plan. That commitment, combined with the contributions of new members and positive investment returns, have allowed the DB plan to reduce its unfunded liability and avoid a challenging spenddown period that would last for many decades (**Figure 30**).

The workforce experience in West Virginia also contrasts significantly with the other states studied in this report. **Figure 31** shows that actual turnover rates for teachers in West Virginia with five or more years of service was 4.5 percent per year. For non-teachers and state workers (including State Police, Judges, Firefighters, and EMS), among those with five or more years of service, turnover was 4.3 percent. This is much lower than the turnover rates seen in the DC plans currently in place in the other states examined in this report. This retention effect is one of the key workforce management tools of a pension plan.

Throughout the early years of employment, this retention pattern looks more similar to other states that offer a DB plan as well, with early turnover being higher, but dropping throughout the first five years. After workers gain experience throughout their first five years, retention is fairly strong with turnover under five percent.

Reopening the pension plan also has improved the demographic balance within that plan. **Figure 32** shows how the ratio of active to retired members has changed since reopening the DB plan. This more stable balance of members should allow West Virginia TRS to avoid some of the challenges looming for plans in other states, where current active members are declining precipitously.

The example of the TRS plan in West Virginia shows that closing a pension plan is not an irrevocable decision. A closed DB plan can be reopened, and if sound funding practices are implemented, this can have a positive impact on plan cash flow, funded status, demographic balance, and workforce management.





VI. CASHOUTS IN DEFINED CONTRIBUTION PLANS

A recent study found that, nationally, 41.4 percent of DC accounts are cashed out when a worker separates from a job.⁵¹ Other estimates have found that between \$60 billion and \$105 billion are withdrawn each year (2019 study) by 4.5 to 6.4 million participants. Making matters worse, this level of withdrawal occurs each year, and the data indicate that the typical Baby Boomer held an average of 12 jobs between the ages of 18 to 56. ⁵²

Other research looks at the lost savings from all types of leakage including cashouts, but also in-plan loan defaults, hardship withdrawals, and even deferred participation in the plan.⁵³ Taken together, these various forms of leakage have a real impact on Americans' retirement readiness.

The picture in the public sector, where DC plans typically serve more as a supplement to a DB plan, is less clear. But there are some data that make it possible to begin looking at the impact within systems that have replaced their DB plans with DC plans.

While it is reassuring that across the retirement industry there are efforts to reduce this "leakage" from DC plans, it is also worth noting that pensions—once the worker is vested—typically do not default to returning money to workers with the hope that they will keep those dollars for retirement. In fact, in most plans, once workers are vested, they are not allowed to cash out their retirement wealth and spend it on today's needs. This is another dynamic that changed when the onus to provide retirement income was shifted to workers.

Refunds in Michigan SERS

It is not possible to see the full picture from the available data, but the scale of savings leaving the Michigan SERS DC plan is available. **Figure 33** below shows that the dollars leaving the Michigan SERS DC plan (pre-retirement) during the past 11 years have been between 40–50 percent of contributions in all years, except 2020. As this is a fairly mature DC plan, this is clearly significant enough to impact the growth of assets under management in the DC plan.

However, the data does not show what portion of these dollars end up going into other retirement-dedicated accounts (direct rollovers), how much might be taken as a



check and later deposited into an IRA (indirect rollovers), or how much is taken out and never used for producing retirement income.

The national 401(k) data are not encouraging in this area. Unfortunately, the DC plan has no way of tracking indirect rollovers. There are also certainly more significant behavioral hurdles with indirect DC plan rollovers, including:

- 1. Requesting a lump-sum distribution
- 2. The transfer is the responsibility of the participant
- 3. Tax laws get complicated:
 - » The check the participant receives will not be the full amount as the plan is required to withhold 20 percent. So, the participant will have to come up with the 20 percent that the plan withholds to avoid tax consequences.
 - » The 20 percent will be returned to the participant if they properly complete the rollover.
- 4. The participant also only has 60 days to deposit the funds, or they face taxes on pretax contributions and earnings, as well as an additional 10 percent tax penalty if they are under age 59¹/₂.⁵⁴

In stark contrast, among the public sector DB plans that show a (non-zero) refund of contributions in the PPD (which includes 179 plans) during 2021, total refunds and withdrawals equal only 2.6 percent of contributions. Also, those receiving a refund, e.g., if they did not work long enough to vest, can do an indirect rollover just like those participating in DC plans. And, often, if a plan participant moves to another public DB plan, the employee can purchase that service in the new DB plan to keep the refund as pensionable service.

This is partly why DB plan assets under management should be expected to grow faster than DC plan assets relative to participation levels, which was noted in a recent *Pensions & Investments* commentary:

Defined benefit plans also provide more than twice as much benefit to retirees as 401(k)s. For example, the National Conference on Public Employee Retirement Systems' analysis of data shows that from 1975 to 2018, the average assets per participant in a private-sector DB plan grew from \$5,634 to \$184,432. During the same period, average assets per participant in DC individual accounts only grew from \$6,432 to \$59,186.⁵⁵

Like DC cashouts, DB refunds will only be used for retirement income if individuals make that decision and take the time

to do it. But, the scale of this challenge is simply much smaller in a DB pension plan, where withdrawals are far less common.

Refunds in Oklahoma PERS

Oklahoma PERS has data that provides further insight into direct rollovers from the DC system recently implemented for new hires. While the percentage of those leaving who utilize a direct rollover has been increasing, it remains only at 16 percent (**Figure 34**).

A few items are worth noting here, including the fact that this is a new DC plan. As such, the people leaving do not have much service time, and thus likely relatively small account balances. Behaviors may change as future cashouts likely would involve larger balances. But, as it stands, it seems clear that most of these cashouts are unlikely to be used to provide retirement income at all.

Some indirect rollovers also may be happening, which DC plans cannot track. But, given the behavioral hurdles, it is very unlikely that a large share of cashouts result in an indirect rollover.

Again, this behavior can be contrasted against the DB plan that is run by Oklahoma PERS. The DB plan develops assumptions regarding the probability that contributions remain in the system after termination, i.e., not cashed out, which is based on their actual experience. This assumption is service-rated, meaning there is a different probability developed for those with nine years of service vs 25 years. The probability that the money remains in OPERS is above 80 percent for all groups, almost the inverse of the DC plan. For those with more service, the probability approaches 100 percent. If the goal is for retirement assets to be used to produce retirement income, the DB plan is far more successful than the relatively new DC plan is at this point.

Finally, one important takeaway from the partial data provided above is that it would be helpful for providers to track and report these data in a way that helps to clarify these impacts on retirement security, not just the plan's financial results. The term "disbursements" clarifies what is happening to the DC plan, but it does not show whether these savings might be used to provide retirement income or whether they are spent at the time of withdrawal.

Cashouts in Alaska PERS and TRS

During FY's 2021 and 2022, cashouts were equal to 38.8 percent of contributions.



Cashed Out Rolled Over

VII. CONCLUSION

Remarkably few states have closed their public DB pension plans over the years. This remains true despite the flurry of legislative activity that occurred in the years immediately following the Great Recession. Instead, public pension plans were customized in many ways, including efforts to reduce contribution volatility within the DB plan framework. Even in Oklahoma, the one state where it could be said that a plan was closed after the recession, only one of its five statewide plans was closed, and even then, only partially so.

The one state that had closed a statewide plan more than three decades ago, West Virginia, reopened that plan less than 15 years after closing it. Currently there is an active legislative debate underway in Alaska about reopening that state's closed pension plans, as workforce challenges in the state have mounted. In Kentucky, the incumbent governor campaigned for re-election in 2023 in part on returning to a DB plan for public safety professionals covered by three of the five plans under KPPA. It seems clear that states that have closed their plans have decided to revisit those decisions in later years after the multiple challenges emerged.

North Dakota, which passed legislation in spring 2023 to close one of its statewide pension plans, became the fifth state to take such action. While the legislation has not yet taken effect and the plan remains open to new hires as of this writing, North Dakota is likely to experience the same funding, workforce, and retirement security challenges that have plagued other states that have closed DB plans. The North Dakota legislature did amend its pension funding policy to improve the funding of the plan when they acted to close the plan. This may make it appear, in the near term, that the funded status of the plan is improving, but, as in the case of states like Michigan and Alaska, this short-term improvement may be short-lived if a prolonged market downturn hits once cash flows begin trending more negative over time and the demographics within the plan become unbalanced.

The available evidence shows over and over again that closing a public pension plan presents unexpected and long-lasting challenges. From plan funding to workforce management, a closed pension plan restricts the capacity of plan sponsors to operate in providing well-functioning public services. Moreover, the do-it-yourself nature of DC plans and the high rates of cashing out at separation in those plans reduces the retirement preparedness of public employees. Closing a public DB plan offers no quick fix to the ongoing challenges of maintaining a robust and thriving public workforce and managing existing financial obligations. Instead, experience shows that closing a DB pension plan creates more problems for public sector employeer and employees for many decades.

VIII. APPENDIX







Figure A4: AK TRS - Termination Assumptions for DB & DC Plans Based on Actuarial Experience





Figure A5: AK PERS - Male Non-Peace Officer Retention for DB & DC Plans Based on Ultimate Termination Rates

Figure A6: AK PERS - Female Non-Peace Officer Retention for DB & DC Plans Based on Ultimate Termination Rates





Figure A8: AK PERS - Female Peace Officer Retention for DB & DC Plans Based on Ultimate Termination Rates



ENDNOTES

- 1. The U.S. Bureau of Labor Statistics states that 86 percent of state and local government workers have access to a defined benefit plan as of March 2023: <u>https://www. bls.gov/charts/employee-benefits/percent-accessparticipation-takeup-retirement-benefits.htm</u>
- 2. Tyler Bond, Dan Doonan, Todd Tauzer, and Ron Temple. *Examining the Experiences of Public Pension Plans Since the Great Recession*. National Institute on Retirement Security. October 2022.
- 3. Keith Brainard and Alex Brown. *Significant Reforms to State Retirement Systems*. National Association of State Retirement Administrators. December 2018.
- 4. Keith Brainard and Alex Brown. *State and Local Government Contributions to Statewide Pension Plans: FY 22.* National Association of State Retirement Administrators. November 2023.
- 5. Susan Banta and David Draine. *State Pension Contributions Hit Important Benchmark.* The Pew Charitable Trusts. October 2022.
- 6. T. Iversen. "DEFINED CONTRIB. PLAN FOR SERS, PSERS AND LRS MEMBERS; EARLY-OUT FOR STATE WORKERS" House Legislative Analysis Section. Available on the web at: <u>http://www.legislature.mi.gov/</u><u>documents/1995-1996/billanalysis/House/pdf/1995-</u><u>HLA-6229-A.pdf</u>
- 7. Ibid.
- J. Carrasco. "H.B. 6229: ENROLLED SUMMARY SERS/ DEFINED CONTRIBUTION PLAN" Senate Fiscal Agency. December 19, 1996. Available on the web at: <u>http://www.legislature.mi.gov/documents/1995-1996/</u> <u>billanalysis/Senate/pdf/1995-SFA-6229-E.pdf</u>
- 9. In previous years, plans reported the Annual Required Contribution, or ARC, before the ADEC or ADC replaced that measure due to GASB changes. This report uses ADEC to be consistent with current practice.
- 10. The Public Plans Database is available at: <u>https://</u> <u>publicplansdata.org/public-plans-database/browse-</u> <u>data/</u>
- 11. Authors' calculations using data provided by the Michigan Office of Retirement Services. See also: Louise Gates and Mita Drazilov. "Re: SERS - Savings from Tier 2 Plan Establishment for Fiscal 2021" Letter to Mr. Aver Hamilton, State of Michigan DTMB – Financial Services. October 7, 2022.
- 12. Authors' calculations using data provided by the Public Plans Database.
- 13. Mita Drazilov and Louise Gates. *Michigan State Employees' Retirement System 5-Year Experience Study: October 1, 2012 Through September 30, 2017.* GRS. June 29, 2018.

- 14. Ibid.
- 15. Ibid.
- 16. Ibid.
- *17. Pensions & Investments*, 2005 (July 29), "Alaska Gov. Frank Murkowski signed a bill to create a new defined...," Washington, DC.
- P. Forgey, 2014 (April 11), "Here's who got Alaska into this public employee retirement mess," *Anchorage Daily News*, Anchorage, AK.
- 19. Bloomberg, 2010 (June 14), "Mercer will pay \$500 million to settle Alaska pension lawsuit," *Pensions & Investments*, Washington, DC.
- 20. Dan Doonan. Alaska Teacher Recruitment and Retention Study: Options and Analysis Supporting Retirement Plan Design. National Institute on Retirement Security. April 2023.
- 21. Alaska Department of Public Safety, 2017 (November 14), "Recruitment and Retention Plan Overview: 2018-2023," Anchorage, AK, <u>https://dps.alaska.gov/getmedia/ ca76d118-d1ca-43c4-85be-49600a4fb8d0/Recruitment-Retention-Plan-Overview-2018-2023.</u>
- 22. Ibid.
- 23. Ibid.
- 24. Webinar hosted by the National Institute on Retirement Security. "Alaska's Experience Moving Public Employees from Pensions to Defined Contribution Plans." June 12, 2023. Slides available at: <u>https://www.nirsonline.org/ wp-content/uploads/2023/06/FINAL-Alaska-Webinar-Presentation-June-2023-compressed-2.pdf</u>
- 25. Ibid.
- 26. Ibid.
- 27. Ibid.
- 28. Tyler Bond and Dan Doonan. *Enduring Challenges: Examining the Experiences of States that Closed Pension Plans.* National Institute on Retirement Security. August 2019.
- 29. Alaska Retirement Management Board. Defined Contribution Plan Committee Meeting. September 13, 2023. Available on the web at: <u>https://treasury. dor.alaska.gov/docs/treasurydivisionlibraries/armb/ meetings-minutes/committees/dc-plan/meetingpackets/2023/2023.09.13 armb dc plan cmte packet v.f.pdf?sfvrsn=9988cd84 1</u>
- 30. Vanguard. "Making your savings last through retirement" Available on the web at: <u>https://investor. vanguard.com/investor-resources-education/</u> retirement/income-making-savings-last
- 31. Alaska Retirement Management Board. "Resolution 2023-18" Available on the web at: <u>https://treasury.</u> dor.alaska.gov/docs/treasurydivisionlibraries/armb/

<u>resolutions/2023-18-empower-managed-account-</u> <u>service_w.attachments_final.pdf?sfvrsn=e70bcfc_1</u>

- 32. Tyler Bond and Dan Doonan. *The Growing Burden* of *Retirement: Rising Costs and More Risk Increase Uncertainty*. National Institute on Retirement Security. September 2020.
- Alaska Retirement Management Board, 9/13/23, Op. cit.
- Dan Doonan and William Fornia. A Better Bang for the Buck 3.0. National Institute on Retirement Security. January 2022.
- 35. Kentucky Public Pensions Authority. *Annual Comprehensive Financial Report: FY 2022*. December 7, 2022.
- 36. Ibid.
- 37. Ibid.
- 38. Ibid.
- 39. Janie Shaw and Daniel White. Kentucky Retirement Systems: 2022 Actuarial Experience Study for the Period Ending June 30, 2022. GRS on behalf of Kentucky Public Pensions Authority. June 5, 2023.
- 40. Janie Shaw and Daniel White. County Employees Retirement System: 2022 Actuarial Experience Study for the Period Ending June 30, 2022. GRS on behalf of Kentucky Public Pensions Authority. May 9, 2023.
- 41. OPERS. "2019 Pension Update" Delivered to the House Banking, Financial Services, and Pensions Committee. November 8, 2019.
- 42. Data provided upon request from OPERS to NIRS. See also OPERS 2019, Op. cit. for earlier data.
- Yanwen Wang, Muxin Zhai, and John Lynch. "Cashing Out Retirement Savings at Job Separation" *Marketing Science*, Vol. 42, No. 4. November 7, 2022.

- 45. Oklahoma Pathfinder Plan Highlights, pg. 2. Information on five year investment returns provided via Google search on November 22, 2023.
- 46. Oklahoma Office of Management & Enterprise Services, Annual Compensation Report FY21

- 48. HB 2854 (2023 session) and HB 2486 (2021 session)
- 49. Doonan and Fornia, Op. cit.
- 50. See *Beyond the ARC* for other examples of dedicated revenues in public plans. Tyler Bond and Dan Doonan. *Beyond the ARC: Innovative Funding Strategies from the Public Sector*. National Institute on Retirement Security. December 2020.
- 51. Wang, Zhai, and Lynch, Op. cit.
- 52. U.S. Bureau of Labor Statistics. "Number of Jobs, Labor Market Experience, Marital Status, and Health for those Born 1957-1964" August 22, 2023. Available on the web at: <u>https://www.bls.gov/news.release/nlsoy.nr0.htm</u>
- 53. Employee Benefit Research Institute. "Workplace Retirement Account Leakage: By the Numbers" November 17, 2022. Available on the web at: <u>https://www.ebri.org/docs/default-source/by-the-numbers/ebri leakage facts-and-figures 111722.</u> <u>pdf?sfvrsn=22dd382f 6</u>
- 54. FINRA. "Thinking About Rolling Over Funds From Your Thrift Savings Plan? Consider This." Available on the web at: <u>https://www.finra.org/investors/military/</u><u>retirement/roll-over-tsp</u>
- 55. Hank Kim. "Commentary: A simple solution to the looming retirement security crisis" *Pensions & Investments*. August 30, 2023.

^{44.} OPERS, Op. cit.

^{47.} Ibid.

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